

Net-Zero by 2050 - Carbon Border Adjustment Mechanism (CBAM) and Product Standards



As the UK continues its transformation to a Net Zero economy, policymakers are faced with the challenge of ensuring a level playing field for domestic manufacturing in competition with imports from areas with less ambitious carbon reduction policies and lower carbon costs.

UK (and EU) energy intensive manufacturing sites are regulated through Emissions Trading Systems (ETS) within which installation emissions associated with climate change (so for the UK paper sector essentially carbon dioxide from gas) are annually reported, with a requirement to submit ETS emission permits to cover these emissions. Permits are issued by Government to an annual limit that declines each year, with this 'cap' set to ensure that emissions from these regulated sectors decline in-line with national targets.

Under the existing scheme, installations in sectors assessed as at risk of being undermined by low-carbon cost imports are issued with a number of free allocations intended to ensure they are not unfairly disadvantaged. The level of free allocation is set by the most carbon efficient sites and declines each year. For the UK paper sector, in 2022, sites using gas were required to submit 1,102,954 allowances, with 629,424 provided free of charge. The balance of 473,530 being purchased as a cost of around £38m – the 'trade' part of the ETS cap and trade system.

Policymakers are now assessing alternative ways to equalise UK cost with those in high-carbon content imports. The new idea is to add cost to products brought into the UK from areas with low carbon costs. New policies are being considered through which a cost equal to that imposed on domestic manufacturing can be added to imports. Once these policies are in place the need for free allocations would be removed.

The EU has already decided to implement carbon borders around a number of specific sectors by implementing a Carbon Border Adjustment Mechanism (CBAM) through which carbon costs will be levied against imports. The UK Government has also decided to implement a UK CBAM by 2027 to the **aluminium, cement, ceramics, fertiliser, glass, hydrogen, iron, and steel sectors**. The cost to be imposed will be dependent on the greenhouse gas emissions intensity of the imported good, and the gap between the carbon price applied in the country of origin (if any) and the carbon price that would have been applied had the good been produced in the UK.

Full details here: [Factsheet: UK Carbon Border Adjustment Mechanism - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/104848/factsheet-uk-carbon-border-adjustment-mechanism.pdf).

CPI Position. We support the development of policies to drive industrial decarbonisation and acknowledge that policy makers understand the potential damage if policies are unrealistic and economically unviable.

It follows that there should be no assumption that CBAMs should be extended to all ETS regulated sectors, and there should be a detailed impact assessment for each sector before any policy is progressed. We welcome the decision not to include the paper sector in this first set of sectors to be subject to a CBAM. The development of this new policy area is expected to be controversial and difficult, with challenges likely from countries adversely affected by these new border charges as well as huge administrative challenges. Accordingly, it makes complete sense to pilot the idea with a limited number of sectors, especially in supportive sectors where the EU has already confirmed it will be implementing a CBAM that could adversely affect UK production.

Lessons learned from this first phase of CBAMs will be invaluable in assessing if the policy should be extended to other sectors where there is less support and more uncertainty over benefits. We urge these lessons are fully learned before any further extension.

In particular we highlight a set of sector specific issues that need to be considered and resolved before any CBAM is extended to papermaking:

- The industry has a long and complex supply chain with a large number of different products – meaning any border administration will be especially challenging.
- Free allocations have already played a role in helping decouple economic growth from increasing emissions – the present system works.
- UK papermakers already use 72% of recycled fibres as feedstock, using gas as the heat source with no proven economic alternatives – so the UK recycling driven circular economy could be damaged by imports of material that did not attract a CBAM charge because it was produced using carbon neutral energy, such as biomass.
- The EU is the main trading partner for the UK sector and there is no sector CBAM being proposed – complexities would be magnified if the UK tried to go it alone.
- UK mills are already regulated by ETS, with free allocations only covering around three-fifths of emissions – there's no windfall in free allocations that needs to be addressed.

Product Standards. An alternative (or potentially complimentary) approach is to develop standards applied to products sold on the UK market – these standards can either be mandatory or voluntary. Obviously, this approach is well developed from a product safety perspective and there are some examples in other areas such as the rules designed to drive coal generation from the UK, or (following the voluntary approach) environmental labelling for wood-based products providing environmental information to inform consumers when making purchasing decisions.

For **Mandatory Product Standards** the position is that the Government will continue to explore whether there is a role for them from the late 2020s.

For **Voluntary Product Standards** the Government plans to work with industry (in the first instance the steel, cement, and concrete sectors) to establish voluntary product standards to benchmark the carbon content of selected industrial products.

CPI Position. We welcome this approach and support the provision of information to consumers that helps inform purchasing decisions and encourage the preferential use of products with lower environmental impact.

