

UK Steel – Spring Budget Submission 2024

About UK Steel

UK Steel, a division of Make UK, is the trade association for the UK steel industry. It represents all the country's steelmakers and a large number of downstream steel processors.

Introduction

- Steel is a key driver of economic growth and supply chain resilience.
- Steel is central to the UK's decarbonisation journey, being infinitely recyclable and used in every single technology required for a Net Zero future.
- The UK is in a prime position to lead green steelmaking as one of the world's largest generators of steel scrap.
- The sector employs 39,800 people directly in the UK and supports a further 50,000 in supply chains, with a median steel sector salary that is 43% higher than the UK national median and 56% higher than the regional median in Wales, and Yorkshire & Humberside, where its jobs are concentrated.
- The steel industry directly contributes £2.9 billion to UK GDP and supports a further £3.8 billion while directly contributing £4 billion to the UK's balance of trade.

The UK steel sector has been operating in an uncompetitive business environment marked by persistently high electricity prices. Combined with the unprecedented growth in steel produced in developing economies fuelled by state subsidies, it has become increasingly difficult to compete in a global market for steel riddled with distortions and excess steelmaking capacity. The landscape remains challenging for the UK steel sector amid a weak economic climate and lack of a clear operating framework that will ensure a competitive business landscape and a level playing field with our competitors.

In this submission, we call for the Spring Budget to include policies which enable the UK steel industry not only to survive but actually thrive in an increasingly competitive international environment, continuing its key contribution to levelling up our regions and nations, providing security of supply for a strategically important product, and decarbonising in line with our domestic and international responsibilities.

UK Steel Spring Budget Priorities

Summary of Priorities:

- 1. Bring forward UK Carbon Border Adjustment Mechanism implementation to 2026
- 2. Establish competitive electricity prices for the steel sector
- 3. Abolish the Carbon Price Support Mechanism
- 4. Support investment in decarbonisation and innovation

Priority 1: Bring forward UK Carbon Border Adjustment Mechanism implementation to 2026

UK Steel greatly welcomes the news that the UK Government will introduce a Carbon Border Adjustment Mechanism in the UK, which will create a level playing field on carbon pricing between imported and domestically produced steel. However, we are very concerned that HMT plans to introduce it by 2027, a year later than the EU, which will increase the risk of trade diversion and damage the UK steel industry.

The UK steel industry is at great risk of carbon leakage, as it is carbon, energy, and trade-intensive. Over 20% of all steel produced globally is traded internationally – this climbs to nearly 40% in markets outside China. The UK exports 40% of its steel production and imports 55% of its direct requirements. There is, therefore, intense



competition, which keeps steel prices and margins low. Carbon price differentials are a key risk factor contributing to carbon leakage.

The HM Treasury's Net Zero Review¹ analysed the risk of carbon leakage to different industries. It showed that the basic metal sector (dominated by the steel sector) had one of the highest trade openness at 72%, combined with the highest carbon intensity (CO₂ tonne/\$m) and the third-highest proportion of CO₂ from domestic sources. The report showed that the steel sector's gross output was the most reactive to high carbon pricing among all industries.

Table 2.B: Carbon intensity for UK manufacturing sectors, and the illustrative cost of carbon pricing

Sector	Overall trade openness ¹⁹	UK-sourced carbon intensity ²⁰ (CO ₂ tonne/ \$ million)	Proportion of CO ₂ from domestic sources	(% of gross	output)	arbon pricing \$100/tonne
Computers & electronics	78%	71	41%	0.4%	0.5%	0.7%
Textiles and apparel	76%	125	63%	0.6%	0.9%	1.2%
Mining & energy extraction	75%	381	90%	1.9%	2.9%	3.8%
Basic metals	72%	790	80%	3.9%	5.9%	7.9%
Other transport equipment	72%	76	37%	0.4%	0.6%	0.8%
Chemicals & pharmaceuticals	70%	121	59%	0.6%	0.9%	1.2%
Motor vehicles	69%	96	43%	0.5%	0.7%	1.0%
Electrical equipment	69%	90	36%	0.4%	0.7%	0.9%
Machinery and equipment	67%	118	46%	0.6%	0.9%	1.2%
Other manufacturing	54%	170	69%	0.8%	1.3%	1.7%
Refineries	52%	681	83%	3.4%	5.1%	6.8%
Rubber and plastics	51%	300	76%	1.5%	2.3%	3.0%
Wood products	35%	122	55%	0.6%	0.9%	1.2%
Fabricated metals	34%	112	49%	0.6%	0.8%	1.1%
Mining of non- energy products	32%	176	73%	0.9%	1.3%	1.8%
Non-metallic minerals	30%	417	81%	2.1%	3.1%	4.2%
Paper	28%	157	66%	0.8%	1.2%	1.6%

