

Written evidence submitted by the Chemical Industries Association (ETS0003)

About us

CIA is the organisation that represents chemical and pharmaceutical companies located throughout the UK.

The UK chemical and pharmaceutical industries have a strong record as manufacturing's number one export earner (on a value-added basis) and a provider of essential inputs to UK value chains. This includes products and technologies which are key enablers of climate change solutions. We therefore have a strong contribution to make both to rebalancing and greening the economy.

However, the chemical industry is energy intensive, competes globally for market share and inward investment, and has already done much to improve the energy efficiency of our existing production assets. Our contribution is therefore critically dependent on secure and competitive energy supplies and carbon reduction schemes which do not leave us internationally exposed. Energy is our number one issue.

Summary

- i. **Carbon leakage will harm the UK and the climate.** When it comes to carbon pricing, the most critical issue for our sector is how we achieve a level playing-field with our international competitors, so that manufacturing emissions are reduced in the UK and not offshored. This would be the best outcome for the UK, securing skilled jobs and advanced manufacturing capability, in parts of the country targeted by the "levelling-up" agenda; and it would be the best outcome for the climate, supporting cleaner UK manufacturers with their ambitions to decarbonise.
- ii. **We need a level playing field because we compete on price in a global market.** We are also energy intensive, which means energy is our most significant operational cost, and we have already exhausted our economic options for emission abatement. Our industry's pathway to net zero now depends upon access to competitively priced clean heat and power, as well as carbon capture and storage (CCS) infrastructure to store and use unavoidable greenhouse gas emissions resulting from some chemical reactions.
- iii. **Carbon pricing can work for our sector with the right design.** That means a long-term, predictable price signal that recognises and accounts for international competitiveness, upstream and downstream impacts, and a sector's specific pathway to decarbonisation. In the absence of a global carbon price, unilaterally increasing the carbon price for UK operators, without effective carbon leakage provisions, will simply cause our foundation industries to offshore.

Future of UK carbon pricing

1. **As participants in the EU ETS, UK manufacturers are already at a disadvantage**, owing to the carbon price disparity between EU ETS and non-EU ETS manufacturing locations. Moreover, UK manufacturers are at a further disadvantage within the EU ETS, because they face additional direct and indirect carbon pricing over and above their EU competitors. The additional direct cost arises from the UK-only Climate Change Levy charged via their energy bills, whilst the indirect carbon cost comprises the pass-through cost of the UK-only Carbon Price Support (CPS) levied on thermal generators.
2. **Our success in decarbonising electricity means we also face higher prices** than our competitors in the rest of the world. This price disparity represents the pass-through of cost of:
 - a) Carbon pricing on thermal generation, including the EU ETS and CPS;
 - b) Subsidies for renewable power (Contracts for Difference, Feed-in Tariffs, the Renewables Obligation, Capacity Market);
 - c) Increasing our network's capacity to balance intermittent and distributed renewables.These pass-through costs have paid for the decarbonisation of the UK's electricity sector and the UK's energy-intensive foundation industries have disproportionately shouldered this burden. Our electricity prices are over 70% above the EU median and far higher than our major competitors. Electricity wholesale costs now represent just 49% of a UK industrial user's bill, whilst policy and network costs make up 51% and are rising. In this way UK manufacturers are financing the success story of electricity decarbonisation, at the expense of our own competitiveness.
3. **The cumulative burden of rising energy and carbon costs will overwhelm UK industry** if the government does not act. So far, UK gas prices have allowed us to continue to compete internationally. However, the cost of our gas/ heat will rise if industrial consumers are asked to pay for the decarbonisation of the gas grid as we were with the electricity grid. This process has already started with the publication of government proposals for a Green Gas Levy (under consultation). Taking the electricity system as a parallel, to date over £40 billion has been spent on policies to support its decarbonisation and this figure increases every year. All of this support has only partially decarbonised the electricity grid. To put this in context, the UK's electricity grid provided 325 TWh of energy in 2018, whereas the UK's natural gas demand was 877 TWh. Given the scale of the clean heat transition, and the higher production cost of manufactured green gases (e.g. hydrogen or biomethane), a far more significant amount of long-term financial support is needed to decarbonise the gas grid. The UK's foundation industries cannot afford to finance the decarbonisation of our whole energy system whilst, at the same time, paying a direct carbon price for emissions that are outside of our ability to abate.
4. **Carbon leakage is already happening in our sector**, although the evidence is often not available in the public domain and so the impact is impossible to quantify without speaking with companies. The reasons behind this are:
 - a) It is very difficult to say any one site closure is because of an energy or carbon price increase. The comparatively high energy and carbon price for large energy users in the UK lowers profit margins. This renders UK manufacturers more vulnerable to whatever one-off shock subsequently results in site closure (e.g. a recession).
 - b) ~70% of our sector is comprised of multinational companies with a global footprint. The comparatively high energy and carbon prices in the UK erode the business case for new investment here so that each year, during budget review, new investment is allocated to sister assets in the EU or elsewhere. The result is that UK assets are being run down rather than renewed. This makes them less efficient and so a more obvious target for closure when a challenge comes along.
 - c) Carbon leakage is not just site closure, it is new sites opening overseas rather than in the UK. China became the largest producer of chemicals in 2009 and have continued to expand their

lead ever since, at the expense of European production. These chemicals are not made using clean energy or with CCS. In Europe, we continue to buy them because they are cheap.

