Carbon leakage myth buster

Carbon Market Watch Fact Sheet
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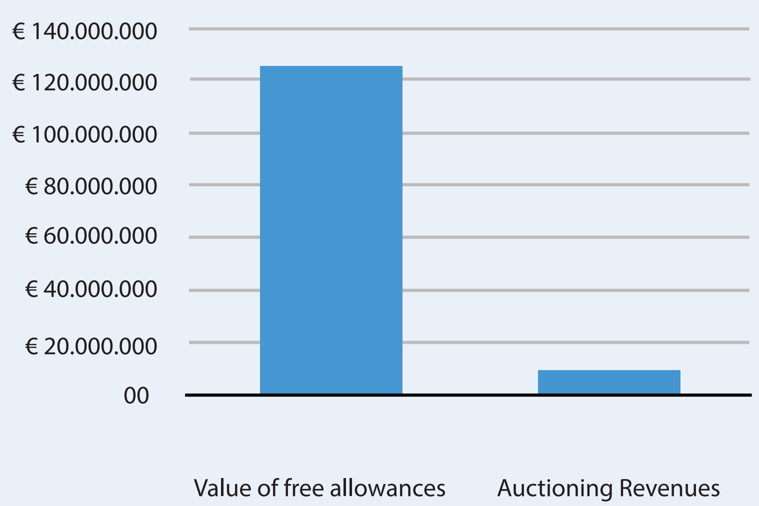
Executive summary

The current EU ETS rules grant preferential treatment to industrial companies deemed at risk of "carbon leakage" in the form of awarding free pollution permits. This has resulted in windfall profits for corporations at the expense of taxpayers, lower auctioning revenues for climate protection measures and a general stagnation of industry's climate efforts up to 2030.

- Between 2008 and 2014, 15 million allowances were given out for free to industry in Luxembourg. **These free pollution permits have a monetary value of €126 million.**
- In the years 2013 and 2014, **Luxembourg generated over €10 million from auctioning allowances.** More than 50% of these revenues were invested for climate purposes.
- Energy-intensive companies in Luxembourg were able to make up to **€50 million in windfall profits** from the EU ETS in the 2008-2014 period in two ways:
    1. By letting their customers pay the price for freely obtained carbon permits amounting to about €37 million.
    2. By being able to sell excess carbon permits worth about €13 million as they received more permits than what they actually needed.



Value of free allowances vs auctioning revenues in Luxembourg (2008-2014)

The ongoing legislative process to revise the EU ETS rules for the post-2020 period provides an important opportunity to revisit the rules to ensure that further windfall profits are avoided. The policy brief concludes with recommendations how to change the current rules so that unjustified pollution subsidies can be avoided in the future.

Case study: ArcelorMittal

ArcelorMittal is the world's largest steel producer headquartered in Luxembourg that has so far been able to build-up a surplus of 140 million freely obtained emission allowances[1]. By selling part of its excess allowances ArcelorMittal has generated $500 million windfall profits in the last five years[2] (±€440 million). The three installations in Luxembourg have accumulated a surplus of 500,000 allowances and could have generated up to €12 million windfall profits from the EU ETS so far[3].

In 2012, ArcelorMittal closed its Schifflange site but still received 81,000 free allowances for that year. The Luxembourg authorities have demanded that ArcelorMittal give back all of its unused allowances from 2012, as the steel plant was no longer in production in that year. Since ArcelorMittal refused to do this, the case was referred to the European Court of Justice in June 2015.

"Carbon leakage" – the threat to relocate production due to the EU ETS

The EU Emissions Trading System (EU ETS) covers the EU's greenhouse gas emissions (GHG) from the industry and power sector which amount to just over 40% of the EU's total GHG emissions. After each year, companies participating in the system must surrender enough allowances to cover all of their emissions. Since 2013, power generators have to buy all of their allowances to emit CO_2 at auction. However, manufacturing industries are granted preferential treatment in the form of receiving CO_2 allowances for free because they are considered to be at risk of "carbon leakage".

This has resulted in financial subsidies for corporations at the expense of taxpayers as they must make up the loss of public funds represented by lower auctioning revenues. Between 2008 and 2014, 15 million allowances[4] were given out for free to industry in Luxembourg. **These 15 million free pollution permits have a monetary value of €126 million.[5]**

Carbon leakage is a term used to describe the hypothetical situation where stringent climate policies would force companies to move their production abroad to countries with less ambition climate measures to lower their production costs. This can lead to a rise in global greenhouse gas emissions.

