# *Fixing the Carbon Leak*

***The Commission for Carbon Competitiveness***
***June 2023***

# Contents

## EXECUTIVE SUMMARY

The Commission for Carbon Competitiveness was founded in February 2023 as a cross-party and cross-industry effort to explore how the United Kingdom can reach net zero without undermining the competitiveness of British industry.

Through a targeted consultation to UK industry, MPs, trade unions, academics and think tanks, the Commission received 20 written submissions and held four oral evidence sessions. Following this process, and in combination with academic research, the Commission has developed a set of 12 core recommendations.

A UK CBAM should:

1. **Be introduced to coincide with the beginning of UK ETS Phase II (from 2026)**
2. **Align with the EU CBAM where practical, but tailor our design to the UK's specific requirements where needed**
3. **Apply universally to all UK manufacturing industries without exception**
4. **Apply to Scope 1 emissions initially, to make the scheme as simple as possible**
5. **Use as many existing information-gathering tools as possible, on a 'tell us once' principle**
6. **Be kept up-to-date by regular, independent 5-year technical reviews**
7. **Only apply to manufactured products consumed in the UK**
8. **Comply with the UK's obligations under the World Trade Organisation (WTO) whilst taking the needs of least developed nations into account**
9. **Proceed as a collaboration between government, Parliament and industry**
10. **Use the proceeds of a UK CBAM to cut or abolish green levies and fuel duty**

Additionally, prior to a CBAM's introduction a number of transitional arrangements will be needed to ensure our manufacturing industries already exposed to high levels of damage from carbon leakage remain viable:

11. **Free allowances should not be withdrawn and the proposed cut to the ETS allowance cap in 2024 should be delayed until a CBAM comes into effect**
12. **Restore industry confidence in the Cost Containment Mechanism (CCM) by revising its methodology and making it an automatic and effective break on unsustainable UK allowance price spikes**

The Commission now looks forward to further engagement with UK Government around its own consultation on carbon leakage, and will continue to provide its own analysis on how UK manufacturing can play a key role in the transition to a net zero economy.

## FOREWORD BY THE COMMISSIONERS

When it comes to engineering and manufacturing expertise, the UK ranks amongst the best in the world. The ninth largest manufacturing nation, British industries contribute 10% of the UK's total GVA (gross value added) and account for 7% of jobs.[1] The importance of manufacturing to Britain's economy, however, goes further than these statistics: it has better economies of scale than most service industries, which means its potential to improve the UK's productivity is greater too. In addition, having a flourishing manufacturing sector would diversify our economy away from its current reliance on the service sector, increasing our resilience to external economic and security shocks, such as pandemics, wars or new technologies such as artificial intelligence. In addition, our factories, mills, forges and workshops have a crucial role in providing skills, meaningful work and community purpose across the nations and regions of the UK.

Alongside this priority is the necessity of reducing our emissions. The UN Intergovernmental Panel on Climate Change (IPPC) is clear that without urgent action we are on course to breach global temperature rises of 1.5°c in the near term, with painful consequences for our planet. As a major developed economy, the UK cannot, for its part, ignore the urgency of the need to arrest the heavy costs of climate change.

The problem is that all manufacturing industries, but particularly the more energy-intensive businesses, have traditionally been large emitters of carbon. If UK manufacturers are bearing costs that international rivals do not, then we risk seeing economic activity moving overseas: decarbonisation will become deindustrialisation with job losses and industrial decline here, as emissions and profits move elsewhere. This is called carbon leakage and, if it isn't dealt with properly, it means successful manufacturing industries and net zero are incompatible opposites where one can only be achieved at the expense of the other.

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We believe this is wrong. There should be no contradiction between growth in manufacturing and delivering net zero. They are complementary rather than contradictory, and the UK can – with an approach tailored to our specific industrial needs – do better than our international trading partners and rivals. It will, however, only be possible if we fix the harmful carbon leak.

It is against this backdrop that the Commission for Carbon Competitiveness was formed. This report is the culmination of months of discussions with industry, trade unions, academics, think tanks and Members of Parliament, and we believe it provides important and timely recommendations for Government on how the UK can reach net zero without undermining the competitiveness of British industry.

There is no time to waste if the UK is to get ahead of our international competitors as we move towards net zero. The US Inflation Reduction Act has demonstrated the lengths to which advanced economies will go to attract the investment needed for a sustainable economy, while our nearest trading partners in the EU are bringing in their own measures through the European Green Deal, not least of which is the implementation of a carbon border adjustment mechanism (CBAM). There can be no doubt that the window for early mover advantage is closing.

Solving the challenge of maintaining and growing a strong manufacturing economy whilst also addressing the threat of climate change is an issue that extends beyond a single parliamentary term or the lifetime of any government. As a cross-party and cross-industry group, we are proposing solutions that will last the

[1] House of Commons Library, *Industries in the UK*, https://commonslibrary.parliament.uk/research-briefings/cbp-8353/, 6 December 2022 (accessed 1 June 2023)

test of time because they cross the political divide. Not only is this good politics, it is also vital for manufacturing businesses, which plan their capital investments over 10-to-25-year horizons.

We started this effort before the government announced its own consultation on how it should address the risks of carbon leakage, but are pleased that this is issue being treated seriously by Ministers. Throughout this paper, we have compiled recommendations to help the UK navigate the policy landscape. Implementing these recommendations will require significant effort and cooperation from both government and industry. The benefits, however, of fixing carbon leakage far outweigh the costs. For our industrial communities there can be no delay.

**John Penrose MP**
***Weston-super-Mare (Chairman)***

**Arjan Geveke**
***Energy Intensive Users Group***

**Jo Gideon MP**
***Stoke-on-Trent Central***

**Stephen Kinnock MP**
***Aberavon***

## WHAT IS CARBON LEAKAGE AND WHY DOES IT MATTER?

Achieving net zero requires rapid change across the whole economy, with the need for low-carbon solutions across the UK's manufacturing base and energy-intensive industries. The net zero transition offers opportunities for major technological advances through the deployment of low-carbon hydrogen, carbon capture storage (CCS), energy efficiency and electrification.

Many of the companies and sectors that engaged with the Commission are at the cutting-edge of these possibilities: be it **CEMEX's** use of 100% renewable electricity across all their UK sites and further ambitions to deliver net zero $CO_2$ concrete globally by 2050;[2] **LIBERTY Steel's** recent trial to replace anthracite with 'ecoke', which is expected to deliver a further 5% reduction in overall steel making emissions at their Rotherham site;[3] or **Phillips 66's** 'Gigastack' project, which is proposed to build a new 100MW electrolyser facility that will utilise renewable power to produce green hydrogen for use at their Humber Refinery.[4]

Existing barriers to the long-term vitality of British manufacturing, however, serve as a brake on potential investments to decarbonise industry: lack of infrastructure, access to capital, higher energy costs, trade barriers and taxation all form part of the mix that require urgent attention. A key unspoken challenge – and the focus of this report – is the growing risk of carbon leakage.

The concept of carbon leakage is relatively simple. HM Treasury's 2021 Net Zero Review describes it as:

> Climate rules and policies designed to reduce emissions in a given country can increase the costs of production of its businesses (including indirectly because of the impact on the price of inputs, such as energy) relative to international competitors if those competitors are subject to weaker climate change mitigation policies.
>
> If such rules and policies (such as carbon pricing, or other emissions reduction policies), are not implemented in an equivalent way across jurisdictions, this can result in production and the associated greenhouse gas (GHG) emissions being displaced, undermining the original environmental objective of climate mitigation policies – this displacement of GHG emissions is known as carbon leakage.[5]

In other words, domestic companies will suffer if the burden of policies aimed at reducing carbon emissions is too high, particularly if they operate in internationally competitive markets that means they cannot easily pass those costs on to the end consumer. Instead, production is reduced – or ceases altogether – with the carbon-intensive activity simply happening elsewhere.

