

A growing surplus of allowances is a common problem for emissions trading schemes; the first two phases of the EU ETS, RGGI, US Acid Rain SO₂, among others. There are multiple causes -- economic downturns, technological change, and complementary policies among others. Cap adjustments for such developments are rarely included in the ETS design. The result is ad hoc political adjustments when the surplus becomes "excessive" and the allowance price is "too low". The uncertainty associated with such ad hoc adjustments is costly in both economic and environmental terms.

Automatic, smaller, rule-based adjustments to the cap are feasible and a better alternative than the current ad hoc adjustments. An example of such a possible rule is the following:

When the surplus (banked allowances and credits recognized for compliance use held by participating installations) exceeds 5% (the number could be adjusted as a result of modelling) of the annual cap, the amount by which the surplus exceeds 5% is deducted from the cap in equal increments over the subsequent three years. This is achieved by reducing the quantity sold at auction. The reduction is a permanent reduction of the cap, not a deferred sale.

For example, if the surplus in 2014 was 8% of the 2014 cap, the caps for 2015, 2016 and 2017 would each be reduced by 1% of the 2014 cap. Since the excess surplus is equal to 3% (8% - 5%), this translates into a 1% reduction for each of the next three years. The 2018 cap would return to the pre-specified level unless there were additional adjustments in the interim. If, despite the reduction of the cap, the surplus exceeded 5% again in 2015 (or 2016), there would be an additional adjustment calculated in the same way.

Such a rule allows the accumulation of a reasonable bank of allowances to provide price stability. As soon as the bank exceeds the specified maximum (5% in this proposal), surplus allowances are removed by reducing the cap. The adjustments are likely to be relatively small and they are spread over three years to avoid substantial changes to the cap and associated price impacts. Reducing the cap by lowering the quantity of allowances auctioned preserves the incentive for installations to cut their emissions. The higher price for the remaining auctioned allowances minimizes the revenue loss (might even increase the revenue) for governments. The value of the allowances held by installations is protected or enhanced. With a clear, simple rule for the cap adjustment, the market will be able to anticipate the adjustment and adjust allowance prices accordingly.

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