

Polluting for Profit: The Paradox of the EU's Emissions Trading System

by Pietro Quercia

Increased public sensitivity on issues related to global warming and the decarbonisation of our economies are demonstrated by events that have recently shaken Europe. Thousands of young citizens belonging to the Fridays for Future movement marched in European countries to call for more stringent environmental measures. The May 2019 European Parliament elections only reconfirmed these trends, with electoral support for Green parties and the European Free Alliance witnessing a considerable surge across member states.¹

The European Union has long been considered at the forefront of the fight against climate change. When, in the early 2000s, the EU Commission proposed a carbon market where CO₂ emissions would be penalised through

a carbon price, the idea was considered innovative.

The EU Emission Trading Schemes (EU ETS) now covers more than 11,000 polluting companies and consists in the establishment of a market where firms trade emission allowances to cover their annual CO₂ emissions. A single European Union Allowance equals one tonne of CO₂ or other greenhouse gases. The balance between the supply and the demand for allowances determines the price of these emission permits, and so the carbon price.

If a company is polluting more than expected, it has the obligation to purchase more allowances either from a government or from a company that did not make use of a part of its allowance. As a result, firms are encouraged to invest in better environmental standards or machinery, in order to gradually reduce their emissions so as to purchase fewer allowances. This

¹ Lorenzo Colantoni, "Europe's Green Wave and the Future of the Energy Union", in *IAI Commentaries*, No. 19|36 (May 2019), <https://www.iai.it/en/node/10463>.

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ideal outcome, however, only holds true if the price of emissions is high enough to make decarbonization cheaper than the purchasing of allowances. This has not been the case, as the EU ETS has maintained a very low carbon price until very recent times.

This is because energy-intensive industries have claimed that the carbon price may entail a loss of international competitiveness due to increases in production costs, specifically vis-à-vis competitors that are operating in countries with no carbon pricing policy. This could lead to a relocation of industrial production and, most importantly, to an increase in emissions in third countries where no carbon pricing exists, the so-called carbon leakage effect, making the benefits of the system negligible.

To prevent this eventuality and gain industrial support for the establishment of the carbon pricing market, the EU Commission provided free allowances to industries operating at risk of carbon leakage. Unfortunately, given that almost 97 per cent of ETS industrial emissions originate from companies in the carbon leakage list, the system overcompensates polluting firms, which are not paying for their emissions.

Such compensatory measures have been contested by numerous economic studies, which have demonstrated that a loss of competitiveness is unlikely or very limited.² According to experts,

² Frédéric Branger, Oskar Lecuyer and Philippe Quirion, "The European Union Emissions Trading System: Should We Throw the Flagship Out with the Bathwater?", in *CIREC Working*

the modest risk of carbon leakage can be attributable to the marginality of the carbon price in the composition of production costs. Moreover, other factors influence a company's choice of location, such market proximity, quality of infrastructure, expertise in research and development and respect of the rule of law, to mention a few.

While the free allocation of allowances has mitigated the risk of carbon leakage, it has also led to negative effects. The distribution of free allowances has been anchored to a plants' production levels before 2008: the number of permits granted for free usually were enough to cover the CO₂ emissions originating from the manufacturing sector.

However, with the collapse of activity levels during the economic crisis, free allowances have not been adjusted to new outputs, resulting in overcompensation to certain companies. Moreover, these firms were able to sell their excess allowances on the market without taking any decarbonization measures, generating unfair profits.³

According to some estimates, between 2008 and 2015, European cement producers benefited from over 5 billion euro of windfall profits due to an excessively generous amount of free allowances. More than half of this number was generated by the sale of allowances on the market. The

Papers, No. 48 (July 2013), <http://www2.centre-cired.fr/IMG/pdf/CIRECWP-201348.pdf>.