Source: OECD, HM Treasury calculations

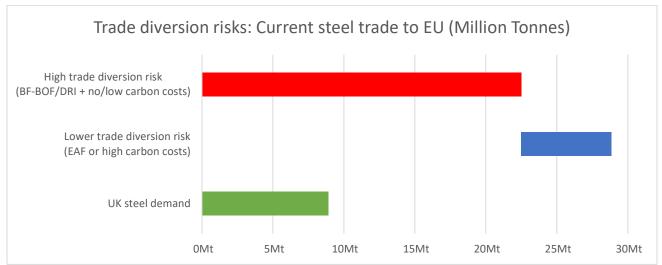
¹ HM Treasury (2021), Policy paper, Net Zero Review Final Report, https://www.gov.uk/government/publications/net-zero-review-final-report



Our biggest and geographically closest trading partner, the EU, is implementing a CBAM policy, and reporting requirements already started in October 2023, with CBAM compliance costs from 2026 onwards. This could have devastating effects on the UK steel market, UK producers, and the industry's ability to compete and decarbonise:

- <u>Trade diversion:</u> When facing an EU CBAM tariff, high-emission steel currently exported to the EU will be diverted to the UK, flood the market, and depress prices.
- <u>Trade barrier</u>: UK producers will face an EU CBAM compliance cost, resulting in a trade barrier to our biggest export market.

As illustrated in the chart below, of the 28.5Mt steel imported to the EU, 22.5Mt is at risk of trade diversion, as it originates from countries with little or no carbon pricing and is produced with high emissions levels. If some of this is diverted to the UK, it could cause serious injury to UK producers and directly undermine any efforts to decarbonise, as they would be undercut by high-emission steel imports before the UK's own CBAM is introduced in 2027. At the same time, the steel safeguard measures will end in June 2026, further leaving the UK exposed to cheap, high-emission imports from highly subsidised steelmakers.



Source: Trade data: International Steel Statistics Bureau, UK steel demand: WorldSteel. Note: Canada and New Zealand place somewhat comparable carbon costs between £30-40/tCO₂e on their steel producers; South Korea and Japan negligible carbon costs at £10-12/tCO₂e; and South Africa, Chile, Mexico, Kazakhstan, and Colombia almost no carbon costs at £0.7-3/tCO₂e, with the remaining countries placing no carbon costs on emissions from steel producers. 71% of global steel production is via BF-BOF (at an average of 2.32 tonnes CO₂ per tonne of crude steel cast), 7% DRI-EAF (at an average of 1.65tCO₂/tCS), and 22% Scrap-EAF (at an average of 0.67tCO₂/tCS). High trade diversion risk is estimated to be BF-BOF/DRI-EAF production in countries with no/negligible carbon costs, and lower trade diversion risk is estimated to be Scrap-EAF production in countries with no/negligible carbon costs, and any production in countries with somewhat comparable carbon costs.

It is therefore imperative that the UK Government brings forward the introduction of a UK CBAM to 2026 to 1) prevent trade diversion of high emissions steel, which could significantly damage the UK market, 2) minimise the risk of carbon leakage and assist in decarbonising the industry. The UK Government must match the EU timeline for implementation to avoid devastating effects to its own steel industry.

Recommendation: Bring forward the UK Carbon Border Adjustment Mechanism (CBAM) to 2026 to prevent trade diversion of high-emission steel to the UK market.

Priority 2: Establish competitive electricity prices for the steel sector

As evidenced in the Government's consultation on <u>renewable exemptions</u> and <u>network charges compensation</u>, the UK has Europe's highest industrial electricity prices and well above other key industrial competitors. For an electro- and trade-intensive sector like steel, this is hugely damaging to both short-term competitiveness as well as long-term viability and ability to attract inward investment. Higher electricity costs naturally increase



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production costs (electricity costs can represent around 20% of conversion costs²), making UK producers less competitive in home and export markets. More damaging still is the long-term erosion of investment. With nearly all UK producers being part of multi-national companies with facilities elsewhere in the EU and four also operating outside the EU, there is fierce competition for capital investment, and it is clear the UK consistently loses out due to its poorer business environment. Persistent cost disadvantages in the UK lead to underinvestment, which leads to further erosion of competitiveness.

