Carbon leakage myth buster

National Fact Sheet **March 2016**

Executive summary

This policy brief interprets the findings of a new study by CE Delft[1] that shows how energy-intensive companies in the Netherlands have massively profited from their pollution to the count of €1 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 the Netherlands made over €1 billion** from the EU ETS during 2008-2014[2]. The corporations in the Netherlands that were able to make the most profits from the EU's carbon market are Tata Steel (over €300 million), Shell (over €200 million) and Chemelot (€90 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 Dutch government has given out 533 million free pollution permits and has thereby **missed out on at least €6.4 billion in auctioning revenues[3]**.

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 €1 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 the Netherlands was able to generate over €1 billion in windfall profits from the EU ETS** during 2008-2014 in the following ways[4]:

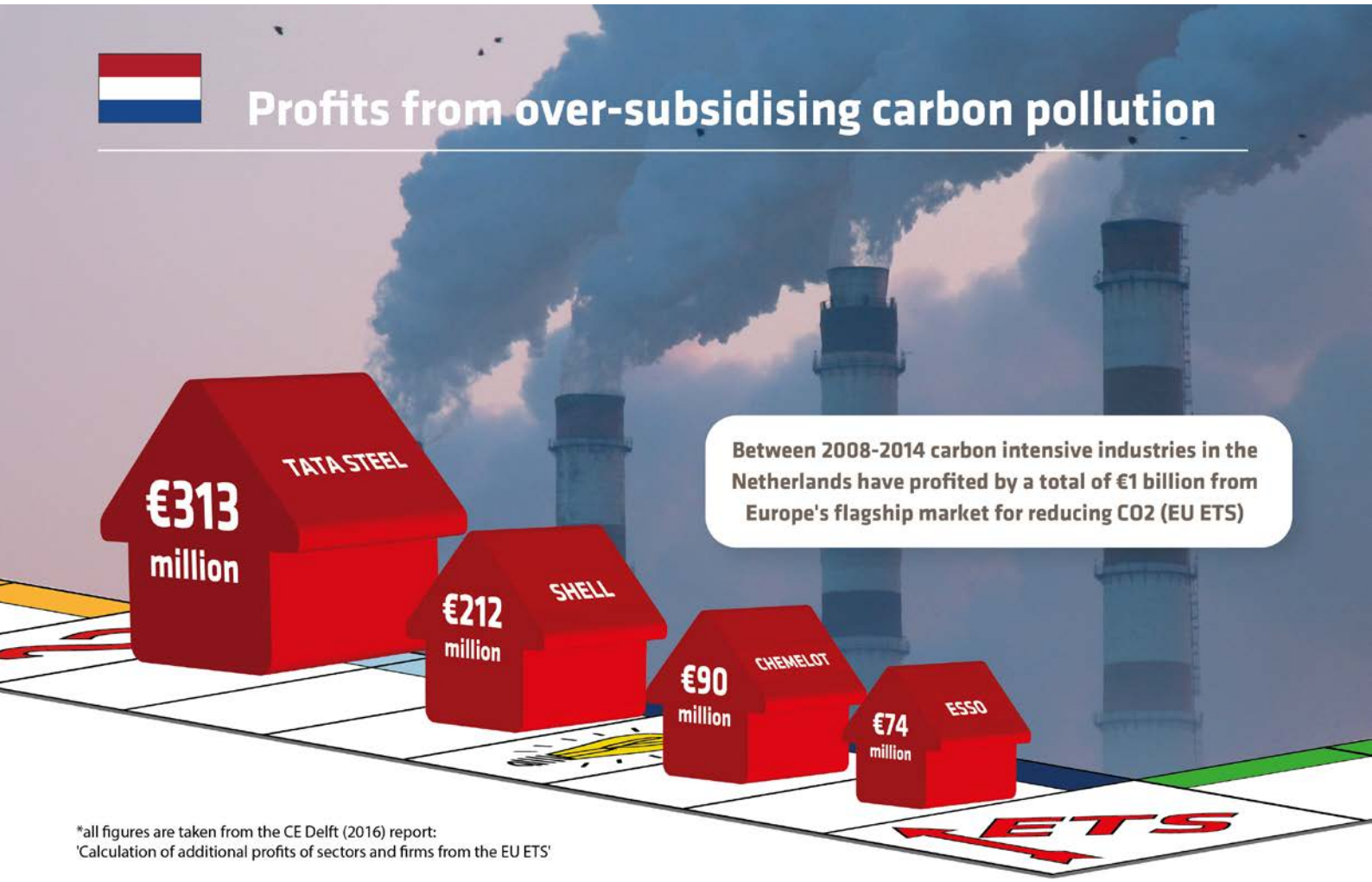
1. **Windfall profits from surplus: €236 million.** Industries have received more emission allowances for free than they actually need, and are able to sell their surplus for a windfall profit in the market.

