

# ***CURRENT STATUS AND ISSUES OF THE KOREAN EMISSION TRADING SCHEME***

Seonghee Kim  
Institute of Energy Economics, Japan,  
+81-3-5547-0231,  
songhee@tky.ieej.or.jp

## **Overview**

In January 2015, Republic of Korea introduced a greenhouse gas emission trading scheme (ETS). The scheme covers about 60% of Korea's GHG emissions and is positioned as a major policy for cutting GHG emissions by 30% from a BAU (business as usual) level by 2020 under a medium-term GHG emission reduction target set in 2009. As the government announced a draft national emission allocation plan for sectors subject to the scheme in September 2014, the industry side claimed that allocations were based on a wrong BAU outlook and about 21% less than required for the first target period. Of the 525 companies subject to the Korean ETS, 243 firms or about 46% filed complaints against the initial allocations, causing a dispute over the reasonability of the initial allocations. Industry also argued that allocations for each sector fell short of what it needed, making it difficult for business operators to buy permits from those in other sectors. In order to ease industry's burden in complying with the scheme, the government implemented flexibility measures and market stabilization measures such as the expansion of upper limit of borrowing from 10% to 20% of emissions and additional permit supply from government's reserves. This paper focuses on the government-industry dispute over the initial emission allocations and confusion related with Korea's ETS operation. Current issues with Korean ETS introduction are analyzed along with details of the scheme.

## **Methods**

To clarify the factors of shortage of initial allocation, the scheme design features and background for the deviation of actual emissions from the BAU are analyzed. Focusing on the compliance result as well as supply and demand situation of emission trading market, the impact and possible adverse effect of government intervention are also analyzed through literature survey and interview with related stakeholders.

## **Results**

Figure 1 indicates actual GHG emissions from 2005 to 2013 and BAU forecasts to 2020, and the emission reduction target through 2020. It shows that actual emissions rapidly increased from 2009 and far exceeded BAU forecasts. The rapid emission increase from 2009 is attributable mainly to a fast rise in energy consumption due to greatly expanded capacity and output in energy-intensive petrochemical, steel and oil refining industries. Figure 2 shows the emission trading volume and permit price from January 2015 to June 2016. Total volume of emission trading is 12.27Mt. KAUs (Korean Allowance Units) accounted for 15% of total trading volume, KCUs (Korean Credit Units; offset credits converted into credits usable in Korean ETS) for 24% and KOCs (Korean Offset Credits; domestic offset credits) for 61%. Most of KAUs seems to have been used for compliance or banked for future, because only about 0.003% of initially allocated KAUs were traded during the first year of Korean ETS. The price of KAUs hovered around 10,000 won level in 2015 then soared to 20,000 won in May of 2016. Of the 522 companies, 236 companies were short of emission permits, however, total balance of supply-demand of emission permits ended as an oversupply of 6 million tons in 2015. It is mainly due to the market stabilization measures such as expansion of upper limit of borrowing from 10% to 20% which was implemented urgently by the government at May 2016, just before the end of compliance period.

