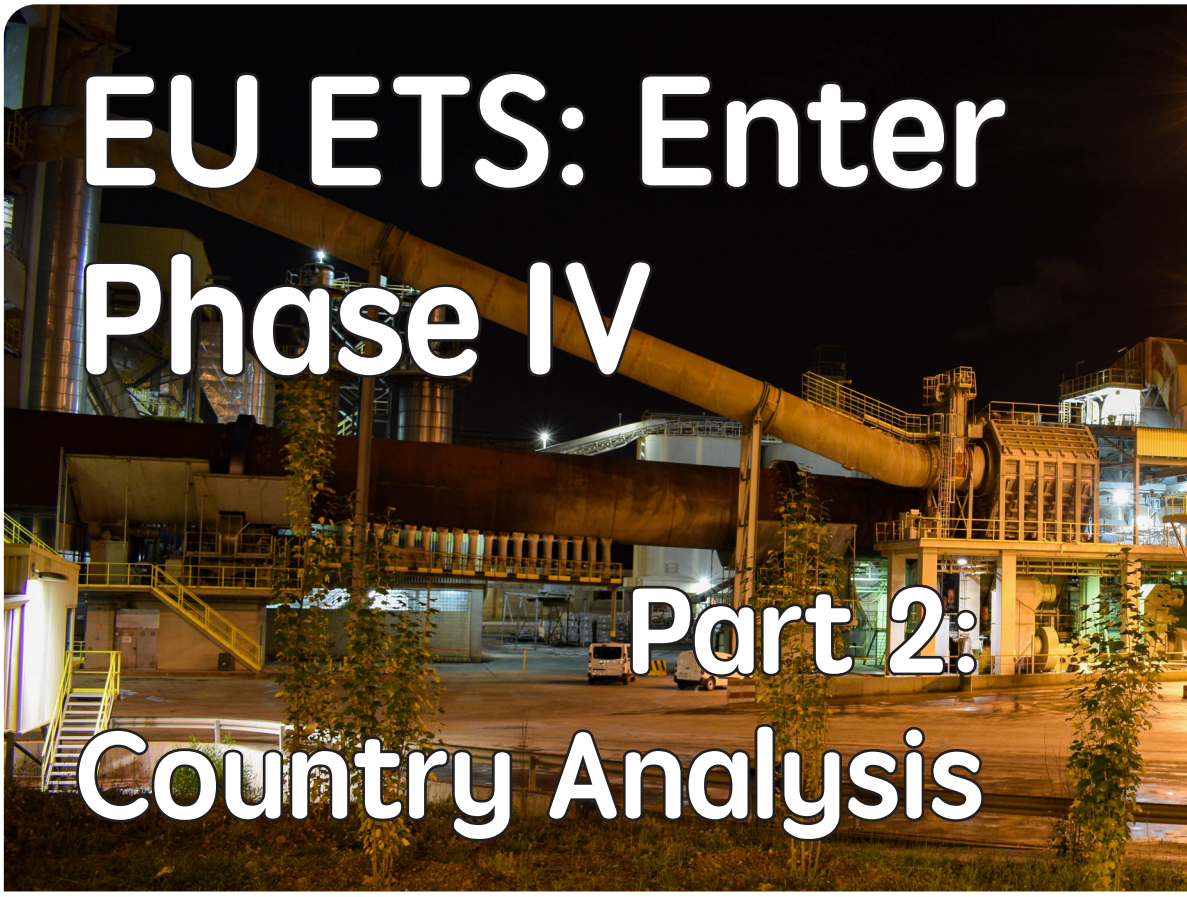
Terry Pavlopoulos, CemBR

EU ETS: Enter Phase IV

Part 2: Country Analysis



Right: The Cementos Molins Sant Vicenç dels Horts plant close to Barcelona, Spain. **Source:** Xavier Valero, entrant to the *Global Cement Photography Competition.*

In the second of CemBR's series of articles on the EU Emissions Trading Scheme (ETS), Terry Pavlopoulos looks at the developments in its Phase IV, with focus on the differences between free allowance allocations between EU ETS member states...