The provisions to protect the manufacturing industry in Europe for the potential risk of relocation due to the EU ETS are only valid for the period up to 2020. A key question is how the concept of "carbon leakage" will be addressed in the next ETS trading round from 2021-2030. Despite concerns that free allocation rules have not had the desired effects, the European Commission has proposed to continue with many of the existing rules, including the EU-wide hand-out of around 6.3 billion free pollution permits in the post-2020 period[6].

Windfall profits for polluters

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. They were able to generate windfall profits by letting their customers pay the price for freely obtained allowances and by being able to sell their surplus free allowances in the market.

"Heavy emitters in Luxembourg were able to make up to €50 million in windfall profits from the EU ETS between 2008 and 2014"

Windfall profits from passing on non-existent carbon costs

Several carbon-intensive industries that are not at genuine risk of carbon leakage are still receiving all of their carbon credits for free. These corporations are able to cash in these freely obtained allowances by letting their customers pay for their non-existent carbon costs. Numerous studies including an analysis by Commission[7] have found that companies pass through at least part of the costs of carbon pricing to consumers. The steel sector for example passes through a minimum of 60% of the market price of carbon to their consumers.
In Luxembourg, 16 installations have received about 15 million allowances for free during 2008 and 2014. **These companies could have made windfall profits in the order of €37 million[8] during this period**. The steel and cement sector in Luxembourg could each have generated about €12 million and €8 million windfall profits respectively from passing on non-existent carbon costs.

Overview of Minimum cost pass - through values found in existing literature [SWD(2015) 135]

	Minumum
Iron and steel	60%
Cement	35%
Glass	20%
Refineries	40%
Petrochemicals	25%
Fertilizers	0%

COMPANY	SECTOR	AMOUNT OF EMISSIONS COVERED WITH FREE ALLOWANES (2008-2014)	MINIMUM COST PASS-THROUGH VALUE	ESTIMATED WINDFALL PROFITS
CIMALUX	Cement	4,296,236	35%	€12.6 million
ARCELORMITTAL	Steel	1,668,413	60%	€8.4 million

Windfall profits from over-allocation

Carbon-intensive industries have in the past received more free carbon allowances than they actually need, and are able to sell off the surplus carbon allowances for a profit in the market. As a result of flawed rules, companies receive free emission allowances based on historical production levels even if current production levels are cut by almost half. Industries that run their factories at low production levels can use this loophole to receive up to twice as many emission allowances for free than they actually need. This surplus of allowances that companies freely acquired so far can be sold on the carbon market for a profit.

By the year 2014, companies in Luxembourg have accumulated a considerable surplus of free allowances of about 1.6 million[9] (excluding purchased carbon offsets). If sold on the market against today's prices, **these industries are able to generate a windfall profit of €13 million from the EU ETS**. The largest surpluses of free allowances were awarded to Cimalux (cement company) and ArcelorMittal (steel company) who are able to generate almost €8 and €4 million from selling both their oversupply and their purchased offsets using today's market prices[10].

COMPANY	SECTOR	FREE ALLOWANCES (2008-2014)	EMISSIONS (2008-2014)	OFFSETS	SURPLUS (2008-2014)	EST. WINDFALL PROFITS
CIMALUX	Cement	4,906,678	4,305,645	373,066	974,099	€7.9 million
ARCELORMITTAL	Steel	2,156,232	1,805,505	146,062	496,789	€4.0 million

Case study: ArcelorMittal steel factory in Schifflange

The world's largest steel company has reduced the production levels of several of its factories in Europe due to the economic crisis. Yet each installation was still able to receive as many emission allowances for free as it would when running at full capacity. **In October 2011, ArcelorMittal temporarily closed the Schifflange site** (Esch-sur-Alzette) and extended the "temporary closure for an indefinite period" in March 2012[11]. However, a month prior to the closure it still received free allowances from the Luxembourg department of environment for the year 2012.
As the plant was no longer in production in that year, Marco Schank, the minister of the environment, demanded that ArcelorMittal give back essentially all its unused allowances (81,000) from 2012[12]. **The company has so far refused to do this**, and in June 2015 the case was referred to the European Court of Justice[13].
Several voices have denounced the classification "temporary closure for an indefinite period" as a move by ArcelorMittal to continue benefitting from free emission allowances in order to sell them in the market for profits[14]. **The Schifflange site received allowances equivalent to 81,073 tonnes of CO_2 emissions in 2012 even though it emitted only 151 tonnes that year.**
In total the ArcelorMittal plant in Schifflange has been able to accumulate a surplus of about 200,000 allowances by the end of 2012 as it has received 160,000 allowances too many for free and because it purchased 40,000 carbon offset credits.[15] At current market prices, **these surplus allowances are worth €1.6 million**.