The Department for Energy Security and Net Zero (DESNZ) and HM Treasury's ongoing consultation into carbon leakage argues that it can take place through three main channels:

- Businesses in countries with ambitious carbon pricing and climate regulation face higher costs, causing a drop in domestic production and associated emissions, and an expansion elsewhere;
- Differences in the strength of carbon pricing and climate regulation influence investment decisions, causing a shift in future production and associated emissions elsewhere; or

[2] CEMEX, '*CEMEX ambitious 2030 climate targets validated to be in line with the latest science*', https://www.cemex.com/w/cemex-ambitious-2030-climate-targets-validated-to-be-in-line-with-the-latest-science, 5 October 2021 (accessed 21 May 2023)
[3] LIBERTY Steel Group, *'LIBERTY Steel UK launches ecoke – a new method of electric steelmaking to reduce CO2 emissions'*, https://libertysteelgroup.com/liberty-steel-uk-launches-ecoke-a-new-method-of-electric-steelmaking-to-reduce-co2-emissions/, 18 October 2022 (accessed 21 May 2023)
[4] Phillips 66, '*Hydrogen*', https://www.phillips66.co.uk/emerging-energy/hydrogen/ (accessed 21 May 2023)
*5* UK Government, HM Treasury, Net Zero Review Final Report: Analysis exploring the key issues, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1026725/NZR_-_Final_Report_-_Published_version.pdf, October 2021, p.26 (accessed 20 May 2023)

- Reduced demand for fossil fuels due to policy measures in some countries could impact international fossil fuel prices, increasing incentives for carbon-intensive production involving the use of fossil fuels elsewhere.[6]

If carbon leakage is not dealt with properly, therefore, decarbonisation simply becomes deindustrialisation. This creates huge problems for exports, economic growth, jobs and skills throughout the UK, and leads to offshoring – rather than reducing – our emissions with severe environmental consequences too.

[6] Department for Energy Security & Net Zero and HM Treasury, '*Addressing carbon leakage to support decarbonisation*' https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1149568/UPDATED_FINAL_CONDOC_-_HMG_TEMPLATE_-_ADDRESSING_CARBON_LEAKAGE_RISK_TO_SUPPORT_DECARBONISATION.pdf, March 2023 (accessed 21 May 2023), p.22

## POLICY OPTIONS: PRODUCT STANDARDS AND CARBON PRICING

Carbon leakage risks undermining the economic gains associated with the net zero transition. By effectively offshoring our emissions, carbon leakage has significant economic and environmental consequences, and could ultimately risk the competitiveness of our manufacturing industries. Delivering a more holistic approach is needed to ensure that decarbonisation is not just achieved by deindustrialisation and the loss of investments and high-skilled jobs across many regions of the UK.

Given solutions for an enforceable global GHG reduction framework have not been forthcoming, a variety of options have been developed to tackle the problem. Broadly, these crystallise as two differing, yet not always mutually exclusive, approaches:

- **Product standards:** Regulators produce a set of mandatory product standards, with only products meeting these low-carbon specifications able to be sold in a particular market. The US Biden Administration's Inflation Reduction Act (IRA) is a current example of this approach, backed by some enormous (roughly $500 billion) taxpayer subsidies for domestic firms investing in clean energy technologies. [7]
- **Carbon pricing:** Following the 'polluter pays' principle, the negative effects of emissions are internalised by directly charging producers for the carbon that they have used in making their products. High-carbon products become more expensive than their low-carbon rivals, so that producers have an incentive to do the right thing. The carbon price is discovered through auctions under trading schemes – such as the EU Emissions Trading Scheme (ETS) (which the UK led the development of pre-Brexit) and its successor UK ETS. Such trading schemes are challenging to implement effectively, but nonetheless offer businesses flexibility in meeting their responsibilities, allowing them to pursue methods that best suit their specific business context.

Product standards are a long-established idea, which has been used for many decades to push up quality of certain goods. Attention has in recent years increasingly turned, however, to whether the carbon pricing trading regime approach, such as UK or EU ETS, can be supplemented by leveraging global trade rules to drive up global climate change standards as well as prevent carbon leakage. This is a newer concept called a Carbon Border Adjustment Mechanism (CBAM).

In 2021, former International Trade Secretary and the UK Government's 2020 candidate to lead the World Trade Organisation (WTO), **Dr Liam Fox MP**, put forward the case for what he then termed a "Carbon Border Tax":

> This is simply a charge on carbon emissions attributed to imported goods that have not been carbon-taxed at source. The aim is to put an additional price on imports from countries where it is cheaper to pollute and level the playing field for domestic industries that produce goods with lower levels of greenhouse gas emissions. Countries such as the UK, or those in the EU, argue that producers in their own countries who have already applied measures to reduce emissions, through carbon pricing, are handing foreign suppliers who do not bear these costs an advantage. Over time, they argue, it will shift production to low cost high emission countries. This will have the net effect of punishing our own industries and jobs, damaging our international competitiveness yet doing little to limit global emissions….
>
> A Carbon Border Tax can therefore lead to a rebalancing against importers from those nations with more lax environmental standards. It can also be argued that a Carbon Border Tax can improve domestic support for climate change policies by securing the buy-in of local industry for deeper decarbonization policies.[8]

Following this, in May 2022 the then-Financial Secretary to the Treasury, **Lucy Frazer MP**, announced the UK Government was "exploring a range of policies that could mitigate future carbon leakage risk", including growing the market for low emissions industrial products, and "whether measures such as product

[7] The White House, *Building a Clean Energy Economy: A Guidebook to the Inflation Reduction Act's Investments in Clean Energy and Climate Action*, https://www.whitehouse.gov/wp-content/uploads/2022/12/Inflation-Reduction-Act-Guidebook.pdf, January 2023 (accessed 1 June 2023)

[8] The Rt Hon Dr Liam Fox MP, '*Dr Liam Fox speaks at the Centre for Policy Studies on 'The Case for a Carbon Border Tax*', https://www.liamfox.co.uk/news/dr-liam-fox-speaks-centre-policy-studies-case-carbon-border-tax, 27 May 2021 (accessed 21 May 2023)

standards and a carbon border adjustment mechanism (CBAM) could be appropriate tools in the UK's policy mix."[9]

In 2023, the European Union became the first major economy starting to pursue such a carbon border approach with agreement on a carbon border adjustment mechanism (CBAM). Due to begin its transitional phase on 1 October 2023, with the first reporting period for importers ending 31 January 2024, the EU CBAM will "initially apply to imports of certain goods and selected precursors whose production is carbon intensive and at most significant risk of carbon leakage: cement, iron and steel, aluminium, fertilisers, electricity and hydrogen."[10]

From 1 January 2026, the EU CBAM is intended to enter into permanent force, with importers needing "to declare each year the quantity of goods imported into the EU in the preceding year and their embedded GHG. They will then surrender the corresponding number of CBAM certificates. The price of the certificates will be calculated depending on the weekly average auction price of EU ETS allowances expressed in €/tonne of CO2 emitted. The phasing-out of free allocation under the EU ETS will take place in parallel with the phasing-in of CBAM in the period 2026-2034."[11]

These two policy approaches – product standards with subsidies to incentivise investment on the one hand, and emissions trading with a CBAM on the other– have a number of arguments in their respective favour:

a) **Cost and flexibility:** Economists have been clear that an emissions trading and CBAM approach are typically a much cheaper (up to 22 times cheaper) and more efficient way of removing each tonne of carbon than a regulatory or product standards approach, due to the flexibility they give to firms in how they achieve emissions reductions.[12] Companies with a profit motive are quicker and more creative than regulators who have to check whether rules have been followed, and whether they work effectively or not.

b) **Complexity and simplicity:** Products standards are typically less complex than the emissions trading and CBAM approach. Product standards are (relatively) simple, because they can be measured and checked against the final product, with the only complexity in ensuring the goods match their corresponding labelling. CBAMs, however, need to piece together the carbon embedded in every product that – for complicated technologies – can include thousands of components or molecules from hundreds of production facilities in dozens of countries across the globe. That makes them potentially much more complicated, and puts a premium on simple, cheap and standardised defaults for reporting the data on each product. It also makes simplifying assumptions more likely: for example, the EU's CBAM is expected to apply to 'Scope 1' embedded carbon (the direct emissions which each firm controls) while applying product standards to Scopes 2 and 3 to avoid it becoming unworkably hard to use.

