

Executive summary

This policy brief interprets the findings of a new study by CE Delft¹ that shows how energy-intensive companies in Germany have massively profited from their pollution to the count of €4.5 billion because they are deemed to be at risk of "carbon leakage". "Carbon leakage" refers to a hypothetical situation where companies transfer production to countries with weaker climate policies in order to lower their costs. Under the current EU Emissions Trading System (EU ETS) rules, industrial companies that are believed to be at risk of "carbon leakage" are awarded free pollution permits.

- Free allocation has resulted in significant windfall profits for corporations. Windfall profits occur when industrial companies are over-subsidised for their pollution. Energy-intensive companies in Germany made over €4.5 billion from the EU ETS during 2008-2014². The corporations in Germany that were able to make the most profits from the EU's carbon market are ThyssenKrupp (€673 million), ArcelorMittal (€585 million), Hüttenwerke (€389 million) and Rogesa (€277 million).
- European taxpayers are picking up the bill as governments forego income and lose out on revenues from auctioning these pollution permits. As a result of free allocation, less money is available for investments in the climate friendly transition of the European economy. In the 2008-2014 period, the German government has given out 2.4 billion free pollution permits and has thereby missed out on at least €29.7 billion in auctioning revenues³.

In the coming months, European policymakers will revise the current EU ETS rules for the post-2020 period. The policy brief concludes with recommendations how to change the current "carbon leakage" rules to ensure that further windfall profits are avoided.

What are windfall profits?

The current EU ETS rules hand out free emission allowances to industrial companies deemed at risk of "carbon leakage". The emission allowances that are given away for free represent subsidies, since governments forego income and lose out on revenues from auctioning these pollution permits. Windfall profits occur when industrial companies are over-subsidised for their pollution. This can for example happen when too many free emissions allowances are given away that can be sold for a profit in the market.

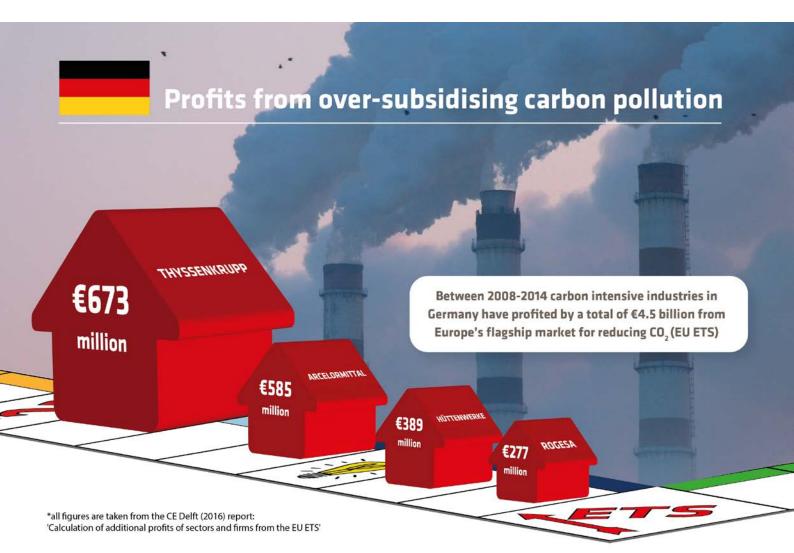
Heavy industry made over €4.5 billion windfall profits from the EU ETS

Some corporations have used the EU ETS to increase their cash flows by using the theoretical risk of "carbon leakage" as an argument to receive pollution subsidies from governments. **Heavy industry in Germany was able to generate about €4.5 billion in windfall profits from the EU ETS** during 2008-2014 in the following ways⁴:

- 1. **Windfall profits from surplus: €1,121 million.** Industries have received more emission allowances for free than they actually need, and are able to sell their surplus for a windfall profit in the market.
- 2. **Windfall profits from offsets: €187 million.** The price for international offsets is much lower than the price for emission allowances. Industries have therefore bought international offsets to comply with their targets, and are able to sell their remaining free allowances for a profit in the market.
- 3. Windfall profits from cost-pass through: €3,191 million. Industries have generated windfall profits by letting their customers pay the price for freely obtained emission allowances.

The sectors in Germany that have profited most from the EU ETS so far are the iron and steel, refineries, cement and petrochemicals sectors. Within these sectors, the iron and steel sector was able to generate the most money from receiving too many free allowances and selling this surplus for profits in the market.

Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost-pass through	Total windfall profits
Iron and steel	€377 million	€67 million	€1,654 million	€2,098 million
Refineries	€123 million	€25 million	€729 million	€877 million
Cement	€78 million	€34 million	€313 million	€425 million
Petrochemicals	€104 million	€14 million	€179 million	€298 million



ThyssenKrupp, ArcelorMittal, Hüttenwerke and Rogesa are the corporations in Germany that have made the most profits from the EU's carbon market. ThyssenKrupp was for example able to make about €670 million from the EU ETS. ArcelorMittal was able to make €585 million of which €370 million from being able to sell excess free emission allowances.

