

# United Kingdom & European Union Emissions Trading Systems (ETS)

Emissions Trading Schemes are cap and trade mechanisms to limit and progressively reduce Greenhouse Gas (GHG) emissions. The original sectors covered were power generation and heavy industry (including paper mills) though the coverage has subsequently been widened to include other sectors such as aviation and waste incineration.

A cap and trade mechanism requires legislation making it illegal for an obligated installation to emit GHGs unless an “emissions allowance” is surrendered for each tonne of fossil derived GHG emitted. Installations assessed as at risk of carbon leakage (essentially losing market to companies operating in countries with lower cost carbon) can receive a proportion of their anticipated requirement for free; but this quantity is set by the most efficient sites and declines year-by-year - seeking to drive carbon reductions. The total number of emission allowances created by government is ‘capped’ at a level to drive emissions down in line with national targets; the price of the allowances is set by government auctions and by the secondary trading markets. An obligated emitter can choose to comply either by investing in technologies and techniques to abate emissions, or pay the market price and ‘trade’ sufficient allowances to cover the resulting emissions.

Emissions are regulated at their point of release and reported on an annual basis, with around 45% of EU and UK fossil carbon emissions covered by the scheme. Each installation is required to report its independently verified emissions of GHGs and then surrender an equal number of allowances to cover the reported fossil-based emissions.

Within Europe obligated installations (including UK paper and pulp mills) have been required to comply with ETS since 2008. ETS has operated through progressive phases, with a reduction in the total number of allowances issued each year and a falling number of free allocations to industry.

Following Brexit, the UK withdrew from the EU scheme and instead introduced a UK ETS (starting January 2021) with rules based very closely on Phase IV of

EU ETS. In June 2025, an agreement was made that the two schemes would be linked; meaning that allowances will be valid across both schemes and so the price will equalise. Bringing the schemes back into broad alignment will take time, with 2029 being a provisional target date.

These schemes, and their associated measures, remain central to UK and EU policies to reduce the release of GHGs from their domestic economies. Both parties are committed to becoming climate neutral by 2050 (net zero) with interim targets to map the way.

For the UK pulp and paper sector, the reportable emission under ETS is essentially carbon dioxide (CO<sub>2</sub>). This CO<sub>2</sub> is emitted as part of the process of combusting fossil-derived fuels for energy – the industry predominantly uses natural gas to raise heat (steam or hot air) required for drying within the papermaking process. The industry also combusts solid biomass for a significant portion of its heat requirement – the CO<sub>2</sub> emitted from this process is reportable under the ETS schemes but as it is of biogenic origin, emissions allowances do not have to be surrendered.

Emissions associated with electricity consumption do not have to be reported by users – the emissions are captured within ETS by the generators reporting and surrendering allowances at the site where the electricity is generated. The cost of this is passed through to electricity consumers – so for the pulp & paper sector, the sector pays for the emissions but does not report them for any grid supplied electricity. Detailed information on EU ETS can be found on the websites of the European Union and the UK Government at:

[Participating in the UK ETS - GOV.UK](#)

[EU Emissions Trading System \(EU ETS\) - European Commission](#)

## CPI Position

### • **CPI supports the principles of the UK and EU ETS.**

A market-based cap and trade system is the most economically efficient way to drive down industrial emissions of carbon. However any targets must be realistic and achievable for installations operating in open markets subject to imports.

### • **A global agreement is critical.**

The target for reduction is global emissions – GHGs are trans-boundary actors and it does not matter where in the world they are emitted. Accordingly, the overwhelming priority must be for UK and European targets to be part of a global agreement; one area cannot reduce global emissions on its own. Countries need to deliver commitments made as part of the Paris Climate Change Agreement and these need to be developed to provide a global scheme that genuinely reduces carbon emissions in an equitable manner.

### • **Government should set a target and stick to it.**

Fundamental to any ETS is setting long-term carbon targets so companies can decide if they should either invest in emission reduction or purchase allowances. The system should be allowed to operate and the temptation for policy makers to micro-manage should be resisted.

### • **Climate change ambition must be integrated with a proper industrial competitiveness strategy.**

Recent upheaval to supply chains (such as covid disruption, the energy crisis following the Russian invasion of Ukraine and the on-going tariff wars triggered by the US) all serve to highlight the strategic importance of a domestic manufacturing industry, additional to its potential role in growing and rebalancing the economy. A stable and long-term legislative framework is required that combines industrial competitiveness and affordable energy with actions to support decarbonisation.