5. **Carbon pricing can work for industry.** It has worked well for power because the power sector has a captive market, viable alternatives and significant policy support. These allow it to pass through the cost to its customers. Industry competes globally for market share so, in the absence of a global carbon price, cannot pass through the cost of decarbonisation to its customers. To reach net zero, industry needs access to a competitively priced and reliable supply of clean energy. The scale of the investment is vast and direct carbon pricing, on top of paying for the energy transition, further erodes the business case for investing in UK assets. For our sector, an effective carbon price would provide a long-term, predictable price signal. It would recognise international competitiveness (e.g. through carbon border adjustment), upstream and downstream impacts, and a sector's specific pathway to decarbonisation.
6. **The impact of carbon leakage can be mitigated.** The UK government must consider all options for maintaining a level-playing field for UK industry, with the EU and the rest of the world, whilst we roll-out the energy and emission infrastructure required for net zero manufacturing. This could be achieved by:
 - a) Levelling the playing field on carbon price, through free allocation or other cost-containment mechanisms like that used in Alberta, Canada's carbon pricing scheme.
 - b) Ensuring competitively priced energy supplies by exempting industry from the pass-through cost of policies to decarbonise the power sector, as recommended by Dieter Helm's Cost of Energy Review;
 - c) Grant support for investments in energy efficiency and industrial decarbonisation;
 - d) Subsidy support for the roll-out of industrial CCS and use of cleaner energy sources (e.g. hydrogen);
7. **The threat of carbon leakage can be eliminated.** Ultimately, we will need to shift the cost of decarbonised production to the end consumer, by creating a market for zero carbon industrial products. This Committee on Climate Change advise that this could be done through product labelling/ standards or a carbon border adjustment measure (CBAM). The EU are already looking at implementing a CBAM for steel, electricity, cement and chemicals, because they recognise it is required to reach net zero whilst maintaining domestic manufacturing. A UK CBAM could be used to apply a carbon price to imported products, effectively applying a carbon price to manufacturers outside of our jurisdiction. The carbon price can also be refunded on UK exports to locations that do not currently apply a carbon price, allowing cleaner UK manufacturers to compete on a level-playing field overseas.

Our preference

We support a UK ETS that is linked to the EU ETS. Alignment to the EU ETS would help to level up the playing field with the EU at least, by affording us the same direct carbon price. It would also avoid issues of liquidity, which could occur in a standalone scheme.

If we cannot negotiate a link to the EU scheme, then we would support BEIS' proposals for a standalone UK ETS above the Treasury's proposals for a carbon emissions tax. Our main concerns with the carbon emissions tax are that it provides business with less flexibility and provides less incentive to improve beyond the benchmark. Even so, we are concerned that a standalone UK scheme could disadvantage us against the EU and the rest of the world.

In the table below, we outline our perception of the main advantages and disadvantages of the three options.

The advantages and disadvantages of a standalone UK ETS and a Carbon Emissions Tax

	UK ETS linked	CET	UK ETS standalone
Advantages	<ul style="list-style-type: none"> - Continuity of EU ETS (broadly) - Price equivalence 	<ul style="list-style-type: none"> - UK can set own rules. - Cross-sector correction factor (CSCF) would not apply. - BEIS will begin a review of free allocation in 2021, to ensure it is “fair and proportionate”. 	<ul style="list-style-type: none"> - UK can set own rules. - BEIS will begin a review of free allocation in 2021, to ensure it is “fair and proportionate”.
Disadvantages	<ul style="list-style-type: none"> - We are subject to EU rules (e.g. on benchmarks) without a say - Emissions cap will be set 5% below the UK’s share of the EU ETS cap for Phase IV of the EU ETS (i.e. 156 million allowances in 2021, including aviation) from the start - The cap will remain 5% below where we would have expected the UK’s share of the Phase IV EU ETS cap to be, year-on-year 	<ul style="list-style-type: none"> - No provisions for the transfer, banking or borrowing of allowances, mean proposals are more costly for UK-based installations - We are subject to EU rules (e.g. on benchmarks) without a say - Reward payments, for emission reduction below free allocation, are less than under the EU ETS. Sites must report additional information to receive payment. - Tax rate is capped at a rate higher than the average EUA clearing price. - Operators are unable to hedge. - EU CBAM could leave us exposed. 	<ul style="list-style-type: none"> - Low liquidity mean higher prices are likely - EU CBAM could leave us exposed. - Participants will not be permitted to use any banked EUAs for UK ETS compliance obligations - Emissions cap will be set 5% below the UK’s share of the EU ETS cap for Phase IV of the EU ETS (i.e. 156 million allowances in 2021, including aviation) from the start - The cap will remain 5% below where we would have expected the UK’s share of the Phase IV EU ETS cap to be, year-on-year. - A transitional Auction Reserve Price of £15 will apply, to be removed once a Supply Adjustment Mechanism can be implemented.

Note: The advantages and disadvantages listed refer to the specific government proposals for each scheme, as of October 2020.