But these issues are not straightforward and there can be conflicting priorities. In the paper sector, UK paper mills are the largest domestic user of recycled materials, with recycled fibre providing 72% of raw material – an example of the circular economy in action.

Recycling mills overwhelmingly use natural gas as their heat energy source. By contrast, virgin fibre mills use production by-products and low-grade forest residues as their zero-carbon energy source.

So, imported virgin fibre products would be likely be classed as zero carbon, and so could be advantaged if product standards simply target carbon content, while a recycled content product standard would support recycled mills using gas.

A perfect example of a Net Zero policy potentially being in direct conflict with a working example of the Circular Economy. Additionally, high levels of recycling are integral to the overall paper cycle, but most mills are not designed to blend recycled and virgin materials - mills end to use one type of fibre or the other.

Using Revenue. Once in place, the CBAM system will deliver additional revenue to government. This is a perfect opportunity to support investment and drive decarbonisation.

Background to Carbon Border Adjustment Mechanisms (CBAMs)

If the UK is to become a Net Zero economy, then industry will effectively need to decarbonise, with major progress being required over the next few years. The drivers for this policy are a combination of carrots and sticks – carrots by support to invest in low carbon manufacturing technologies; and sticks by driving up the cost of emitting gasses linked to climate change. So, for the UK economy, potentially higher prices for natural gas, and the removal of fossil fuels from the electricity supply network. At the same time support to swap to new low-carbon technologies is critical. The challenge is to align these policies so that commercially deployable low-carbon technologies are available through this economic transition. Getting it wrong means a more expensive UK manufacturing base, with an economy more dependent on imported goods and less resilient.

Ambitious targets* to transform the UK into a Net Zero economy signal a determination to provide global leadership. This aspiration is supported by CPI; paper-based products offer a diverse range of sustainable and bio-based materials provided by an industry already rooted in the circular economy. Huge progress in decarbonisation has already been delivered by the UK Paper Industry (direct emissions of carbon dioxide have been reduced by 73% from a 1990 baseline), with sector companies actively progressing additional decarbonation plans.

Paper mills have a viable set of technologies to full decarbonisation, but these are currently not economic without support. An ongoing partnership with Government is needed through the energy transition if UK manufacturing is to thrive. If policies simply impose higher costs for UK installations, then this threatens the economic viability of local manufacturing, with a consequent loss of jobs, economic activity and reduced national resilience in the event of a repeat of something similar to COVID-19. Switching UK manufactured goods for imported goods simply to reduce domestic emissions is futile.

At international level, the global focus on addressing climate change continues to grow. The Paris Accords (the outcome of negotiations involving 194 nations representing more than 97% of global emissions) has reinforced the determination by Governments to restrict the global average temperature increase to well below 2°C, with each country's 'Intended National Determined Contribution' to become more ambitious and reviewed every year.

*UK target is zero-carbon by 2050 with an interim target of -68% by 2030 (vs 1990 baseline); EU target is zero carbon by 2050 with an interim target of -55% by 2030 ('Fit for 55').

Analysis by the Committee on Climate Change (the Government advisors on setting and meeting UK targets) signals that the use of oil and gas in the UK must be greatly reduced and largely eliminated over time. The Prime Minister has already highlighted a green revolution as a route to economic growth, and government departments are busy building a suite of new energy policies to deliver the targets.

The risk for Energy Intensive Industries (EII) is that the cost of operating in the UK is driven up through higher energy costs than those imposed in locations where competitors are based. If a company has a largely captive audience (like for example power generators) these extra costs are simply passed through to customers. By contrast, manufacturing businesses cannot easily pass these costs through to customers without losing market share and - in the long-term - losing investment and jobs to lower cost manufacturing sites outside the UK. This investment loss is generally referred to as carbon leakage.

This concept of carbon leakage has been accepted by policymakers, with cross-party agreement that policies are needed to prevent such leakage. In principle, decarbonisation by deindustrialisation is not a policy – but it is a real risk. And while not all installations are protected from additional energy costs imposed by climate change policies – and indeed those protected from additional costs are not fully sheltered, we do see some examples where high UK energy costs has already caused UK site closures.

Emissions Trading System (ETS). The main policy driver to decarbonise the power sector and heavy industry is EU ETS - a cap and trade system based on reporting requirements and the provision of emission permits by obligated companies; permits being issued or sold by national governments based on a declining overall cap. Since Brexit, the UK has established its own ETS scheme, with broadly similar rules. The separation of the UK established a much smaller and illiquid scheme experiencing far more price volatility than in the EU. CPI continues to support calls for there to be a mutual recognition between the schemes meaning that allowance prices would converge. Obviously, any changes need to be timed carefully when prices between the two separate schemes are reasonably close to each other.