Critically, the disparity between UK electricity prices and those found elsewhere is also a serious impediment to decarbonising the steel sector in the UK. The steel industry will make a complete switch to electric arc furnaces, which substantially increase its use of grid electricity, meaning that national electricity prices will become an ever more important factor in where steel production is situated and which existing sites attract investments.

The Government announced the British Industrial Supercharger package, which sets out to reduce the disparity between UK and European industrial electricity prices. It contained policies to increase exemption levels from renewable levies, provide exemption for Capacity Market levies, and compensate for prohibitively high network charges by up to 90%.

However, it has been incredibly disappointing that Government lowered its ambition and the compensation level of network charges from 90%, as consulted upon, to only 60%. The French and German governments exempt their steel industries from 85%-90% of network charges, resulting in network charges at around ± 0.5 -1/MWh, compared to the UK network charges of an estimated ± 10 - ± 12 /MWh after the 60% compensation. Therefore, UK steelmakers will face network costs over ten times higher than those of their nearest competitors, resulting in an ongoing competitive disadvantage.

An ongoing electricity price disparity will continue to negatively impact the steel industry in numerous ways. The steel sector operates on relatively thin margins. Whilst there are increasingly specialised and high-value steels being produced, market requirements and economies of scale mean that the vast majority of steel made even in developed economies is commoditised and available from a broad range of sources. There is, therefore, intense competition, which keeps steel prices and margins low. It will also harm the industry's decarbonisation, as new electric arc production is more electro-intensive. The sector consumes 2.5TWh of grid electricity each year, the equivalent of 800,000 houses. When all UK production converts to electric arc furnaces, the sector will face higher electricity costs of £289m (at a price disparity of £52/MWh).

The Government should, therefore, increase compensation to similar levels as Germany and France, i.e. 90%, and provide truly competitive electricity prices for the steel industry.

Recommendation: Increase network charging compensation to 90% in line with France and Germany.

Priority 3: Abolish the Carbon Price Support Mechanism

The UK's Carbon Price Support mechanism is currently increasing the UK's carbon price unnecessarily compared to the EU. Some UK steel companies today receive near-full compensation for pass-through costs from power generators in industrial electricity prices. However, not all benefit from this, and many Energy Intensive Industries (EIIs) are not eligible for the ETS/CPS compensation, resulting in higher electricity prices and a price differential with many European countries. This will remain a problem until either the UK removes the CPS or expands the compensation for the indirect cost of carbon in electricity prices to more EIIs.

In the 2022 Budget, it was announced that *"The government will freeze the CPS rate at £18/tCO₂ for 2021-22"*. In the 2018/19 Budget, the Government committed *"to reduce the CPS rate if the Total Carbon Price remains high"*. The UK ETS price currently stands at £40 per tonne of CO₂. This results in a total UK carbon price of around £58/tCO₂. Moreover, in the 2017 Budget, it was explicitly stated that *"... the Total Carbon Price, currently created by the combination of the EU Emissions Trading System and the Carbon Price Support, is set at the right level, and will continue to target a similar total carbon price until unabated coal is no longer used"*. From 1 October 2024, Great Britain will no longer use coal to generate electricity. At the time of the above statement,

² Conversion costs - the costs of converting the basic raw materials into steel.



the total carbon price stood at £25/tCO₂. As the charts below demonstrate, the UK's total carbon price passed this target point in early 2018 and has remained well above since, even after the recent reduction in UK ETS prices.

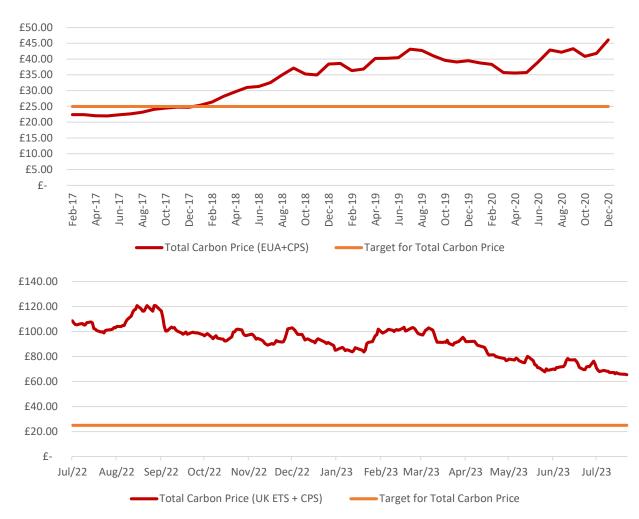
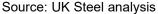