³ This led to a perverse situation where companies were incentivised to maintain lower production levels, in order to benefit from the overallocation.

remaining is imputable to profits made from price increases that are passed on to consumers even though allowances were received for free. Three of the main companies in Europe (LaFarge-Holcim, Heidelberg-Italcementi and Cemex) alone would have benefited of 2 billion euro in profits.⁴

Similarly, European steel producers are accused of having gained over 1 billion euro of windfall profits from 2008 to 2014 by selling their surplus allowances on the market and over 6.7 billion euro if one considers the potential of cost increases for consumers.⁵ Such profits are unacceptable, considering that the cement and steel sectors together account for about 15 per cent of overall European CO₂ emissions.

European policymakers have tried to reduce the overallocation of free allowances, cutting surplus allowances in the market, but the situation remains dramatic. The windfall profits made by some companies represent a distortion of the market and a missed opportunity to increase the revenues of the sale of allowances by EU member states.

These resources could have been invested in low-carbon and disruptive technologies, to the benefit of the polluting companies themselves, accelerating the pace of decarbonisation

⁴ Carbon Market Watch, "Cement's Pollution Windfall from the EU ETS", in *Carbon Market Watch Policy Briefs*, November 2016, p. 2, <https://carbonmarketwatch.org/?p=24715>.

⁵ Carbon Market Watch, "Industry Windfall Profits from Europe's Carbon Market. How Energy-Intensive Companies Cashed In on Their Pollution at Taxpayers' Expense", in *Carbon Market Watch Policy Briefs*, March 2016, p. 3, <https://carbonmarketwatch.org/?p=21749>.

in these highly polluting sectors.

The overallocation of free allowances represents one of the main flaws of the EU ETS, hampering its effectiveness and reputation. The allocation criteria of free allowances have distorted the market, rewarding polluting companies that maintained low production levels while penalising performant companies that have actually invested in renewable energy and decarbonisation.

Free allowances were initially conceived to prevent the loss of competitiveness for European industries at the international level. Ironically, they led to an unequal and unfair treatment between European companies competing in the same market.

Against this backdrop, a number of actionable policies can be implemented to mitigate this distortion, contributing to a more level playing field in Europe.

These range from short-term measures such as improving allocation criteria, leading to a reduction in the allocation of free allowances, to more ambitious proposals that would reform the EU ETS, eliminating free allowances altogether, gradually replacing these with other more functional mechanisms.

In order to prevent further cases of overallocation, the distribution of free allowances should follow real and annual production levels not historical data as has been the case until now. This would prevent or at least limit overallocation risks in the event of a fall in a company's output, while at the same time not penalising companies that increase production or implement

green energy solutions to strengthen their decarbonisation efforts.

Such a reduction in free allowances will have another positive effect, increasing revenues for EU member states due to expected increases in the sale of allowances. These resources can be used to finance low-carbon technologies – fundamental for the decarbonisation of key polluting sectors of the economy – in a more effective way.

Finally, it is time to consider a gradual phase-out of free allowances altogether, substituting them with other mechanisms that prevent the loss of competitiveness for European companies. For example, the establishment of a border tax adjustment that imposes an equal carbon price on imports (in cases when these do not bear the same carbon cost) has often been proposed as a good replacement to free allowances.⁶

The EU Emission Trading Scheme can be an important instrument in the decarbonisation of European economies, but policymakers need to be more ambitious and stand against strong industrial interests when these are costly for society, working to correct the flaws of the carbon market.

The long-term trend of de-industrialisation of Europe and the necessity to react to global warming should provide impetus to promote an innovative, green and CO₂-free

industry, capable of creating new jobs, increasing competitiveness at the international level while simultaneously leaving a better world for future generations.

Introducing a new functional mechanism that could compensate for the EU ETS's shortcomings by resolving this paradoxical situation in which polluting companies can make a profit via free allowances, the selling of allowances or the passing on of increased costs to consumers is a necessary step in this direction.

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⁶ Lakshmi Mittal, "A Carbon Border Tax is the Best Answer on Climate Change", in *Financial Times*, 12 February 2017, <https://www.ft.com/content/8341b644-ef95-11e6-ba01-119a44939bb6>.

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