Since 2013 the electricity sector receives zero free allocations; meaning that power generators are required to purchase the full amount of allowances required to offset their annual emissions – this on the basis that they can either pass costs through to customers or invest in low carbon generation. By contrast, large parts of industry remain protected from some of these carbon costs through the continued

provision of limited numbers of free allocations to protect from carbon leakage.

From a decarbonisation policy perspective, the principle of an ETS scheme is to set an overall declining emissions cap and issuing allowances up to this cap. Companies comply either by submitting allowances (either received free of charge or purchased) or by reducing emissions and selling any un-needed allowances to other companies where reducing emissions would be more expensive.

A Carbon Border Adjustment Mechanism (CBAM). While these principles remain, policymakers (in the EU and now in the UK) are now exploring a different way to protect domestic manufacturing. The new idea is that any cost advantage for imports should be removed by increasing the cost of the cost of carbon for products manufactured elsewhere. The policy view is that if this can be achieved, then the need for free ETS allocations is removed and all allowances can be auctioned rather than some being provided free of charge. Additionally, even more finance is raised by taxing the carbon content of imports by adding carbon cost passed through to consumers.

European attention is now being focused on establishing a carbon border around the European Union via a Carbon Border Adjustment Mechanism (CBAM). The new carbon border is designed to increase the cost of carbon associated with goods entering the EU so it matches the cost of carbon associated with goods manufactured in the EU.

The European Commission has identified four key targets that can be delivered by a CBAM:

- Limiting emissions leakage;
- Protecting against reduced competitiveness of domestic industries;
- Incentivising foreign trade partners and foreign producers to adopt measures comparable/ equivalent to the EU's;
- Yielding revenue that can be used to fund investments in clean technology innovation and infrastructure modernisation, or as international climate finance.

While the Commission proposal is for the scheme to initially cover a limited number of sectors (specifically electricity and energy-intensive industrial sectors with large volumes of standardised bulk products such as cement, steel, chemicals, and fertilisers) the expectation is that the scope will be expanded over time. So, at some stage Pulp & Paper may become in scope – **but at the moment the pulp and paper sector is not covered.**

Scheme details are still being developed, but in principle there will be an assessment of the carbon content when goods cross a border, with a tariff imposed to bring the cost of any production linked carbon to the same cost as would have been incurred if the product had been made inside the UK or the EU. Such an assessment will likely be based on the production site; carbon content of production; and carbon content of the domestic electricity supply. For simple basic materials made at one site, this may be fairly straightforward, but the level of complexity (and scope for intergovernmental arguments) quickly grows as more complex and diverse products are brought into scope.

The UK Government has also decided to implement a UK CBAM by 2027 to **the aluminium, cement, ceramics, fertiliser, glass, hydrogen, iron and steel sectors**, with costs dependent on the greenhouse gas emissions intensity of the imported good and the gap between the carbon price applied in the country of origin (if any) and the carbon price that would have been applied had the good been produced in the UK. Full details here: [Factsheet: UK Carbon Border Adjustment Mechanism - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/118242/factsheet-uk-carbon-border-adjustment-mechanism-2024.pdf).

The CPI position is that any UK CBAMs should be progressed only after in-depth sector specific discussions and following a detailed impact assessment. Additionally, establishing a CBAM will be internationally contentious, meaning that the first round of CBAM's will provide an opportunity for lessons of relevance to the UK.

For the Paper Industry a CBAM would be especially challenging because:

- The industry has a long and complex supply chain with a large number of different products – meaning any border administration will be especially challenging.
- Free allocations have already played a role in helping decouple economic growth from increasing emissions – the present system works.

- UK papermakers already use 72% of recycled fibres as feedstock using gas as the heat source with no proven economic alternatives – so the recycling driven circular economy could be damaged.
- The EU is the main trading partner for the UK and there is no sector CBAM being proposed – complexities would be magnified if the UK tried to go it alone.
- UK mills are already regulated by ETS, with free allocations only covering around three-fifths of emissions – there's no windfall in free allocations that needs to be addressed.

Further Information

Further information is available from Steve Freeman, Executive Director - Energy and Climate Change sfreeman@paper.org.uk.

Confederation of Paper Industries

- The Confederation of Paper Industries (CPI) is the leading trade association representing the UK's Paper-based Industries, comprising paper and board manufacturers and converters, corrugated packaging producers, makers of soft tissue papers, and collectors of paper for recycling.
- CPI represents an industry with an aggregate annual turnover of £11.5 billion, 56,000 employees, which supports a further 93,000 jobs in the wider economy.
- For facts on the UK's Paper-based Industries please visit: www.paper.org.uk.

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