## **Guest** Commentary

## Carbon price floor to save ETS

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The functioning of the EU ETS is under debate. Although the ETS guarantees emission reductions by 2020, the current low prices fuel doubts about whether it will remain a key policy instrument of EU climate policy. Such doubts increase investment uncertainty, which is likely to have a negative impact on investments in low-carbon technologies, which are needed to achieve a low-carbon economy by 2050.

*On 16 April, a majority of the European Parliament* voted against the European Commission's proposal to temporarily set aside emission allowances. In an earlier assessment of this proposal, PBL Netherlands Environmental Assessment Agency concluded that the impact of this backloading proposal on CO2 prices would likely be limited as the total amount of allowances up to 2020 would remain unchanged. Structural reform would be necessary to deal with the oversupply of allowances. A second vote is now scheduled for July. However, as long as Germany's position remains unclear, it seems uncertain whether a second vote would result in a different outcome. The European Parliament's vote against the backloading proposal underlines the importance of a more structural reform of the EU ETS.

In November 2012, the Commission put forward six options for a structural ETS reform, and launched a consultation. Stakeholders expressed their position in two consultation sessions. Although opinions vary, there appears to be support for increasing the linear reduction factor. This seems a logical option, as it would leave the current ETS framework intact, while reducing the supply of allowances in line with ambitions in the EU's Roadmap 2050.

PBL evaluated several of the options proposed by the European Commission, as well as alternative options that combine the ETS and a CO2 tax on energy use.

Options that aim to increase the scarcity of EU ETS allowances, such as reducing the supply of allowances or expanding the EU ETS by including other sectors, will boost emission prices but provide only an adhoc solution in an uncertain world. New unforeseen events, such as a further deterioration of the economic situation or new energy and climate policies, would require readjustment of the allowance supply. In addition to the uncertainty this causes in the market, the difficult decision-making process on backloading shows how cumbersome adjustments to the ETS framework can be. A carbon tax would directly provide an emission price and, hence, reduce uncertainty regarding investment signals. If, however, the supply of EUAs is left unchanged, the price of allowances will collapse and a carbon tax would simply take over the entire role of the EU ETS.

In our opinion, an auction reserve price would provide the best opportunity for making the ETS more robust against unforeseen events, while the advantages of the trading scheme are being maintained. Such a price floor would be particularly effective in a period of low economic growth or in cases of unforeseen events that would lower demand, as under these types of conditions this option would lead to larger emission reductions than any of the other reform options. Moreover, an auction reserve price would guarantee a more predictable price path, which is particularly important for low-carbon technology developments and investments that currently face too much uncertainty about the long-term carbon price. For very similar reasons, a price ceiling would prevent allowance prices from increasing above a predefined level in cases of positive demand shocks. A more robust system would also avoid difficult decisionmaking processes in the future. Moreover, our calculations show that cumulative auction revenues up to 2030 would increase, while renewable energy subsidies would decline.

Various cap-and-trade systems that recently emerged outside Europe, such as in California, Australia and New Zealand, also have features that act as a price floor or ceiling. Furthermore, the Chinese region of Shanghai is also seeking a mechanism to correct emission prices. The challenge in implementing a price floor and ceiling would be to reach agreement in the European Parliament and the European Council on an effective price collar. Our evaluation of the various options for a structural reform of the EU ETS does not provide clues about an optimal price floor. Although not examined in our report, one possibility could be a mandate for the European Commission to implement a price collar, under the advice of an independent body of experts that takes into account various developments, such as those related to fuel prices, technology and climate ambitions.

The implementation of a price collar would require further debate. It is vitally important that the implementation of a price collar, or any other option that would structurally reform the ETS, removes existing doubts about the ETS as a key policy instrument in the long term.

PBL's report can be found at: http://www.pbl.nl/en/ publications/evaluation-of-policy-options-to-reformthe-eu-emissions-trading-system