	2008	2009	2010	2011	2012	Total
EMISSIONS	68,791	64,250	64,696	47,502	151	245,390
FREE ALLOWANCES	81,073	81,073	81,073	81,073	81,073	405,365
OFFSETS				40,536		40,536
SURPLUS ALLOWANCES	12,282	16,823	16,377	74,107	80,922	**200,511**

Delivering real investments into the Euopean economy

European industrial companies receive their allowances to emit CO_2 for free and are therefore hardly exposed to the carbon price. That means that European companies are currently not receiving a sufficient price signal to produce more efficiently or invest in innovative technologies that reduce CO_2. A wide range of technological options to reduce emissions in these carbon-intensive sectors are available that remain unexploited. Free allocation also fails to reward those companies that have already chosen to shift their production towards efficient, low-carbon technologies. As a result, Europe's industry emissions are not projected to decrease up to 2030, according to the European Environment Agency.

At the same time, giving free emissions allowances to industry reduces auctioning revenues that could be mobilized by governments. Taxpayers must then make up the loss of public funds represented by the lower auctioning revenues. Consequently, free allocation means that less money is available for investments in the low-carbon transition of the European economy.

In the years 2013 and 2014, Luxembourg generated over €10 million from auctioning allowances to stationary installations and aircraft operators. **More than 50% of these revenues (over €5 million) were invested in Europe and third countries for climate purposes**.[16]

Recommendations for the EU ETS revision

Key recommendations to help avoid windfall profits in the future:

- **Phase out the free allocation of pollution permits** by gradually increasing the share of allowances to auctioned from the current 57% to 100% in the future.
- **Only compensate** industrial sectors on the carbon leakage list **for the share of carbon costs that are not passed on to customers.**
- **Do not give free pollution permits to sectors that are not at risk of carbon leakage** (and hence not on the carbon leakage list).
- Adjust the number of free pollution permits to companies when they reduce their production levels by more than 10% or close their operations, and **allow governments to reclaim unused pollution permits** per quarter year from companies when they close their operations.

Read more: http://carbonmarketwatch.org/myth-buster

1. Sandbag (2014), Saying the dragon, see here
2. Information taken from ArcelorMittal's annual reports: $140 million (2010), $93 million (2011), $220 million (2012), $32 million (2013) and $14 million (2014)
3. By passing through non-existing costs from free allowances and by selling oversupply in the market for a profit
4. Over 12 million emission allowances were given away for free to installations in the second EU ETS trading period (2008-2012) and about 2.7 million allowances were given away for free in 2013 and 2014.
5. Against current market prices (€8.37/tCO2 on 12/11/2015)
6. SWD(2015) 135, Impact Assessment accompanying the EU ETS revision see here, p. 29
7. SWD(2015) 135, Impact Assessment accompanying the EU ETS revision see here, p. 202 table 33
8. Windfall profits are calculated by multiplying the amount of emissions covered by free allowances times the minimum cost-pass through values times the current carbon price (€8.37/tCO2 on 12/11/2015). The minimum cost pass-through values per sector from the Commission's analysis are used and an average 30% cost-pass through value for the other sectors. Data taken from the European Union Transaction Log.
9. Data taken from the European Union Transaction Log
10. Against current market prices, the current price differential between offsets and EUAs is used (€8.37 and €0.65 on 12/11/2015)
11. Reuters (20/03/2012), ArcelorMittal closes Luxembourg furnace indefinitely, see here
12. Paperjam (22/06/2015), Les quotas d'ArcelorMittal devant la Cour de justice de l'UE, see here
13. Case C-321/15 see here
14. Luxemberger Wort (29/07/2014), Schifflange steel plant decision by end of 2014, see here
15. Data taken from the European Union Transaction Log
16. Data taken from Eionet, Greenhouse gas Monitoring Mechanism Regulation (use of auctioning revenues)

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