The fundamental choice for reducing emissions, therefore, remains regulation (often backed by targeted subsidies) or flexible and typically lower cost emissions trading, or a complimentary combination of both approaches.

**Scope 1, 2 and 3 emissions**

According to the Carbon Trust, the Greenhouse Gas Protocol – which provides the most widely recognised accounting standards for greenhouse gas emissions – categorises GHG emissions into three 'scopes':

***Scope 1:*** Covers direct emissions from owned or controlled sources, i.e. fuel combustion, company vehicles or fugitive emissions.

***Scope 2:*** Covers indirect emissions from the generation of purchased energy consumed by the reporting organisation, i.e. purchased electricity, steam, heat and cooling.

***Scope 3:*** All other indirect emissions that occur in a company's value chain. This includes all other upstream and downstream activities.

For more information see:

https://www.carbontrust.com/our-work-and-impact/guides-reports-and-tools/briefing-what-are-scope-3-emissions

[9] The Rt Hon Lucy Frazer MP, Hansard, 'Update on Carbon Leakage Mitigations', Volume 714: debated on Monday 16 May 2022, https://hansard.parliament.uk/Commons/2022-05-16/debates/22051619000007/UpdateOnCarbonLeakageMitigations?highlight=%22carbon%20border%22#contribution-3A904219-9A32-48A4-B76F-57D193888017, 16 May 2022 (accessed 21 June 2023)

[10] European Commission, 'Carbon Border Adjustment Mechanism', https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en (accessed 21 May 2023)

[11] *Ibid*.

[12] See T. H. Tietenberg, 'Economic instruments for environmental regulation', *Oxford Review of Economic Policy*, https://www.jstor.org/stable/23606112, Spring 1990, Vol. 6, No. 1, pp.17-33 (accessed 31 May 2023)

The question of how the UK's manufacturing industry can contribute towards its net zero goals, and what policy approach will best tackle the risk of carbon leakage and enable them to do so, is the focus of this report.

We understand that the UK Government and devolved administrations are currently reviewing their UK ETS policy following an in-depth consultation in 2022.[13] Additionally, the Department for Energy Security & Net Zero and HM Treasury are currently consulting on measures to address carbon leakage risks, including proposals to introduce a UK CBAM and mandatory product standards (MPS).[14] There can therefore be no better time for this report, and we look forward to it making a serious, cross-party contribution to the current debate.

[13] UK Government, Scottish Government, Northern Ireland Executive and Welsh Government, '*Developing the UK Emissions Trading Scheme (UK ETS)*', https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1067125/developing-the-uk-ets-english.pdf, March 2022 (accessed 21 May 2023)

[14] Department for Energy Security & Net Zero and HM Treasury, '*Addressing carbon leakage to support decarbonisation*' https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1149568/UPDATED_FINAL_CONDOC_-_HMG_TEMPLATE_-_ADDRESSING_CARBON_LEAKAGE_RISK_TO_SUPPORT_DECARBONISATION.pdf, March 2023 (accessed 21 May 2023)

## SCOPE OF THE CHALLENGE

Seeking to understand the scale of the challenge facing the UK economy, the Commission issued a call for evidence on 15 February 2023.[15] Over the course of February and March 2023, the Commission received 20 written evidence submissions from industry and other key stakeholders. In April 2023, the Commissioners also took oral evidence from a select group of industry leaders, think tanks, trade associations, a trade union and a fellow Member of Parliament.

The views expressed through this consultation process sit under three main themes:

1. The economic, social and environmental impact of carbon leakage on industry and the UK economy;
2. Views on existing carbon pricing policies and mechanisms, including the UK Emissions Trading Scheme (UK ETS); and
3. Potential alternative carbon leakage mitigation policies, including a UK carbon border adjustment mechanism (UK CBAM).

Taking each of these areas in turn, the following sections summarise the evidence received.

### 1. The problem of carbon leakage

Almost all of the respondents identified the risk of carbon leakage as an important issue to their particular industrial sectors and the UK economy more broadly. This was particularly prevalent where industries operated in an environment with small profit margins, where their products were traded routinely on the international market or both.

It was clear, however, that the degree of importance ascribed to carbon leakage varied between industries and their respective economic circumstances. Some sectors said they keenly felt the impacts of carbon leakage now, whilst others expect it to become a major concern in the near future. For example, the **Chemical Industries Association (CIA)**, the trade association representing the UK's chemical and pharmaceutical companies, argued that carbon leakage was an important issue for the petrochemical industry, given the energy costs and trade competition they face, noting that "this is a top three issue" for them. Other industry groups, like **Net Zero Industry Wales (NZIW)**, a not-for-profit umbrella group that supports Wales' industrial clusters, agreed with this view and highlighted that Wales' carbon footprint is much greater *per capita* than the rest of the UK, and as such, it is at greater risk of carbon leakage.

Speaking on behalf of the oil refining industry, the **UK Petroleum Industry Association (UKPIA)** argued that carbon leakage and associated investment leakage were among the top three risks for the refining sector. They also noted how the UK has a structural disadvantage compared to competitors like the United States in terms of energy costs, with the Biden Administration's Inflation Reduction Act and wider government policy supporting investment in new technologies offering a distinct contrast to the situation in the UK. In relation to the US Inflation Reduction Act, **UKPIA** argued that the US Government was subsidising its energy industry at an unprecedented level. They argued that this was stretching the production gap between the UK and the US, as the latter was not only receiving incentives but also had a lower regulatory burden to the UK, which had to deal with UK ETS.

Both **Valero**, who own and operate the Pembroke Refinery in Wales, and **Prax Lindsey Oil Refinery** in North Lincolnshire agreed with this, with the latter arguing that carbon leakage risked disincentivising investments in decarbonisation, underlining that this was particularly strongly felt in their industries, which are highly exposed to operational leakage and face a very open market. The former argued that the issue of carbon leakage and its effects on global competitiveness of UK sites are the "principal problem facing energy-intensive industries like ours in the UK".

On the other hand, while **GFG Alliance** (a group of businesses including **LIBERTY Steel**, **ALVANCE Aluminium** and **SIMEC Energy**) said that carbon leakage had not been a top issue of concern in general, the proposed reforms to the UK ETS in the UK ETS Authority's 2022 consultation would in fact make the

[15] The Commission for Carbon Competitiveness, '*Competitive decarbonisation is the only way to save our industrial communities*', The House, https://www.politicshome.com/thehouse/article/competitive-decarbonisation-way-save-industrial-communities, 15 February 2023 (accessed 21 May 2023 2023)

issue a key concern and risk for the business. **UK Steel** and the **Confederation of Paper Industries (CPI)**, trade associations for the steel and paper and pulp sectors respectively, both noted that carbon costs, including UK ETS and carbon leakage, were increasingly becoming a key concern for their members.

This was a view echoed by the **British Ceramics Confederation (BCC)** trade association, which highlighted that although UK ceramics only contribute 0.25% of the UK's carbon emissions, and in spite of it being a foundational industry, the UK's current path to net zero by 2050 risks offshoring UK ceramics manufacturing entirely. They described the current 2050 trajectory as a 'decarbonisation by deindustrialisation' strategy.

## 2. Existing carbon pricing policies and the UK Emissions Trading Scheme

UK ETS was consistently identified by respondents as perhaps the main policy disincentivising investment among energy intensive industries in the UK.

For the ceramics sector, the **BCC** noted that UK ETS has raised almost £11 billion for HM Treasury in the three years since it was formed, but the amount of funds made available to ceramics businesses through decarbonisation grants has been of the order of a few million pounds, a tiny fraction of the revenue raised. Business finance can only be spent once and that itself has been made more difficult with the unsustainable energy costs of the last year. Moreover, the UK ETS is in effect a highly volatile, speculative tax where businesses are unable to plan due to the way the carbon market operates.

