

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 from power generators and heavy industry. A cap and trade mechanism requires a law to be introduced making it illegal for an obligated installation to emit GHGs unless an “emissions allowance” is surrendered for each tonne of fossil derived GHG emitted. These allowances may be purchased from government at auctions or bought on the secondary market from other obligated installations, traders or brokers. Most installations also receive a proportion of their anticipated requirement for free, but this quantity declines year-by-year. The total number of emission allowances created by government is capped at an appropriate level to drive emissions down; 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 buy sufficient allowances to cover the resulting emissions.

Since 2005, obligated UK installations have participated in EU ETS. Emissions are regulated at their point of release and reported and reconciled 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. Phase III of this scheme started in 2013 and concludes with the 2020 compliance year. Phase IV of the scheme commences in 2021; however, because of Brexit, the UK will no longer participate in the EU scheme but instead will introduce a UK ETS with rules based very closely on Phase IV of EU ETS and which it is hoped one day will directly link with EU ETS.

These schemes, and their associated measures, are central to EU and UK policies to reduce the release of GHGs from their domestic industry. Overall, the EU and the UK are committed to become climate neutral by 2050 (net zero) with interim targets to map the way. The EU ETS is constructed such that by the end of 2020, GHG emissions from regulated sectors are required to be 21% lower, and by 2030 43% lower than a 2005 baseline.

For the pulp and paper sector, the reportable emission under ETS is carbon dioxide (CO₂). This CO₂ is emitted as part of the process of combusting fossil-derived fuels for energy – the industry uses natural gas to raise steam and heat required by the papermaking process. The industry also combusts solid biomass for a significant portion of its heat requirement – the CO₂ 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 for it. 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: ec.europa.eu/clima/policies/ets/ www.gov.uk/participating-in-the-eu-ets

CPI Position

- **CPI supports the principles of the UK ETS and EU ETS.** A market-based cap and trade system is the most economically efficient way to drive down industrial emissions of carbon.
- **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 European and UK targets to be part of a global agreement; Europe cannot reduce global emissions on its own. Countries need to deliver commitments made as part of the Paris Climate Change Agreement and (over time) 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 needs to be integrated with a proper industrial competitiveness strategy.

Recent economic problems have served to highlight the importance of manufacturing industry and its potential role in rebalancing the economy. A stable and long-term legislative framework is required that combines industrial competitiveness with actions to support decarbonisation.

• 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 Europe reduces direct emissions, but if that manufacturing and its associated emissions are simply shifted, then the scheme damages domestic industry and delivers no global environmental benefit.

• 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, funded through ETS auction revenue.

• Carbon policies should not add additional costs to the best performing sites – either directly or indirectly. The awarding of free emission allowances set by a rigorous benchmarking should be respected. Energy intensive installations in the UK 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. Until there is a genuine global agreement, industry must be protected from excessive carbon costs. It follows that any suggestion that the sector should lose carbon leakage protection is misguided.

• 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.

ETS compliance must be simplified. The present system is overly bureaucratic. The administrative burden could be greatly simplified with some common sense changes to the scheme – and Brexit allow the UK to make these minor changes to its UK ETS without compromising the effectiveness of 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.

• Electricity use should be included in benchmarks. Benchmarks (used to set levels of free allocation) should not simply focus on heat, they should also encompass electricity use. Such a change would obviate the need for the UK compensation scheme to offset the impact of ETS on electricity prices.

• 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 predicated 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.

Rather, such income should be used to fund a major programme supporting energy efficiency, both research and deployment.

CPI Director General, Andrew Large, 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

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, 41 mills meet the criteria for inclusion (June 2020). A number of these mills are classed as “low emitters” (emitting less than 25,000 tonnes CO2 pa) and therefore of lower risk – 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 20 have applied to be opted-out of the 2021 UK ETS.

Mill list - <https://thecpi.org.uk/library/PDF/Public/General/Millcapacities Jan20.xlsx>

In 2019, these 41 mills, plus their associated combined heat-and-power plants (CHPs), emitted a total of 1.62M tonnes of fossil CO2, while they received a total of 1.13M allowances free of charge – a shortfall of 30%. In 2008, the start of EU ETS Phase II, UK mills emitted 3.2M tonnes of fossil CO2, meaning 2019 direct emissions were an impressive 49% 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 less efficient mills. Over the same period, annual UK production of paper fell from 5M tonnes of product to 4M. 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 ETS Summary 2008-19.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, Director of Environmental and Energy Affairs, on 01793 889625 or email 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 £12 billion, 62,000 employees, which supports a further 100,000 jobs in the wider economy.
- For facts on the UK’s Paper-based Industries please visit: www.paper.org.uk.

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