Chart 1: UK Total Carbon Price Vs UK Target Carbon Price



The original purpose of the Carbon Price Floor mechanism was to provide a stable minimum carbon price in the UK, to drive investment within the power sector and later to drive out coal. With the EU price remaining well below projections in 2013 and 2014, the UK total carbon price quickly became 4-5 times higher than the EU's and contributed significantly to the electricity price disparity between the UK and the continent. In order to minimise this impact on industrial competitiveness, HMT froze the CPS rate at £18/tCO₂ in the 2014 Budget, assuming the EU price would remain low for the remainder of the decade.

However, the UK has now introduced its own ETS with a cap consistent with Net Zero and minimum auction price, making a separate top-up tax unnecessary, and the UK ETS prices have remained much higher than the intended total carbon price. The Government should take action as an independent trading nation and remove a tax aimed at topping up an EU scheme and, thereby, reducing the impact on energy-intensive industry.

Recommendation: Remove the CPS completely, as the UK has left the EU Emission Trading System to create our own ETS. The UK has complete autonomy over its carbon pricing policy and should choose the simplest way of achieving its aims. With the auction reserve price, the Government has ensured both the benefits of emissions trading and the certainty of a bankable carbon price. <u>There is no logical argument for retaining both an ETS and a top-up carbon price for power outside of the UK ETS.</u>



Priority 4: Support investment decarbonisation and innovation

Capital Investment

Decarbonisation is a necessity for the steel sector's viability, and governments around the world are partnering with industry to achieve this. UK Steel has published a roadmap³ for how the industry could substantially lower emissions by 2035, in line with the Climate Change Committee's recommendations. It is so far the only steel industry globally where all domestic steelmakers have come together to publish a joint vision for how to decarbonise its production. It proposed an industry-government partnership akin to the North Sea Transition Deal, clearly demonstrating its commitment to investing and reducing its emissions substantially by 2035 and achieving Net Zero steel production by 2050 if Government is willing to match this investment.

Given the scale of funding that governments in the EU, the US, and elsewhere are providing, the UK steel industry warmly welcomed the recent announcement of £500 million to support Tata Steel UK in decarbonising its Port Talbot facilities. This is an excellent model for the Government to apply to support the wider sector in its decarbonisation journey. Furthermore, a broader industrial strategy must be pursued, considering the required infrastructure, grid connections, scrap availability, hydrogen infrastructure, energy efficiency funding, CBAM, support for decarbonising heat, and R&D funding.

Recommendation: Use the model agreed with Tata Steel UK to agree on match-investment funding with other UK steel producers to supercharge their journeys towards decarbonisation, protecting jobs, and investment in our regions and nations.

Research and Innovation

Innovation is essential for green steelmaking and the efficient recycling of steel scrap. The UK boasts some of the best research and innovation expertise, which we must capitalise upon and grasp the opportunity to become global leaders in green steelmaking and the circular economy. The funding currently available to the steel sector for energy efficiency and R&D is limited and spread very thinly across a number of sectors. The extension of the Industrial Energy Transformation Fund (IETF) has been welcomed but is not ambitious enough, while the long-promised "Clean Steel Fund" never materialised. Meanwhile, in 2021, UK steel companies lost access to the EU Research Fund for Coal and Steel.

This is a key funding gap as, essentially, there is no funding currently available that is specific to the steel industry and the steel circular economy, and this is hampering actual progress with the development and adoption of new technologies. A "Clean Steel Innovation Fund" is urgently needed. Furthermore, steel scrap will play an increasingly important role in green steelmaking through electric arc furnaces. UK steelmakers require certain grades of scrap to produce different products, however, these higher grades are not currently readily available. More work remains to be done to improve the sorting, segregation, and separation of scrap, principally to remove the physical contamination from other non-ferrous items and to ensure the best value retention. The poor-quality scrap reduces productivity and increases costs and emissions. While pioneering projects are underway to improve this, additional funding should be supported to improve processing and grade identification.

Recommendation: Establish a ringfenced Clean Steel Innovation Fund to support R&D in green steelmaking and improved scrap processing techniques.

Contact Details: Frank Aaskov, Energy and Climate Change Policy Manager, UK Steel, faaskov@makeuk.org, 07872 190965

³ UK Steel (2022), Net Zero Steel: A Vision for the Future of UK Steel Production,

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