Refiners were also critical of the impacts UK ETS had on their ability to operate competitively in the UK. **Valero** argued that this was a major consideration for their business, informing any decision to invest its capital in low-carbon investment projects and therefore reduce their carbon emissions. **Phillips 66** further cited uncertainty around the future trajectory of UK ETS as eroding their confidence to invest in their UK business. To meet net zero, they argued, without sacrificing UK industries, the UK Government must move fast to support long-term investment and smooth the transition. Supply chains will remain under stress and competition for workforce will be fierce, all while regulations to reduce emissions will intensify, meaning more operational expenses when firms need to make large investments to decarbonise. They argued that the UK Government had so far failed to grasp the shift in competition for the technologies and supply chains needed for the energy transition and this affects their ability to reach net zero.

Other refining organisations also listed a variety of examples on how UK ETS creates commercial difficulties for their businesses in the UK. **UKPIA** highlighted that the cost of its members' operations was almost double that of their US competitors and referenced UK ETS as a key driver of this. **Prax** argued that UK ETS prices have been consistently higher than EU ETS prices, and that the operation of the activity level change regulation has left many operators far worse off.

Steel-related businesses and organisations also argued against the effects of the UK ETS on their industry. The **Community Trade Union**, which represents workers across the steel sector, said that the UK ETS had become increasingly costly for the steel industry, as carbon prices increased and free allowances decreased. It also highlighted that current reforms are expected to make the problem worse, making primary steelmaking economically unviable. **UK Steel** placed the costs of UK ETS into stark perspective, estimating that the industry's 2022 compliance costs were £120 million, which is only a little under the £200 million spent by the sector annually on CAPEX. This is in spite of receiving a large proportion of free allowances. It also highlighted the uncertainty in reforms to free allowances, and how this is creating larger uncertainties about the commerciality of the sector in the longer term. Counter to these views of other industry respondents, however, the **British Metals Recycling Association** said it believes the UK ETS facilitates domestic decarbonisation through market incentivisation, and the cost of the scheme was a clear indicator for businesses to invest, instead of paying for allowances.

Most other businesses and organisations nonetheless agreed with the principle that there are fundamental issues with the current iteration of UK ETS. The **CIA** explained that delivering decarbonisation investment projects, and therefore reducing its carbon emissions, is difficult alongside the increasing costs of ETS until there is a level playing field around carbon prices and carbon policy across the world. **UK Steel** argued that supporting energy intensive industries to decarbonise while also remaining competitive could be done through subsidies, like in the US or Europe. This was a view echoed by the **Community Trade Union**, which

argued that one of the greatest contradictions of the UK ETS was that because of the high fees paid by industry, they lacked the capital to invest in decarbonisation projects.

The expected reduction of free allowances in UK ETS was an issue several organisations identified as problematic. **UK Steel** argued that the reduction of free allowances from 2026 onwards would be nine years ahead of when the Committee for Climate Change expects the steel industry to be able to decarbonise, making the two policies incompatible. **CEMEX**, one of the UK's largest cement, concrete and aggregates manufacturers, urged the Government take a holistic view and ensure the UK ETS is aligned to a trajectory that can be realistically delivered.

**Energy Systems Catapult**, an independent public body set up to promote collaboration between government, academia and industry to accelerate the transformation of the UK's energy system, was among the few organisations that were less critical of the UK ETS. They argued that it is a great policy mechanism, but acknowledged that if one were to design the policy from scratch, it would not include the power system and heavy industry in the same market from the beginning, given their longer timeframes for decarbonising. The **Centre for Policy Studies (CPS)** similarly expressed support for UK ETS and the idea of carbon pricing, but added that the trade-off is between creating a politically workable system and the economist's version of what an efficient encapsulation of carbon pricing looks like. They added that we could move to a better system where the incidence of taxes lies more upstream with fuel producers as opposed to the users of fossil fuels.

## 3. Measures to reduce the risk of carbon leakage

UK ETS and the use of free allowances – those ETS allowances given to UK manufacturers exposed to carbon leakage risk – is at the core of industry's carbon leakage issue. Considering the long-awaited response to the UK ETS Authority's consultation on reforms to the scheme, and the launch of the joint DESNZ and HM Treasury consultation on carbon leakage, several organisations took the opportunity to identify specific changes they would recommend to the way UK ETS works:

*Free Allowances*

- **Prax** welcomed the principle of the UK ETS Authority's decision to change activity level rules (which determine the amount of free allowances an obligated operator receives) for 2020 in its interim response to the 2022 UK ETS consultation. They argued, however, that there was minimal benefit from this change in practice, and that greater flexibility was needed from the UK ETS Authority when unexpected events like Covid-19 occurred and free allowances calculations were impacted. **Valero** similarly asked for revisions to the rules, to exclude the direct impacts of Covid-19 – not just in 2020 but also 2021– which resulted in the removal of free allowances, when ETS-obligated installations had to reduce operations due to unexpected demand destruction as a result of government-mandated measures.

- **Energy Systems Catapult** suggested phasing in carbon policies between now and 2050, including immediate improvements to the allocation of free allowances under a UK ETS, and the integration of standards between UK ETS and a new set of voluntary (then mandatory) accounting practices. It called for an enduring set of incentives for industrialisation with appropriate mechanisms to mitigate competitiveness issues.

*Reforming UK ETS*

- **Valero** suggested reforms include changes to the Cost Containment Mechanism (CCM), the instrument intended to prevent sustained and elevated price rises in the ETS market, in order to make the decision-making process behind its activation more consistent and predictable, as well as to remove current subjectivity and opacity. They referred to the 'controversial' decisions the UK ETS Authority took in recent years when they decided not to intervene on two occasions after the CCM had been triggered after the price of ETS allowances had risen considerably in the UK and *vis-à-vis* international competitors. **CPI** also criticised the UK ETS Authority's decision not to use the provisions in the CCM when they have been triggered, which calls into question their willingness to support the industrial energy transition.

- The **BCC** decried the decision to implement a market-based cap-and-trade scheme at all, pointing to the alternative of a carbon tax or levy that had been mooted, prior to UK ETS being put in place. This would have set a fixed rate so industry would know what the costs of manufacturing are instead of a resulting "lottery of costs". For sectors – like ceramics – unable to switch fuels, a series of allowances and exemptions could then have been more easily introduced. Nevertheless, they agreed that the ceramics industry wants to see a more level playing field while continuing to support good environmental standards.

- **CPI** argued that UK ETS receipts should be part ring-fenced for a fund that can then be reinvested in industrial transition and decarbonisation projects, in order to reduce carbon emissions and maintain economic activity. While such a fund was promised here in the UK from UK ETS receipts, so far it has not materialised, in comparison to the development of a similar fund in the EU ETS.

- **Net Zero Industry Wales (NZIW)** highlighted that only the largest emitters are subject to the UK ETS, and therefore the decarbonisation potential of the smaller emitters could not be utilised. They argued that the UK ETS market is not working and suggested adding smaller emitters into the scheme would improve liquidity and the average marginal abatement cost.

- The **Industrial Decarbonisation Research and Innovation Centre (IDRIC)** said that a CBAM should be considered to support the development of domestic supply chains and markets, and improve upon the free allocation system for managing carbon leakage from the UK ETS. It also called for international agreement on the standards for a potential CBAM.

*Carbon Border Adjustment Mechanism (CBAM)*

The implications of the EU CBAM for the UK economy are impossible to ignore, and many of the respondents to the Commission's call for evidence focused on the potential benefits – as well as possible drawbacks – a similar policy could have for the UK's own energy-intensive industries. A key argument for those who argued in favour of a UK CBAM focused on the inequity created by the UK ETS and other carbon and energy policies in the UK compared with other countries and regions. The **CIA** argued that, given the different carbon policies of other countries, a level playing field with those jurisdictions will be key for the ability of the chemicals sector to continue making products in the UK and then place those products into the global marketplace. **Phillips 66** said that given the global nature of climate change, international cooperation was important when deploying a CBAM.