As outlined in the April 2022 issue of *Global Cement Magazine*, the overall EU ETS allowances for Phase IV, which started in January 2021, were 13% lower than the allowances in 2020. However, this overall reduction has not been uniformly distributed among the member states. Figure 1 shows the country-by-country changes of the 2021 allowances from 2020. It must be noted that the Phase IV allowances have been adjusted for 2019-2020 production levels. These adjustments were in the main positive, in that they increased allowances compared to the original ones based on the 2014-2018 baseline, but there were also some negative adjustments.

Figure 1 indicates that only six out of the 26 country members saw increased free allowances in 2021 compared to 2020. As one might expect, most of the EU ETS members on the Mediterranean rim have reduced their allowances for phase IV.

What do these allowances mean for members?

Clinker production levels for 2019 and 2020 indicate that the capacity utilisation rates for each member state vary significantly. Figure 2 shows the highest capacity utilisation rates achieved in each member over the two years 2019 and 2020. Again, it is obvious that some countries were operating at high capacity utilisation rates, whereas others were operating at much lower levels. The Mediterranean rim countries experienced the lowest capacity utilisation rates over the two years in question.

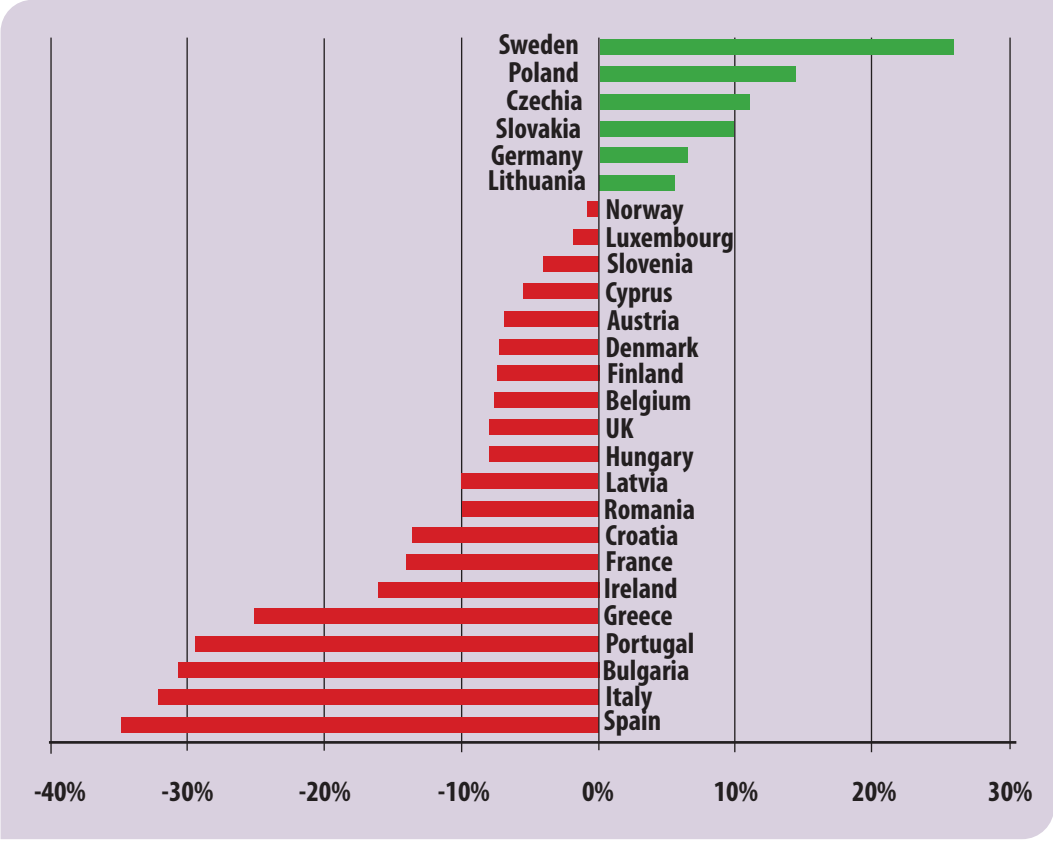
So, what are the options available to each member state? A detailed analysis of this topic is included in CemBR's recent report, *'EU ETS: Enter the Phase IV.'* Here, we consider what might happen if all country members decide to continue to operate at the highest 2019-2020 capacity utilisation rates.