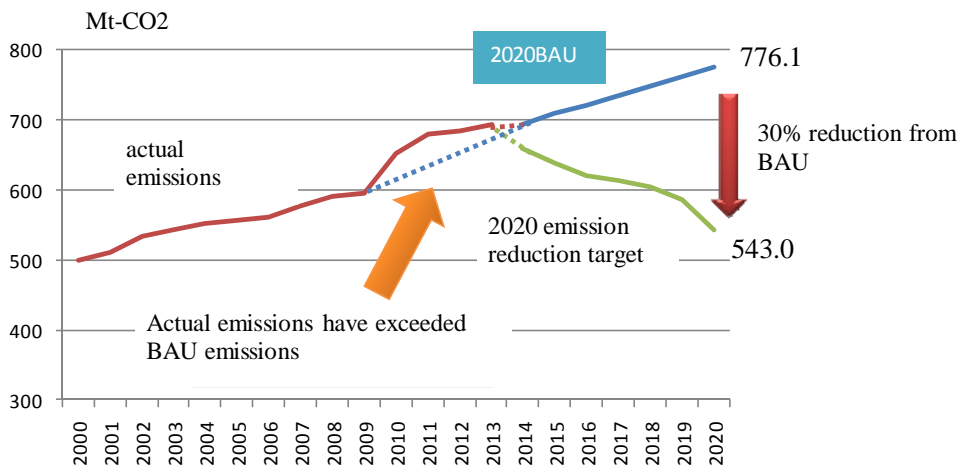


Figure 1 Deviation of actual emissions from the BAU forecast

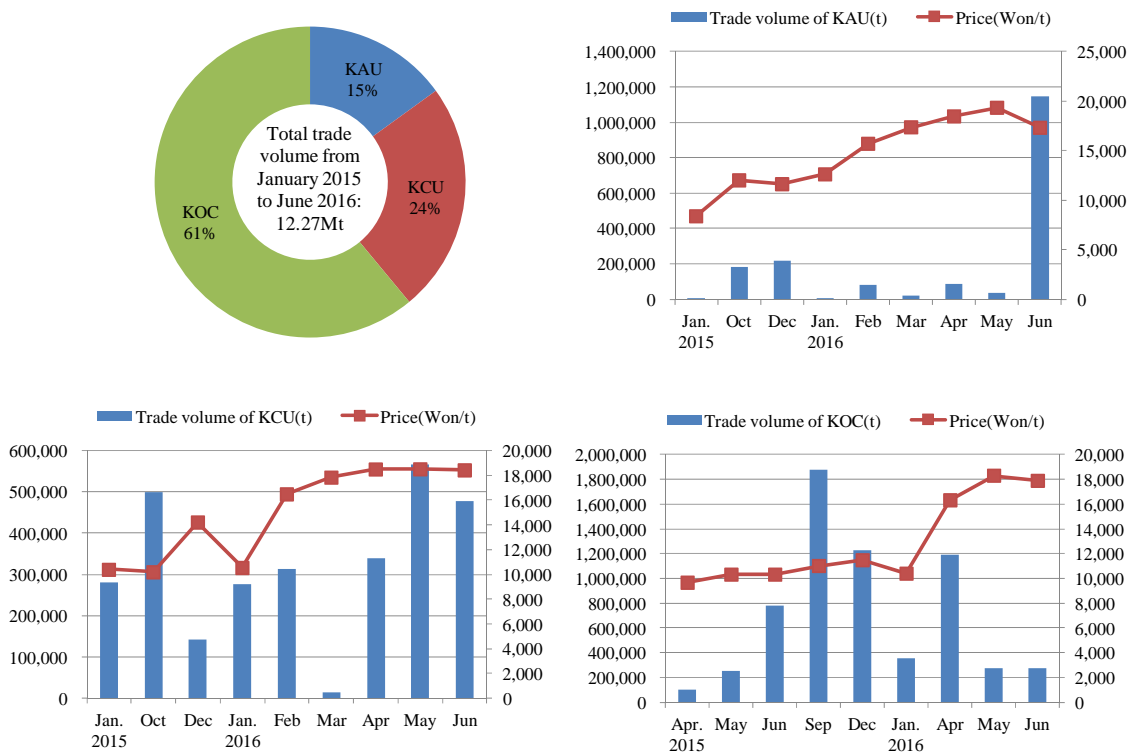


Figure 2 Trade volume and permit price for Korean ETS (from January 2015 to June 2016)

## Conclusions

It is important for the government to give a clear signal to industry that investment for low carbon measure would be beneficial in mid and/or long term. In case of Korean ETS, rapid increase of GHG emissions exceeding initial outlook caused the shortage of emissions permits supply. Accordingly the government implemented market stabilization measures to ease industrial burden, then most of companies subject to shortage of emission permits were able to comply with the scheme in 2015. Considering the low permit price and quite trading market during 2015, the government intervention and frequent rule changes potentially generated policy uncertainty and these might delay companies' decision making of investment for early reduction, however.