The issue of fair competition was also emphasised by the steel industry. **UK Steel** argued that decarbonising steel production "relies on passing on the additional cost of decarbonisation to steel customers without being outcompeted by high-carbon emission steel imported from abroad."

Perhaps the biggest impression made during the course of the call for evidence gathering related to the need to address the carbon leakage not only to imports – as the EU CBAM exclusively does – but also to exports from UK industry to the rest of the world.

Both **CIA** and **Valero** called for exports to be included in a potential UK CBAM, to protect against carbon leakage in the export market and ensure the competitiveness of British products, with the former arguing that "free allocation provides support for products manufactured in the UK regardless of local disposition or whether they are headed for export markets. A CBAM should provide the same level of support, and hence must include an export mechanism, to prevent lower carbon UK products being priced out of overseas markets." The preferred 'mechanism' under a UK CBAM to account for exports suggested by the latter is for ETS free allowances to be applied to products that leave the UK, with **Valero** noting that as "a CBAM charge value would only be applied to inland sales – not to exported products which go to global markets where many suppliers will not incur ETS costs and CBAM charge value cannot be applied – a UK exporter will not be fully compensated by the price pass-through under a CBAM as traditionally conceived. This could be partly compensated for by retaining a portion of free allowances equivalent to the portion of UK production that is exported."

Not all organisations were certain on the best way to move forward with a CBAM, however, as they argued that there should be a consensus on avoiding unintended consequences. **GFG Alliance** said they were

taking a "principles-based approach", given the spread of opportunities across businesses and differentiated products. The **CPI** also outlined a concern that adopting a CBAM could invite "retaliatory measures by other countries" and that instead the UK "needs to learn from the EU experience before starting a CBAM in the UK."

**UK Steel**, however, argued that whilst CBAMs are "a complex policy tool (similar in complexity to, for instance, the UK Emission Trading Scheme), and considerations need to be made in designing one for the UK to avoid unintended consequences" from a steel industry perspective, "CBAMs are still the best carbon leakage measure available. Most of its weaknesses are shared by the other competing measures, such as product standards or labelling, while its strength is its clear connection to existing policies of the UK Emission Trading Scheme and carbon pricing. All policies will have disadvantages, but this should not prevent the Government from acting, as the worst and most damaging outcome would be the failure to introduce a CBAM and other carbon leakage measures."

**KEY DESIGN PRINCIPLES**

Whether they agreed or not on the merits of a CBAM, all stakeholders noted the importance of designing a CBAM correctly if the UK Government moves ahead with the proposal, particularly to avoid negative unintended consequences. Some of the key issues identified by respondents to the Commission's inquiry therefore covered a comprehensive range of principles that need to be built into a UK CBAM in order to prevent carbon leakage, boost trade and create a level playing field between the UK and other countries that instigates a spiral of success that encourages other jurisdictions to adopt their own positive climate action.

*Complexity and predictability*

A consistent charge levelled at the concept of CBAMs is their inherent complexity, and many of the respondents focused on the need to prevent an overly burdensome policy framework as much as possible. The **CIA** argued that "administrative burden needs to be minimised to avoid unnecessary hurdles for imports. Complex supply chains in our sector mean products can cross borders multiple times before reaching the end customer. Implementing a UK CBAM that is significantly different to the EU's could risk mutual non-recognition and consequent disruption to supply chains." Any policy must also be "long-term and predictable" with an acknowledgement that investment is based on "the opportunity for return, which is easier to prove where the factors influencing an investment are known." These points were echoed by **Prax**, who argued that carbon leakage mitigation "cannot function in isolation and that it is crucial that there is alignment with other major market approaches to reduce any additional cost burdens on businesses."

*Aligning CBAM introduction with ETS free allowances*

A key requirement expressed by respondents was the need to ensure a UK CBAM is introduced in alignment with UK ETS, particularly ensuring a seamless transition from the carbon leakage protection offered by free allowances and the introduction of a CBAM, as well as parallel policies like mandatory product standards (MPS). The **CIA** were keen to ensure that complementary policies, "like the development of the UK ETS cap, free allocation methodology and carbon border adjustment/product standards policies should be taken forward simultaneously. This will ensure industry has the clarity and certainty to invest in net zero."

It was particularly clear that there should be no sudden cliff-edge between the end of the current approach and the introduction of the carbon border. Again, the **CIA** argued that "free allocation and indirect cost compensation cannot be withdrawn until a CBAM is proved effective, or a global carbon pricing framework agreed. The EU proposals allow for the gradual phase out of free allowances over time, and include indirect emissions under certain conditions."

*Aligning CBAM introduction with the wider policy framework*

It was also clear that fixing carbon leakage was only one piece of the puzzle, when it comes to ensuring the competitiveness of UK manufacturing. As noted by the **Community Trade Union**, "a CBAM is not a silver bullet for the industry. Community has long called for energy intensive industries like the steel industry to face equivalent energy prices to countries like France and Germany in order to support the international competitiveness of the UK industry." Policies recommended include reducing network charges and providing energy price guarantees to give producers stability and security, as well as capital investment to support the net zero transition.

Again, focus on energy costs was a repeated theme, with **CEMEX** indicating their support for the ongoing Department for Business and Trade "consultation to increase the relief to 100% (from 85%) for energy intensive industries' energy bill regulatory costs (covering the costs from Contracts for Difference, the Renewables Obligation and the Feed-in Tariff)".

The **CPI** – who disagreed with the introduction of a UK CBAM before seeing the impact of the EU's version – nonetheless, also underscored the impact that energy costs were having on their sector's energy-intensive operations, and called for the establishment of a "a net-zero transition support mechanism for [the] UK manufacturing industry that ensures that the UK becomes an attractive location for inward investment in manufacturing and counter-balances the investment leakage likely as a result of the US Inflation Reduction

Act and the EU Net Zero Industry Act…. [This] mechanism must recognise that natural gas remains the main energy source for the UK paper sector… [and] is also likely to remain the key energy source in countries outside the UK."

*Export-coverage and WTO compliance*

A repeated theme from many industries and sectors was the need to address the carbon leakage treatment of UK produced goods subsequently exported. **UK Steel** said the main goal of a UK CBAM should be the prevention of carbon leakage. However, it should also work to facilitate trade, for both imports and exports. They added that the aim was, of course, not to limit trade but to ensure that trade is as fair as possible. The **CIA** spoke for many when they argued that "free allocation provides support for products manufactured in the UK regardless of local disposition or whether they are headed for export markets. A CBAM should provide the same level of support, and hence must include an export mechanism, to prevent lower carbon UK products being priced out of overseas markets."

This view was echoed by **UKPIA**, who argued that "measures to protect the competitiveness of UK exports against competitors from regions with lower climate ambitions" needed to be considered, saying that "whilst the EU CBAM applies only to inland sales, a UK CBAM must be designed to avoid UK products being priced out of international markets (in particular, where these are lower in carbon intensity)." In the same sector, **Valero** argued that exports could be "partly compensated for by retaining a portion of [UK ETS] free allowances equivalent to the portion of UK production that is exported."

Any CBAM, both for import and export, needs to ensure it adheres to World Trade Organisation (WTO) rules. **Prax** argued that such an export-facing CBAM "would be consistent with the WTO". **UK Steel** were similarly confident that – subject to ensuring all steel products "sold in the UK face a similar carbon price, regardless of whether produced in the UK or imported from third countries", then a UK CBAM would be "in compliance with WTO rules, rather than just protecting UK steel from external competition."