What would the carbon cost be for each member?

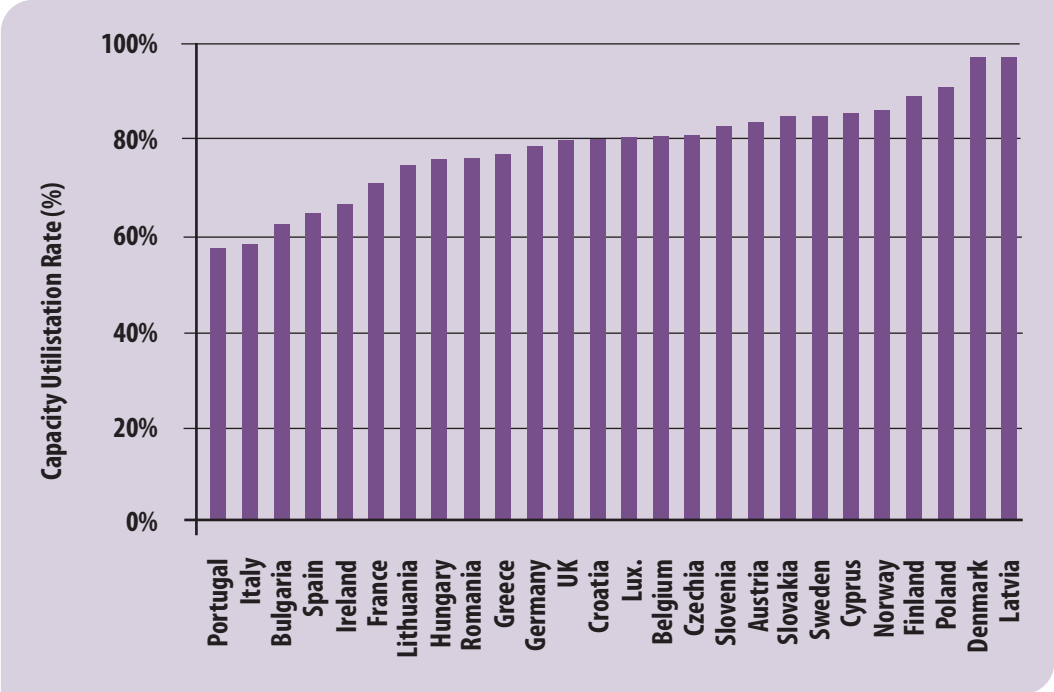
As explained in our April 2022 article, the CO_2 cost to the whole scheme (including the UK) if each member operated at its highest 2019-2020 capacity utilisation levels would be approximately Euro1.3bn in 2022, assuming carbon prices as of January 2022. However, this burden will not be distributed equally among all members, or indeed among all 201 operational clinker producing plants.

Indeed, Figure 3 (overleaf) shows the differences in the costs of each country member within the scheme, plus the UK. As anticipated, the larger markets will have to bear the highest CO_2 costs, but what is more important is the cost of CO_2/t of cement sold in each market. This would offer an indication of potential cement price increases to cover these costs, everything else being equal. This analysis is included in some detail in the report.

