Since 2017, in the expectation of the start of operation of the Market Stability Reserve as of 2019, prices under the EU Emissions Trading System (EU ETS) have been steadily increasing, from around €5 in early 2017 to €25 prior to the onset of the coronavirus epidemic. After a wobble during which the price fell back to around €15 in mid-March 2020, the EU allowance price has been on an upward trajectory since. Over the last couple of months, however, the price has jumped from €30 to about €40\(^1\). These are, without doubt, significant price movements. What can explain them?

Market observers have been offering multiple explanations, ranging from the cold weather to the interest hedge funds have been showing in acquiring EU carbon allowances. Some now suggest that more market intervention may be necessary to fight 'speculation' and temper 'volatility' in the EU's flagship carbon market.

In this Policy Brief, five explanations are offered for the price evolution, linking recent developments with the EU's climate neutrality goal by mid-century.

\(^1\) For daily EUA price data see: https://ember-climate.org/data/carbon-price-viewer/

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The opinions of the authors represent personal opinions and do not represent the position or opinion of the European University Institute.
There are many factors that influence the price of carbon allowances under the EU ETS. Not all of these relate to market fundamentals, and here are five contributing reasons that help explain where we are today, and what lies in store.

First, the price of EU allowances, in the high thirties today, is an expression of confidence in the political commitment made in Europe’s “Green Deal” initiative launched in December 2019. Big players in industry, energy and financial sectors have taken note of the seriousness with which the Green Deal has been communicated, and the underpinning it provides in shaping Europe’s agenda. The advent of the coronavirus, rather than weakening climate resolve, has served to reinforce the need for a major programme of public investment both to ready Europe for the transition to net-zero emissions in 2050, but also to stimulate jobs and growth after the serious economic downturn that the epidemic has caused.

Economic actors have noted the modelling projections of the impact assessments of the EU Commission’s services on the 55% reduction target in 2030, which estimate a range of carbon prices by 2030 between €32 and €65\(^2\). The market considers these projections to be credible. As in all markets, prices tend to anticipate, even in advance of seeing the several specific policy proposals planned for June 2021, and without knowing the outcome of what are sure to be complex and protracted negotiations. Nevertheless, recent market developments put considerable pressure on the EU institutions, as the legal proposals have to match the high ambition level being expressed through political statements. Experience shows us that this is not always easy, and one can expect the carbon price to show further fluctuation as the political processes play out.

Second, there is evidence that there are more actors in the market than there are companies with compliance obligations under the EU ETS. This has always been the case, but its extent appears to be growing\(^3\). This makes some people nervous and new calls for market intervention have been made. Yet, the price level we currently see is at the lower end of the range of carbon prices considered to be necessary globally. The Stiglitz-Stern report on pricing carbon of 2010\(^4\), sponsored by the World Bank, clearly stated that prices in the range of $50-100 per tonne are required. This is the price level that generates substantial changes in the energy market through encouraging not only fuel switching from coal to gas and the widespread uptake of renewable energy, but also radical innovation in manufacturing industry, such as for steel or the production of clean hydrogen, ammonia and methanol using Carbon Capture and Storage or Use.

Third, it is not the first time that calls are being made for additional controls of the carbon market in view of limiting price fluctuations. A recent suggestion made was to create restrictions on the registry holdings of actors who do not have compliance obligations under the EU ETS, such as financial investors. This, it has been suggested\(^5\), would be implemented through amendment of the Markets in Financial Instruments Directive II (MiFID II) Regulation. However, this is not as simple nor as effective as it sounds, as the carbon price movements are observed on the futures market, while the EU ETS registry records actual holdings in accounts. Moreover, resolving the over-supply of allowances following the 2009-2010 recession that led to the introduction of the Market Stability Reserve took more than five years of controversial debate. Such regulatory changes are not made overnight.

Fourth, one can expect more calls for direct price intervention. The long-standing wish by some for a price “floor” for EU allowances may soon be matched by suggestions to create an allowance price “ceiling”. Such ideas have long been favoured by France, and
figured in the Franco-German communiqué of 18 May 2020.\textsuperscript{6} It is assumed that these prices would apply to allowances sold by auction, rather than be price controls in the secondary market. There would inevitably be a link between the primary and secondary markets, as both would respond to underlying demand and supply of allowances. However, it is far from clear that price controls alone would eliminate speculation. Ideas of such price controls are extremely difficult to agree on and makes the pricing mechanism look less like a market-based measure and more like one with predetermined prices, not dissimilar to a tax.

Despite that practical issue, higher carbon prices also result – very similar to taxes – in higher revenues from the auctioning of EU allowances. As the carbon price rises, these revenues will increase, which will be of particular interest to the less wealthy Member States that receive proportionally a higher share of auctioning proceeds than allocation to their entities would normally warrant\textsuperscript{7}. This advantage derives from issues around fairness and the ability to pay for investments needed to decarbonise. These additional revenues are surely welcome, and when combined with the revenues of the Modernisation Fund in particular, as well as the Innovation Fund, provide substantial future funding for investment in the modernisation of energy systems and low-carbon innovation in both energy and industry sectors. The Modernisation and Innovation Funds together offer financing, depending on the carbon price, of between €20 billion, and potentially as much as €26 billion in the case that carbon prices stay in the region of €35 a tonne. This is, of course, in addition to the increased revenues accruing to all Members States from the auctioning of most of the allowances. The short message is that higher carbon prices will provide higher revenues that must, in large part, be spent on climate-related expenditure. It helps offset in part the additional investment costs of high-climate ambition.

Fifth, it is very difficult to forecast how carbon prices may evolve in the coming years. The tightening of the overall cap on emissions regulated by the Emissions Trading System will reduce the supply of allowances, and so increase scarcity. The recent rise of carbon prices is probably part of the logical resetting of prices to reflect the higher EU target of a 55% reduction in 2030, compared to 1990. Further evolution depends on the details of the proposals, the allocations to cover any extensions of scope to include new sectors and the manner in which new sectors are linked with the main EU ETS market. The economic outlook is relevant, as it has always been, as well as the costs of innovation and deployment of new technologies. Companies should no longer be in any doubt that momentum driving climate action will only increase in future. There are as many, if not more, risks in not embracing the transition than there are in investing in low-carbon technologies. The science provides an underpinning of policy, where the direction of travel is clear. Competitors across the world will do the same, with or without a Carbon Border Adjustment Mechanism or free allocation. If carbon prices in Europe were to go through the roof, the EU should better concentrate on how to create over time an additional supply of carbon allowances, such as through the development of intra-EU offsets and certificates of carbon removals. The net-zero targets by 2050 require urgently more action on that front.

The European carbon market has never been more important as an instrument to secure emission reductions cost effectively. Maintenance of its proper functioning must be the priority as we move up a gear in terms of ambition. A higher carbon price is what was always intended to drive change and blunting the instrument must be avoided.


\textsuperscript{7} “Towards a Climate Neutral Europe: Curbing the Trend” edited by Jos Delbeke and Peter Vis, Chapter 4, section 4.6, pp. 81-84 (Routledge, 2019) and also freely available from the European Commission’s website: https://ec.europa.eu/clima/citizens/publications_en#General
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