*Circumvention and avoidance*

One of the major concerns **UK Steel**'s members have raised regarding a CBAM is the need for the UK Government to tackle any potential loopholes that allow circumvention. For example, while the embedded steel in a washing machine being imported to the UK would face a carbon price under a UK CBAM the whole washing machine would not face the CBAM cost, owing to the difficulty in measure the carbon used to produce complex products. **CELSA Steel UK**, the UK's largest producer of rebar steel from their facilities in Cardiff, argued that a key design measure to avoid circumvention could be extending a UK CBAM to all third countries without comparable carbon pricing, and be based on a products place of manufacture principle, to ensure that steel produced in countries without carbon pricing are not subsequently exported via a country with carbon pricing to avoid the CBAM.

Both the **CPI** and **CIA** in particular highlighted the risk that countries exporting to the UK applying a strategy of so-called "resource shuffling", whereby they redirect their existing lower carbon products to the UK and redirect their higher carbon products to markets with lower climate costs. The **CPI** insisted that "Government must be certain that a UK CBAM cannot be circumvented by resource shuffling, third country subsidy or other activity." According to the chemicals sector, resource shuffling in particular "must be avoided as it has both environmental and economical negative impacts". Similar concerns were raised about the possibility of shifting of production to avoid the CBAM levy, with the example given that "it is possible to imagine a situation where ethylene is covered by a UK CBAM and so companies exporting ethylene to the UK switch to making and exporting polyethylene instead, to avoid the border levy."

*Preventing product dumping*

The need to avoid 'dumping' of cheaper, higher carbon products into the UK if a CBAM were either not implemented or not coordinated with the EU CBAM was a concern raised by many respondents. **CEMEX** were one of those that articulated the risk that, as the "EU is now able to safeguard the quality of products that are sold, used, and imported to their markets [this] means that they can guarantee the environmental standards of products, and keep their prices competitive to support industry. As the UK is currently operating in a regulatory environment that does not include a CBAM, this could lead to cheaper products,

with lesser standards flooding our market which will negatively impact both employment and product cost in the UK."

The **CIA** also noted that without a "UK CBAM in place, the EU CBAM presents a risk of trade distortion. Higher carbon products from non-EU countries, that become uneconomic within the EU, could be dumped on UK markets." A UK CBAM must, therefore, "ensure that we do not end up negatively impacted by the EU CBAM."

*Emissions scope*

There were discrepancies between respondents as to which types of emissions should be covered by a UK CBAM, from those that raised the issue. **UK Steel's** submission to the Commission felt that "where a CBAM is linked to carbon pricing, will facilitate trade, and could include an export option, it would not initially be able to cover scope 2 and 3 emissions." They felt that mandatory product standards (MPS) could be an option for embodied – as opposed to direct – emissions that could "be introduced alongside a CBAM policy to underpin the carbon leakage policy"

**CELSA Steel UK**, however, felt that a CBAM "should cover more than just a producer's scope 1 emissions" and that "emissions across the value chain should be considered. Mechanisms exist for capturing the impact of a product across its life cycle, for example, the existence of Environmental Product Declarations (EPDs)." **Energy Systems Catapult** similarly argued that "all carbon policies require some form of transparent and robust monitoring, reporting, and verification (MRV) of emissions, either direct or embodied."

*Transparency of calculations and data*

**Valero** were one of the organisations to highlight the need for a UK CBAM to be based upon robust and verifiable data. All pricing within the CBAM "should be transparent" with the data being used "should be based upon existing reported data/reporting mechanisms where possible" with tools such as Eurostat,[16] the Joint Organisations Data Initiative (Jodi)[17] or the International Energy Agency (IEA)[18] suggested as possible resources that could be utilised. The **CIA** equally underlined the importance of data availability and quality of data used in calculating a UK CBAM, as well as agreement on allocation rules. They recommended the use of an "accredited third-party verifier" and that any "assumptions must be open to challenge through transparent and effective stakeholder engagement."

**Impact assessment:** A thorough impact assessment must be conducted to establish the effect that implementation of a CBAM will have on any given product.

*Engagement*

A final, major component that needs to be built into the policymaking process is the need for close engagement between government and industry if progress towards a CBAM is to be a success. This point was argued by **Stephen Crabb MP** (Conservative, Preseli Pembrokeshire), whose constituency contains a range of major energy businesses, including refining, power generation, fuel storage and liquefied natural gas (LNG) terminals. He noted from his conversations with energy-intensive businesses, they "describe UK carbon costs and regulation as a key cause of the uneven playing field we face internationally" but also that the local industry was making great efforts to work collectively to attract investment and support net zero.

Pointing to organisations like the **Milford Haven Waterway Future Energy Cluster (MHWFEC)**[19] – a coalition of traditional industries, the burgeoning renewables sector, the port and the local authority – it was noted that "The Milford Haven Waterway Future Energy Cluster works very collaboratively. However, we need Government to work closer with industry. They [MHWFEC] want to see Government get closer to them."

[16] Eurostat, https://ec.europa.eu/eurostat
[17] Joint Organisations Data Initiative, https://www.jodidata.org/
[18] International Energy Agency (IEA), https://www.iea.org/
[19] Port of Milford Haven, '*UK's Energy Capital Maps Out Low Carbon Vision*', https://www.mhpa.co.uk/news/2022/06/16/uks-energy-capital-maps-out-low-carbon-vision/, 16 June 2022 (accessed 24 May 2023)

**RECOMMENDATIONS**

Considering all evidence impartially, **the Commission's central recommendation is to introduce a UK CBAM to stop carbon leakage.** This will be a considerably cheaper and more efficient way of reaching our net zero targets, and will mean that UK manufacturing industries can compete on a level playing field with firms based in countries that are moving more slowly towards carbon neutrality, and ensure we avoid decarbonisation leading to deindustrialisation.

The following are detailed recommendations on how the UK Government should approach the introduction of a UK CBAM:

UK CBAM

1. **Be introduced to coincide with the beginning of UK ETS Phase II (from 2026)**
   - With UK ETS free allowances for industries exposed to carbon leakage only confirmed until 2026, when Phase II of UK ETS will begin, it is essential that the timing of a UK CBAM is synchronised in order to minimise the risks of product 'dumping' and other distortions that could undermine key UK manufacturing industries. Government should therefore align the timetable of withdrawing free allowances with implementation of any CBAM and mandatory product standards and communicate this to stakeholders.
   - Additionally, the EU CBAM offers a significant challenge to UK manufacturing and energy-intensive operators, and if action is not taken to advance a UK CBAM before the EU's becomes operational there is substantial risk of trade distortion occurring as other non-EU producers redirect cheap exports to the UK.

2. **Align with the EU CBAM where practical, but tailor our design to the UK's specific requirements where needed**
   - It is important that the UK CBAM does not seek to be different for the sake of being different, but nor should it simply mirror the design and scope of the EU CBAM. We need an answer that is tailored to the UK's specific industrial needs.
   - The UK should use compatible methodologies to those in the EU CBAM wherever it is practical, to minimise administrative burdens and costs, and to reduce any potential risks of mutual non-recognition and disruptions to supply chains, especially for those UK manufacturing sectors that trade heavily with the EU.

3. **Apply universally to all UK manufacturing industries without exception**
   - Whilst some sectors expressed wariness of being included within a CBAM, the Commission believes that creating 'carve outs' for certain industries would create unnecessary complexity and policy confusion. The UK CBAM should, therefore, ultimately be applied to all UK manufacturing without exception, being carefully introduced across sectors and taking into account the nature of each product. This will mean every firm gets the benefit of competing on a level playing field, rather than some getting a better deal than others, making the UK scheme simpler and easier to use.

4. **Apply to Scope 1 emissions initially, to make the scheme as simple as possible**
   - UK ETS is already a complex policy area, underpinned by detailed carbon benchmarking calculations and reporting requirements. A CBAM will undoubtedly share many of the same complexities, but the UK Government should do all it can to reduce the administrative burden on businesses to an absolute minimum. This would involve minimizing bureaucratic processes and streamlining reporting wherever possible.
   - This means that, in the first instance, a UK CBAM should look to only cover Scope 1 emissions in their entirety, and assess whether to include Scope 2 emissions only where external energy systems can be directly tied to operator emissions. Considering the broader complexity of the Scope 2 and Scope 3 emissions, however, these should instead be addressed by other policy measures, such as Mandatory Product Standards (MPS) for those sectors that have value-chains that can be more easily calculated, with a review to see whether Scope 2 might be included in future once the system has bedded in.