The recent UK industrial strategy is disappointing in its focus on potential new opportunities, while neglecting existing and proven sectors. The lack of fiscal support for on-site decarbonisation at existing manufacturing sites is a huge mistake.

### • **Industry operates globally, as do carbon emissions.**

Policy makers cannot assume that industrial locations are static and that, in the long term, they can continue to compete if faced with costs not faced by

competitors outside the scheme boundaries. Closing manufacturing in the UK and Europe reduces direct emissions, but if that manufacturing and its associated emissions are simply shifted, then the scheme damages domestic industry, destroys jobs and delivers zero global environmental benefit. It's a hard lesson for policymakers, but the issues are huge if they get it wrong.

### • **A clear vision is needed on how the sector can meet any new targets.**

Targets must be accompanied by a clear understanding of how sectors can meet targets and remain competitive. This should include support for both innovation and investment in decarbonisation.

### • **Equivalent levels of support.**

The UK **must match** the level of decarbonisation support being offered to installations elsewhere and specifically by the EU – failing to do so will put UK sites in an impossible position. Within the EU, a portion of the revenue raised from industry through the auctioning of allowances is reinvested to support decarbonisation. **The UK must follow this lead and establish an Innovation Fund supported through ETS auction revenue** – as indeed was promised in 2020 as part of Brexit.

### • **Carbon policies should not add additional costs to the best performing sites – either directly or indirectly.**

The awarding of free emission allowances is set by rigorous benchmarking and should be respected. Energy intensive installations cannot remain competitive if faced with higher costs than competitors operating in areas with lower carbon costs. To avoid risk of carbon leakage (firms being driven out of the UK to locations with lower carbon costs), then at-risk firms are provided with a level of allowances free of charge. These free allocations were set by an independently verified assessment of historic data together with product energy benchmarks set by the most efficient installations. Simply put, each installation in a sub-sector receives its free allocation based upon the performance of the best 10% of installations in that sub-sector. Cutting back these allocations shows a fundamental misunderstanding of how industry works.

Independently assessed proposed allocations should be respected, and there should be no scaling back to keep under the overall cap; any shortfall in allowances should be taken from the allocation held by government.

• **Understanding and retaining carbon leakage status is critical; carbon borders.** Until there is a genuine and enforced global agreement, UK industry must be protected from excessive carbon costs. It follows that any suggestion that the sector should lose carbon leakage protection is misguided.

Policymakers are in the process of establishing carbon borders seeking to equalise carbon costs for domestic manufacturers and importers. A Carbon Border Adjustment Mechanism (CBAM) is not suitable for the paper sector because:

- The industry has a long and complex supply chain with a large number of different products – meaning any border administration would be especially challenging.
- Free allocations have already played a role in helping decouple economic growth from increasing emissions – the present system works.
- Recycled fibre is already the main feedstock for UK papermakers (72%) with these mills using natural gas as the heat source. There's currently no proven economic alternative – meaning that a CBAM would disadvantage the existing UK paper recycling industry (with ETS cost liability) against imports of virgin material (with no ETS liability) produced using carbon neutral biomass. So, a poorly thought through policy intended to drive down carbon emissions could damage an existing successful circular economy sector.
- 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.

• **Lower compliance cost is not a bad thing.**

If the reduction targets are delivered at a lower cost than forecast this is good news – not a symptom that the scheme is broken.

• **Competitively priced energy is fundamental.**

Overall energy costs in line with those in competitor nations are fundamental to the long-term future of UK industry. As well as the intrinsic cost of energy, UK papermakers are extremely concerned about increasing regulatory and network costs. It is the cumulative impact of policies that counts – each policy cannot be considered in isolation.

• **Simpler regulation.**

ETS compliance must be simplified as the present system is overly bureaucratic. The administrative burden could be greatly simplified with some common sense changes to the scheme. For example, current rules require the reporting of emissions 'however small' which leads to the inclusion in a site emissions report of complex but inconsequential sources such as propane ignition gas, acetylene for welding and even gas used for laboratory Bunsen burners. This requirement should be scrapped as it incurs disproportionate effort and cost in reporting a tiny fraction of a typical site's emissions.