Company	Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost- pass through	Total windfall profits
ThyssenKrupp	Iron and steel	€50 million	€24 million	€598 million	€673 million
ArcelorMittal	Iron and steel	€370 million	€21 million	€194 million	€585 million
Hüttenwerke	Iron and steel	€187 million	€8 million	€194 million	€389 million
Rogesa	Iron and steel	€76 million	€5 million	€196 million	€277 million

Unsubstantiated "carbon leakage" claims by heavy industry

In the past years, industry lobbyists have made several unsubstantiated claims about the impact of the EU ETS on their competitiveness. Certain corporations have made profits worth hundreds of millions of euros from the EU's climate policies, while still claiming that the EU ETS is impacting their competitiveness.

Claim by ArcelorMittal: "EU energy and climate policy is punishing the steel sector and other energy-intensive industries, which is having a profound impact on our competitiveness" (2014)⁵.

Fact: The steel company in Germany was able to make **€585 million** from the EU ETS in the 2008-2014 period according to the CE Delft (2016) report, of which €370 million from being able to sell surplus free permits.

Claim by ThyssenKrupp: "However unrealistic benchmarks [..], linear and overarching reduction factors [..] and constant changes to the emissions trading system require the continuous purchase of emissions allowances".

Fact: The steel company was able to make **over €670 million** from the EU ETS in the years 2008 to 2014 according to the CE Delft (2016) report.

Free allowances – less money to invest in the low-carbon transition

Giving free emission allowances to industry reduces the amount of allowances that governments can auction, and hence reduces the auctioning revenues that could be mobilised by governments. Consequently, free allocation means that less money is available for investments in the low-carbon

transition of the European economy.

Between 2008 and 2014, 2.4 billion allowances were given out for free in Germany with an equivalent value of €29.7 billion. The German government therefore lost out on €29.7 billion in auctioning revenues.

In the same period, **Germany generated** over €1.5 billion from auctioning allowances. All of these revenues were invested in Europe and third countries for climate purposes.⁷



Figure 1 Value of free allowances vs auctioning revenues in Germany (2008-2014)

Conclusions

There are at least four problems related to the "carbon leakage" rules under which industrial sectors are able to receive free pollution permits:

- 1. Free allocation has resulted in significant windfall profits for corporations: energy-intensive companies in Germany made €4.5 billion from the EU ETS during 2008-2014.
- 2. European taxpayers are picking up the bill as governments forego income and lose out on revenues from auctioning these pollution permits. In the 2008-2014 period, the German government has missed out on at least €29.7 billion in auctioning revenues.
- 3. Without an urgent change of rules, emission reductions of industry will stall over the next 15 years. Giving away free emission allowances reduces the incentive of companies to produce more efficiently or to invest in breakthrough technologies that reduce CO₃.
- 4. The Paris agreement will level the playing field across the global economy after 2020. When relocation destinations have similar climate policies to the EU ETS, there will be no carbon leakage risks. Studies have furthermore not been able to find evidence for "carbon leakage".

Recommendations

The ongoing legislative process to revise the EU ETS rules for the post-2020 period provides an important opportunity to revise the current "carbon leakage" rules. The lessons learned so far are important to ensure that further windfall profits at the expense of taxpayers are avoided and, instead of subsidising pollution, European governments will invest in innovations that lead to low-carbon societies.

Key recommendations

- Phase out the free allocation of pollution permits by gradually increasing the share of allowances to be auctioned from the current 57% to 100% in the future.
- Introduce a tiered "carbon leakage" approach and target free allowances only to those that really need it. The left-over free allowances should be cancelled or auctioned for innovation support.
- Annually reduce the amount of free allowances that an installation receives (the benchmark) in line with the overall decarbonisation pathway of the EU ETS.
- Invest more auctioning revenues in climate friendly innovation and support the frontrunners that want to invest in breakthrough technologies.

For more information see: http://carbonmarketwatch.org/myth-buster/

- CE Delft (2016), Calculation of additional profits of sectors and firms from the EU ETS. See here 1.
- All the information on windfall profits is taken from the CE Delft report (2016), Calculation of additional profits from the 2. EU ETS, see here. These calculations show how much money companies and sectors were able to make from the EU ETS in theory, the actual profits could differ depending on the company strategies.
- 3. Based on information provided by CE Delft (2016), using average annual carbon prices. See here
- CE Delft (2016), Calculation of additional profits from the EU ETS, see here. For (1) the windfall profits are calculated for the whole industry sector, while for (2) and (3) only the 15 most polluting sectors are taken into account. In addition, the windfall profits from offsets (2) are only calculated for the period up to 2012.
- FT (20 Jan 2014), "Rewrite energy policy and re-industrialise Europe" see here 5.
- 6. Thyssenkrupp (2016) see here:
- 7. Data taken from the European Commission climate action progress reports from 2014 and 2015



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