



Prof. Karsten Neuhoff, Ph.D., Head of the Climate Policy Department at DIW Berlin

## SIX QUESTIONS TO KARSTEN NEUHOFF

# »Combining dynamic allocation and Inclusion of Consumption into the EU ETS would be beneficial«

1. Professor Neuhoff, the EU Emissions Trading System, or the EU ETS, has been in existence for ten years now. Has the scheme stood the test of time so far? First, the EU ETS has demonstrated that Europe can act collectively and it takes climate protection seriously. Second, it has established a long-term framework for emissions reductions. Third, the price signal has helped companies consider more efficient low-carbon options. However, since 2012, the carbon price has plummeted. Now this is addressed at the European level through the market stability reserve.
2. What are the weaknesses in the system? When the EU ETS was introduced, there was the expectation that within a few years a global carbon price would emerge. However, now countries choose which policy measures they want to use to achieve their climate protection goals. As a result, we have to cope with different carbon prices in different regions. This, in turn, means that there are incentives for manufacturers of carbon-intensive materials to relocate production if they have to bear the carbon costs in full. In order to avoid this, carbon leakage protection measures have been implemented. Producers are allocated carbon emissions allowances for free to absorb the additional costs.
3. To what extent has there been a geographical shift in the production of carbon-intensive goods, or carbon leakage? We examined this in detail specifically in the cement and steel sectors and were unable to detect any signs of carbon leakage. However, we do have carbon leakage protection measures. The cement and steel industries have been allocated more carbon emissions allowances in recent years than the level of production actually requires.
4. Is this not somewhat unfair toward the industries producing lower levels of CO<sub>2</sub>? Carbon leakage protection measures are needed for highly carbon-intensive materials. For the majority of the manufacturing industry, carbon and energy costs make up a marginal share of total costs, thus carbon leakage protection is not necessary.
5. How can we ensure that the carbon-intensive industries still have an incentive to reduce their CO<sub>2</sub> emissions? The first step in this direction was taken in 2013. Since then, the allocation of free allowances has been based on a benchmark. This means that, as a company, I have incentives to improve my production efficiency in order to retain or be able to sell as many allowances as possible or, conversely, so that I do not have to buy as many allowances. By using free allocation as a carbon leakage protection measure, however, the incentives for intermediate and end customers are lost, the price of a ton of steel or cement will not go up. I therefore have no incentive to use these materials more effectively, no chance of competing with alternative low carbon materials, and no confidence that the additional costs of innovative processes such as carbon capture and sequestration will be covered. Here, the carbon leakage protection measures employed so far have had a negative impact.
6. How should this system be further developed in the future? We analyzed this question for those sectors producing carbon-intensive materials and determined four possible ways of structuring carbon leakage protection after 2020. One option is to continue with ex-ante free allocation while making minor refinements. A second option would be to make this system more dynamic and better aligned with production volumes. A third option would be to carry out border carbon adjustments (BCAs). A fourth option could be to combine dynamic free allocation with the Inclusion of Consumption in emissions trading. The advantage of the last two options is that the carbon price signal is maintained, not only for producers but also for intermediate and end customers, thus enabling us to enjoy the full effect of emissions trading in terms of reaching maximum greenhouse gas reduction potential. BCAs are, however, politically challenging. The Inclusion of Consumption in the emissions trading system has advantages here but is more work in terms of administration than other options. However, this additional effort seems warranted to create incentives for innovation and modernization and is consequently an important basis for further developing the industry and achieving climate goals.

Interview by Erich Wittenberg



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