• **Grid supplied electricity cost is increased through ETS.**

Because electricity generation is obligated by ETS, then the delivered cost is increased as the generation industry passes through their higher costs. This impact is especially pronounced in the UK because gas is generally the marginal fuel of production and sets the market price (together with the UK specific cost impact of CPS taxation). It follows that the UK compensation scheme to offset the impact of ETS on electricity prices remains hugely important.

• **Support industrial CHP electricity generation.**

A major opportunity to support Combined Heat and Power (CHP), and deliver its associated environmental benefits, has been missed by removing free allocation of allowances from industrial CHP electricity. This should be reviewed.

• **Use carrots as well as sticks.**

Current UK energy policy is essentially built on driving up the cost of using fossil fuels so that low carbon generation becomes competitive. This runs a real risk of making industry uncompetitive and driving it out of the country. To counter this, energy taxes should be used to invest in industrial efficiency – making sites more competitive as well as reducing emissions.

• **Invest revenue from the sale of allowances in energy efficiency.** Using carbon taxes to fill holes in general revenue is not a sensible or sustainable policy.

CPI Executive Director – Energy & Climate Change, Steve Freeman, commented: *"Driving manufacturers out of the UK by making them uncompetitive through over-pricing carbon is nonsensical. Domestic manufacture is simply replaced by imported final product; carbon is a global issue and a tonne of CO2 released outside Europe is the same as one released inside."*

## Sector background

The manufacture of pulp and paper is one of the regulated sectors under EU ETS, and all pulp and paper mills capable of producing more than 20 tonnes of product per day are required to comply with EU ETS (and with UK ETS from 2021). In the UK, 37 mills meet the criteria for inclusion (July 2025). A number of these mills are classed as “low emitters” (emitting less than 25,000 tonnes CO<sub>2</sub> pa) – accordingly the UK government has implemented a simplified “Opt-Out” scheme for such sites. 11 paper mills chose to opt out of EU ETS Phase III and some 17 are opted-out of the 2025 full UK ETS Scheme.

Mill list - [UK Pulp and Paper Mills 2025](#)

In 2024, these 37 mills, plus their associated combined heat-and-power plants (CHPs), emitted a total of 1.26M tonnes of fossil CO<sub>2</sub>, while they received a total of 857k allowances free of charge – a shortfall of 32%. In 2008, the start of EU ETS Phase II, UK mills emitted 3.2M tonnes of fossil CO<sub>2</sub>, meaning 2024 direct emissions were an impressive 61% lower than in 2008.

This achievement results from a combination of improved energy efficiency, switching from fossil to biomass fuel, introduction of high-efficiency CHP and, unfortunately, the closure of a number of installations. Over the same period, annual UK production of paper fell from 5M tonnes of product to 3.3M. The UK is now the largest net importer of paper in the world, and over half of UK paper collected for recycling is exported unprocessed.

A full summary of UK EU ETS sector emissions can be found at: <https://thecpi.org.uk/library/PDF/Public/General/EU-UK-ETS-Summary-2008-24.pdf>

## Carbon leakage

A number of Energy Intensive Industries, including the manufacture of pulp and paper, are accepted as being at risk of carbon leakage – the loss of investment, jobs and wealth creation to locations outside the ETS areas which have lower carbon costs. These industries continue to receive a number of free allocations intended to cover their heat use and on the assumption that they operate at the fossil carbon efficiency of the best installations. From January 2013, zero free allocation was provided for electricity use or generation, so adding an additional cost burden and increasing the price of electricity. The UK Government has provided a compensation package to offset some of this cost impact on the most affected installations. A number of UK paper mills are eligible for this compensation.

## Further Information

Further information is available from Steve Freeman, Executive Director – Energy & Climate Change, on 07775 696514 or email [sfreeman@paper.org.uk](mailto: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 recovered paper merchants, paper and board manufacturers and converters, corrugated packaging producers, and makers of soft tissue papers.
- CPI represents an industry with an aggregate annual turnover of £15 billion, with 56,000 direct and a further 59,000 indirect employees.
- For facts on the UK’s Paper-based Industries please visit: [www.paper.org.uk](http://www.paper.org.uk).

REVISED: JULY 2025