What is even more interesting is the disparity between each individual plant within each EU ETS member state. Their relative situation varies significantly, making each plant's strategy for Phase IV an interesting and important exercise. It is therefore expected that every plant in Europe will have to define its own individual strategy regarding CO_2 costs. These strategies will affect levels of



Left - Figure 1: Percentage changes in free allowances for EU ETS member states (plus UK) in 2021, compared to 2020.



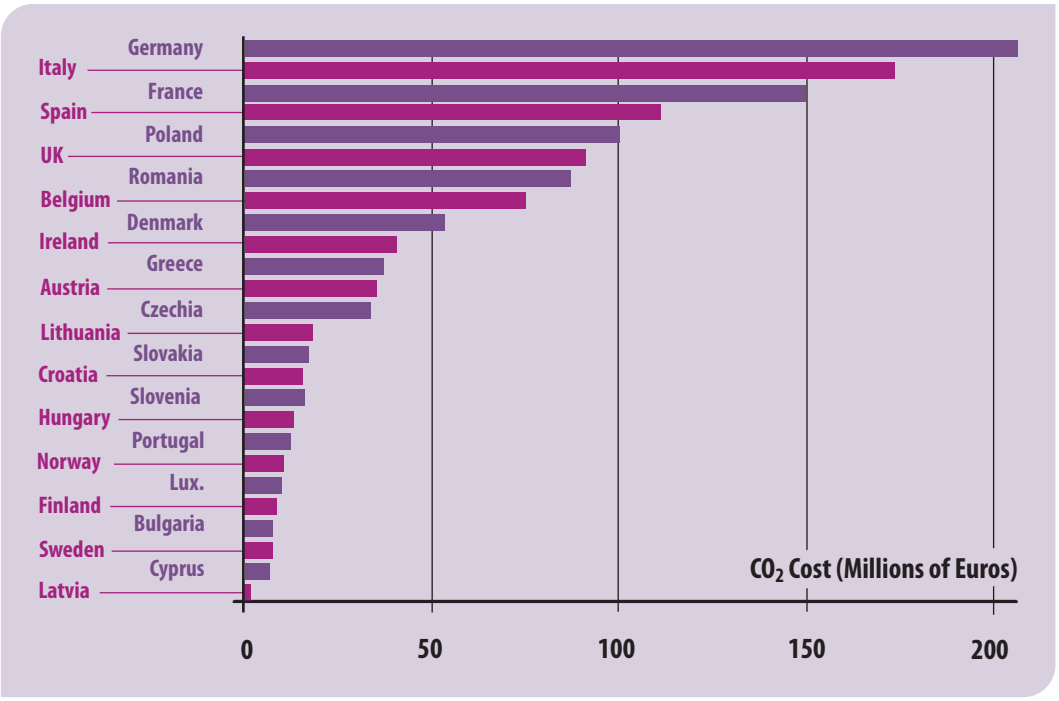
Right - Figure 2: Capacity utilisation rates in EU ETS member states in 2019-2020. Highest value of the two years shown.

Lux. = Luxembourg.

production, cement pricing, exports, and other aspects of plant operations, including investments in CO_2 reduction initiatives. Clearly the plants that belong to larger groups will have a higher level of flexibility, as they may be able to allocate their allowances based on an overall group benefit. This may not be achievable in the UK, however, where plants must each define their individual strategies irrespective of ownership.

Cement prices have been increasing in recent months spurred by both higher CO_2 costs and the unexpected supply chain-driven shortages leading to significant upward energy cost trends. Demand was strong in Europe in 2021, with almost every single country showing a recovery over 2020. This has also contributed to rising prices in Europe.

In its next article, CemBR will address the Carbon Border Adjustment Mechanism (CBAM) and how it might affect both the domestic producers and potential importers into EU ETS countries.



Right - Figure 3: CO_2 cost for each EU ETS member state (Millions of Euros) if 2019-2020 capacity utilisation rates were maintained in Phase IV.

Lux. = Luxembourg.