5. **Use as many existing information-gathering tools as possible, on a 'tell us once' principle**
   - Transparency and visible pricing are essential to the success of a UK CBAM. This would require clear communication to businesses and consumers about how the CBAM works and how it affects the price of goods. By providing transparent information, the UK Government can increase the visibility of the CBAM and its impact on carbon emissions.
   - To ensure this, the data used to calculate the various underpinning methodologies will be crucial for a UK CBAM to be effective. Accurate and up-to-date information is necessary to ensure that the CBAM reflects the true carbon cost of goods. The UK Government should work with businesses to collect and share data on emissions, use existing reporting mechanisms where possible on a 'tell us once' principle, and utilise accredited third-party verifiers to ensure robust standards.
   - By relying on already existing reporting tools, such as those provided by Eurostat, the International Energy Agency or the Joint Organisations Data Initiative (Jodi), we can avoid unnecessary duplication and limit costs too.

6. **Be kept up-to-date by regular, independent 5-year technical reviews**
   - Whilst ongoing updates to the underlying data is necessary to ensure that the CBAM remains effective over time, the UK Government should ensure that CBAM policy engenders long-term certainty for industrial operators and avoids volatile changes that undermine confidence in UK plc.
   - In order to achieve this, the UK Government should complete 5-yearly technical reviews on the effectiveness and economic efficiency of a CBAM, as well as its impact on competitiveness. These reviews – conducted by an independent arms-length body – will deal with changing international trade practices and any attempts by trading partners to 'game' the system or create loopholes (such as circumvention and resource 'shuffling'), while minimising the risks and uncertainty of political interference too.

7. **Only apply to manufactured products consumed in the UK**
   - Many of the UK's manufacturing and energy-intensive industries are highly trade intensive, and cannot operate economically in the domestic market alone. A UK CBAM that only applies to imports, therefore, but does not allow UK manufacturers to compete on a level playing field in the export market will fail to prevent carbon leakage.
   - Our manufacturing exports should therefore be exempt from both the CBAM and the UK ETS, either by permanently extending 100% free ETS allowances to all UK-made manufacturing exports, or applying a zero ETS cost to them.
   - The UK's manufacturing exports will still be low-carbon (because they will be produced in one of the most highly-efficient and environmentally-regulated jurisdictions in the world). This means they will still be inherently less carbon-intensive than many of their global rivals, whilst also being a great deal more internationally competitive as the costs of the UK ETS scheme are removed.
   - They will then be able to compete on a level playing field with rival products made elsewhere in the world, no matter whether they are being sold in a jurisdiction with a CBAM, a product-standards scheme like the US, or locations with little or no carbon costs. Ensuring a level playing field for UK industry on exports is, therefore, good for the global environment and a necessary condition to encourage other countries to develop their own effective climate policies.
   - It will only be when international competitors realise that they cannot gain economic advantage over countries with ambitious net zero policies, like the UK, that they will begin to implement their own carbon reduction measures. In this way, a UK carbon leakage policy that accounts for exports can help provoke a virtuous cycle of climate action globally.

8. **Comply with the UK's obligations under the World Trade Organisation (WTO) whilst taking the needs of least developed nations into account**
   - The use of trade tools to promote carbon action and ensure a level playing field for domestic industry will inevitably raise challenges from third countries, with the risk of potential retaliatory tariffs if not implemented in accordance with international trade rules. Indeed, the EU CBAM is

already likely to be challenged on the basis of its compatibility with WTO rules.[20] We believe, however, that a UK CBAM as we propose will be compliant with the UK's WTO obligations.

- As a UK CBAM will ensure all goods in the UK domestic market – those that are imported and that are produced domestically – are treated equally on the basis of carbon costs, and no one will be subject to preferential treatment, then Ministers should proceed – following the publication of their legal assessment of a UK CBAM – with complete confidence that this approach is compliant with the UK's obligations under the General Agreement on Tariffs and Trade (GATT). This includes upholding our agreement with 'most favoured nation' (MFN) treatment and 'national treatment' rules.
- What is more, measures to ensure UK manufacturing can operate on a level playing field for exports – by choosing not to impose ETS costs through free allowances – represent the removal of a domestic cost, and do not amount to a subsidy, meaning the UK's carbon leakage policies will be compliant with the WTO's Agreement on Subsidies and Countervailing Measures (ASCM).
- It is vital that UK Government Ministers mount a concerted diplomatic and trade negotiating effort to explain these points to our international trading partners, offering reassurance that a UK CBAM will be WTO compliant. This should include adopting proactive dialogue and cooperation with third countries, regarding the implementation of specific elements of UK CBAM and how to best comply with it. In particular, UK diplomats should immediately reach out to less developed countries, and assess where possible exemptions could apply for those nations.[21]

**9. Proceed as a collaboration between government, Parliament and industry**

- The task of introducing a UK CBAM is not inconsiderable. As policy is developed at pace it will require a high degree of communication, cooperation and engagement, particularly between industry and the UK Government to ensure its implementation is conducted with the highest chance of successfully preventing carbon leakage.
- Each of our manufacturing sectors will have their own well-established and specific relationships with Whitehall departments – be that the Department for Business and Trade (DBT), the Department for Energy Security and Net Zero (DESNZ), HM Treasury and others – but discussions around a CBAM are in their infancy, and will require the UK Government to utilise its convening power to make sure a comprehensively applied policy works for all.
- The Commission believes that an official policymaking architecture should be created to formalise dialogue between the relevant departments (principally HM Treasury, DBT and DESNZ), industry trade associations and other interested parties, such as academia. This should take the form of a Ministerial/Industry Contact Group, and be matched by a parallel temporary Joint Committee of MPs and Members of the House of Lords, to oversee progress towards the development of UK CBAM legislation.
- Following the introduction of legislation, the need to maintain this policymaking architecture will reduce, and CBAM policy should be more appropriately dealt with at the technical level and suggested 5-yearly reviews (see recommendation 6), but could nonetheless still play a useful role on occasion to address any unforeseen developments or policy bottlenecks.

**10. Use the proceeds of a UK CBAM to cut or abolish green levies and fuel duty**

- Once the new UK CBAM is in place, we expect it will yield a net income to HM Treasury, through a combination of a reduction in tax revenues as manufacturing exports become exempt from ETS costs, and an increase as manufactured imports start to pay the CBAM according to the amount of carbon emitted in producing and shipping them to the UK.
- If nothing else changes, this would mean that UK consumers and business customers would see a general increase in prices, at a time when inflation and the cost-of-living are already high. It would also mean that Government was, in effect, taxing the same things twice through the existing 'green levies' on energy bills and fuel duty, as well as through the ETS and the CBAM.
- We believe that any increased revenue that HM Treasury receives as a result of a CBAM should be used to significantly reduce as much as possible or even remove the cost of those green levies, including fuel duty, which are significantly contributing to the cost of living. The ONS recently estimated that environmental taxes cost each household £575 in 2020. Significant contributors

[20] Euractiv, 'India plans to challenge EU carbon tax at WTO', https://www.euractiv.com/section/emissions-trading-scheme/news/india-plans-to-challenge-eu-carbon-tax-at-wto/, 17 May 2023 (accessed 9 June 2023)
[21] World Trade Organisation (WTO), 'Least-developed nations', https://www.wto.org/english/thewto_e/whatis_e/tif_e/org7_e.htm (accessed 9 June 2023)

to this bill include Fuel Duty (which comprised around 70% of energy taxes in 2022) and transport taxes (22.3% of all environment tax costs in 2022).[22]