2. **Windfall profits from offsets: €27 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: €819 million.** Industries have generated windfall profits by letting their customers pay the price for freely obtained emission allowances.

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

Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost-pass through	Total windfall profits
Refineries	€26 million	€2 million	€354 million	**€382 million**
Iron and steel	€24 million	€19 million	€271 million	**€313 million**
Petrochemicals	€66 million	€4 million	€127 million	**€197 million**
Fertilizers	€25 million	€0.1 million	€14 million	**€39 million**



*all figures are taken from the CE Delft (2016) report:
'Calculation of additional profits of sectors and firms from the EU ETS'

Tata Steel, Shell, Chemelot and Esso are the corporations in the Netherlands that have made the most profits from the EU's carbon market. Tata Steel was for example able to make more than €300 million from the EU ETS and Shell was able to make over €200 million.

Company	Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost-pass through	Total windfall profits
Tata Steel	Iron and steel	€26 million	€19 million	€269 million	**€313 million**
Shell	Refineries	€36 million	€-	€176 million	**€212 million**
Chemelot	Petrochemicals	€41 million	€0.3 million	€49 million	**€90 million**
Esso	Refineries	€1 million	€-	€73 million	**€74 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 Tata Steel: "*The ETS is one-size-fits-all and is putting energy-intensive industries in competitive disadvantage*" (2014)[5].

Fact: Tata Steel in the Netherlands has made **over €300 million** from the EU ETS in the 2008-2014 period according to the CE Delft (2016) report.

Claim by Chemelot: "*[..] any additional cost of the EU ETS cannot be passed on to the customers. There is considerable competition from producers outside EU-27, where there is no carbon cost impact at all*" (2012)[6].

Fact: Chemelot in the Netherlands has made **€90 million** from the EU ETS in the 2008-2014 period, €49 million of which was from passing costs onto its consumers 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, 533 million allowances were given out for free in the Netherlands with an equivalent value of €6.4 billion. **The Dutch government therefore lost out on €6.4 billion in auctioning revenues.**

In the same period, **the Netherlands generated over €265 million from auctioning allowances**. All of these revenues were invested in Europe and third countries for climate purposes.[7]

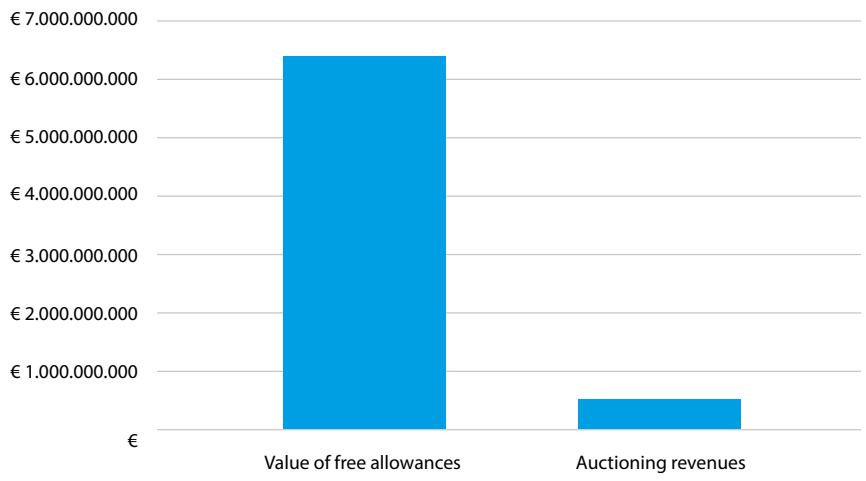


Figure 1 Value of free allowances vs auctioning revenues in the Netherlands (2008-2014)

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 the Netherlands made over €1 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 Dutch government has **missed out on at least €6.4 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 CO_2.

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/

1. CE Delft (2016), Calculation of additional profits of sectors and firms from the EU ETS. See here
2. All the information on windfall profits is taken from the CE Delft report (2016), Calculation of additional profits from the 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
4. 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.
5. Scunthorpe Telegraph (2014), http://www.scunthorpetelegraph.co.uk/Tata-Steel-chairman-slams-unrealistic-EU/story-20549420-detail/story.html
6. Chemelot (2012), see here
7. Data taken from the European Commission climate action progress reports from 2014 and 2015

This project action has received funding from the European Commission through a LIFE grant. The content of this section reflects only the author's view. The Commission is not responsible for any use that may be made of the information it contains.

Contact information:
Femke de Jong, EU Policy Director
femke.dejong@carbonmarketwatch.org