Transitional arrangements

Between now and the start of the new UK CBAM in 2026, we will **need transitional arrangements to make sure our manufacturing industries already exposed to high levels of damage from carbon leakage remain viable**. Until that time, the UK Government and devolved administrations that make up the UK ETS Authority need to make immediate changes to the UK ETS policy that is currently not providing adequate carbon leakage protection for industry. This should include:

11. **Free allowances should not be withdrawn and the proposed cut to the ETS allowance cap in 2024 should be delayed until a CBAM comes into effect**

- The UK ETS Authority has committed to ensuring free allowances up to 2026, with a further consultation on the future of free allowances expected in 2023. If a UK CBAM is introduced – which we believe it should be – then those sectors being included within its scope cannot see carbon leakage protection withdrawn until the new scheme is 'live'; there can be no 'gap' between the end of one and the beginning of the other.
- Until that point, however, UK ETS needs to provide sufficient free allowances to energy-intensive industries that are highly exposed to carbon leakage. When sectors – such as steel – that receive high levels of free allowances are still bearing ETS costs that come close to matching their annual capital expenditure budgets, it is clear the current approach is unsustainable for the UK industries, who face having to curtail operations before a CBAM can provide effective carbon leakage protection.
- The proposed cut to the ETS allowance cap in 2024 should therefore be delayed in order to provide industry with time for the start of the next phase in 2026. This would align the removal of free allowances with the introduction of a CBAM, ensuring a stronger level playing field for UK industry. As we move closer to the feasible deployment of at-scale decarbonisation technologies (such as Carbon Capture Storage and low-carbon hydrogen), free allowances could be removed at a steeper rate, enabling the UK's net zero trajectory to remain in place. As allocation of free allowances, a CBAM and mandatory product standards (MPS) are intrinsically linked, DESNZ should align the timetables for their policy-making processes and communicate to stakeholders the combined timeframe.
- In addition, the decision by the UK ETS Authority to restore free allowances for 2020 in recognition of Covid-19's impact on industrial activity is welcome, but respondents were clear this didn't go far enough considering the long-tail impacts the pandemic had on production well into 2021 if not 2022. The Authority should reconsider its decision to focus on 2020 only. Both Covid-19 and the war in Ukraine demonstrate the urgent need to put in place mechanisms to deal with severe market shocks that can negatively impact on UK ETS free allowance allocations.

12. **Restore industry confidence in the Cost Containment Mechanism (CCM) by revising its methodology and making it an automatic and effective break on unsustainable UK allowance price spikes**

- This should include tying the methodology for triggering the CCM to a more realistic ceiling of where the UK ETS allowance market is, rather than simply increasing exponentially making it incredibly difficult for interventions to occur. It is also essential that the UK ETS Authority take immediate steps to reform the CCM to remove a subjective, vague decision-making process and instead make it objective and transparent.
- The Cap-and-Trade programme that operates in California and Quebec uses a Cost Containment Mechanism that automatically kicks in if prices go above a certain threshold.[23] The UK should look at immediately pivoting to a similar process adapted for the UK's specific needs, which provides transparency, certainty and predictability for UK manufacturers.

[22] Office for National Statistics, '*UK environmental taxes: 2022'* UK environmental taxes - Office for National Statistics (ons.gov.uk) 4 May 2023 (accessed 12 June 2023)
[23] California Air Resources Board (CARB), 'Cost Containment Mechanism', https://ww2.arb.ca.gov/our-work/programs/cap-and-trade-program/cost-containment-information (accessed 24 May 2023)

**ANNEX A: THE COMMISSIONERS**

**John Penrose MP (Chairman) |** *Conservative MP for Weston-super-Mare*

John Penrose has been the Conservative Member of Parliament for Weston-super-Mare since 2005. A Minister under David Cameron and Theresa May in the Department for Culture, Media and Sport (DCMS), Northern Ireland Office and Cabinet Office, as well as a Lords Commissioner to the Treasury, John also served as the UK's Anti-Corruption Champion from 2017-2022. John chairs the Conservative Policy Forum.

**Arjan Geveke (Commissioner) |** *Director of the Energy Intensive Users Group*

Arjan Geveke has been Director of the Energy Intensive Users Group (EIUG) since 2022. The EIUG represents the interests of energy-intensive industrial consumers, including manufacturers of steel, chemicals, fertilisers, paper, glass, cement, lime, ceramics, and industrial gases. Prior to joining the EIUG, Arjan was Assistant Director of Energy Policy at the Department for Business, Energy and Industrial Strategy (BEIS) and Senior Policy Analyst at the Department for Business, Innovation and Skills (BIS).

**Jo Gideon MP (Commissioner)** | *Conservative MP for Stoke-on-Trent Central*

Jo Gideon has been the Conservative Member of Parliament for Stoke-on-Trent Central since 2019. As a Potteries MP, Jo has campaigned for the ceramics industries and chairs the All-Party Parliamentary Group (APPG) on Ceramics. Jo also sits on the Public Administration and Constitutional Affairs Select Committee.

**Stephen Kinnock MP (Commissioner)** | *Labour MP for Aberavon*

Stephen Kinnock has been the Labour MP for Aberavon since 2015 and is the Shadow Immigration Minister. With the UK's largest steel-making plant in Port Talbot within his constituency, Stephen chairs the All-Party Parliamentary Group (APPG) on Steel. Since 2020 Stephen has held a number of shadow ministerial positions, including Shadow Armed Forces Minister and Shadow Minister for Asia and Pacific, and previously served on the Brexit Select Committee.

**ANNEX B – LIST OF WRITTEN EVDENCE WITNESSES**

Written evidence was provided to the Commission for Carbon Competitiveness by the following organisations. To request these submissions in full, please contact the commissioners directly.

1. British Ceramic Confederation (BCC)
2. British Metals Recycling Association (BMRA)
3. Celsa Steel UK
4. CEMEX
5. Centre for Policy Studies (CPS)
6. Chemical Industries Association (CIA)
7. Community Trade Union
8. Confederation of Paper Industries (CPI)
9. Energy Systems Catapult
10. GFG Alliance
11. Industrial Decarbonisation Research and Innovation Centre (IDRIC)
12. International Air Transport Association (IATA)
13. The University of Manchester
14. Net Zero Industry Wales (NZIW)
15. Phillips 66 Limited
16. Prax Lindsey Oil Refinery
17. Sustainable Aviation
18. UK Petroleum Industry Association (UKPIA)
19. UK Steel
20. Valero Energy Ltd.

## ANNEX C: LIST OF ORAL EVIDENCE WITNESSES

**Session one: 17 April 2023**

Commissioners:

- John Penrose MP (Chair)
- Arjan Geveke
- Jo Gideon MP
- Stephen Kinnock MP

Witnesses:

- Brian Donovan, Vice President UK Commercial Operations, **Valero Energy Ltd**
- Andrew Large, Director-General, **Confederation of Paper Industries (CPI)**
- Nishma Patel, Policy Director, **Chemical Industries Association (CIA)**
- Dr Andy Roberts, Director Downstream Policy, **UK Petroleum Industry Association (UKPIA)**

**Session two: 18 April 2023**

Commissioners:

- John Penrose MP (Chair)

Witnesses:

- The Rt Hon Stephen Crabb MP (Conservative, Preseli Pembrokeshire)

**Session three: 19 April 2023**

Commissioners:

- John Penrose MP (Chair)
- Arjan Geveke
- Jo Gideon MP

Witnesses:

- Frank Aaskov, Energy and Climate Change Policy Manager, **UK Steel**
- Jo Milligan, Head of Government Relations and External Affairs, **GFG Alliance**

**Session four: 19 April 2023**

Commissioners:

- John Penrose MP (Chair)
- Arjan Geveke
- Jo Gideon MP
- Stephen Kinnock MP

Witnesses:

- Dr Danial Sturge, Carbon Policy Practice Manager, **Energy Systems Catapult**
- Anna Mowbray, Research and Policy Officer, **Community Trade Union**
- Eammon Ives, Head of Research, **The Entrepreneurs Network (representing the Centre for Policy Studies)**