

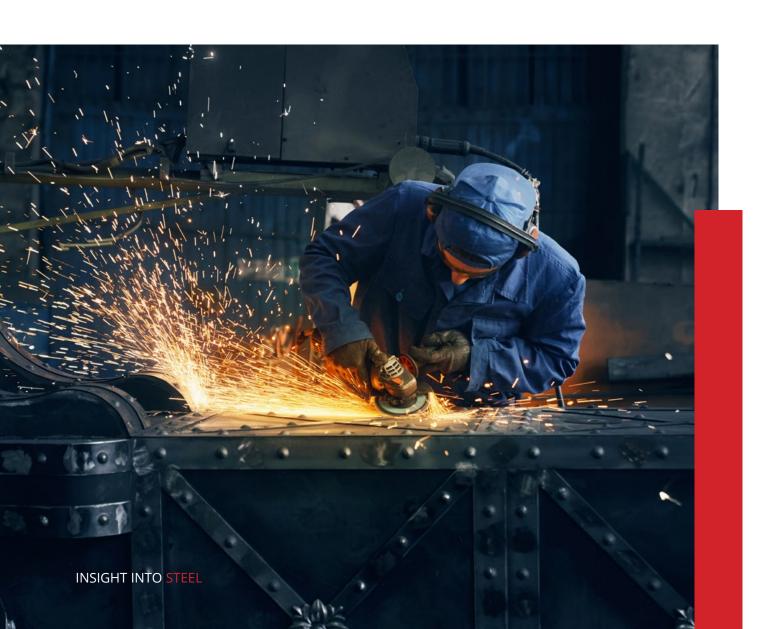
## **RECASTING STEEL**

THE CHANGING ROLE OF THE UK STEEL INDUSTRY

#### A BREAL ZETA INDUSTRY FOCUS PAPER

Specialists in structured asset-based lending facilities for the UK steel industry and commodities markets.

www.brealzetacf.com



## THE UK STEEL INDUSTRY IN NUMBERS

34,500

people directly employed by the UK steel industry

45%

average steel salary higher than the national average

£2.4Bn

direct contribution to UK GVA

£2.4Bn

direct contribution to the UK's balance of trade

43,000

further jobs supported in the supply chain and local communities

**59%** 

average steel salary higher than in Wales and Yorkshire & Humberside Regions where jobs are concentrated

£3.1Bn

indirect contribution to UK GVA via supply chains

**7.2mt** 

of crude steel produced per annum around 70% of the UK's annual requirement

## **FOREWORD**

3 STEEL 2023

Robert Wakeford, Managing Director, UK Sales at BREAL Zeta

Welcome to our industry sector insight paper, 'Recasting Steel - The Changing Role of the UK Steel Industry', which features perspectives from our team and a distinguished panel of expert contributors.

In particular, we would like to give special thanks to John Berry (Teneo), Chris Hall (Hilco Global) and Julian Verden (Stemcor) for their participation, insights and invaluable contributions to this study.

Steel is a critical component in every aspect of our lives; it underpins our infrastructure and the countless downstream markets and supply chains it supports. Yet it is an industry under immense pressure.

This paper does not seek to play down the enormity of the challenges facing the UK steel industry today. We publish against a stark backdrop of ongoing uncertainty due to the impact of the war in Ukraine, rising inflation and ongoing energy price volatility, slowing export demand, intense competition and calls for reduced carbon emissions dominating the headlines.

At BREAL Zeta, we are committed to backing the UK steel and commodities sectors with innovative alternative debt structures as they adapt to confront a perfect storm of issues and lead change. BREAL Zeta's team has a deep understanding of steel businesses, from supporting investment over the longterm to create stability and operational strength, to helping management teams reach the next level of growth by structuring flexible asset-based lending (ABL) transactions.

We anticipate that the M&A landscape will continue to be buoyant with acquisitions, corporate carveouts, MBOs and exits playing out across the UK mid-market. ABL will also have an increasing role to play in providing greater levels of headroom for restructuring and recapitalisations as government supportbased financial lending, like CBILS and RLS, is unwound.

With an increasing shift towards globalisation, we also expect to see an increase in multi-jurisdictional deals. We have completed transactions for businesses located in the UK, Germany, US, Singapore, Poland, Australia and Sweden. We are currently working on a number of exciting cross border transactions.

We work with private equity houses, corporate finance advisers and accountancy professionals to provide structured, multi-jurisdictional ABL facilities up to a £150m hold level that deliver working capital and corporate structuring solutions.

The UK steel industry is facing a unique period of simultaneous challenge and opportunity - one in which large, complex structured transactions, often with a strong cross-border dimension, can deliver significant benefit for companies looking to achieve growth and drive gains in efficiency, productivity and competitive advantage.

#### RECASTING STEEL | THE CHANGING ROLE OF THE UK STEEL INDUSTRY

Steel has been variously described as an integral part of our industrial heritage and the essential backbone of our industrialised value chain. It is the base material at the core of our most strategically important manufacturing sectors, such as automotive, construction, aerospace, defence and fabricated metals.

UK steel is reputed worldwide for the quality, strength and resilience of its output, yet as a sector, it remains highly vulnerable to macroeconomic forces.

Not only must the UK steel industry have the ability and agility to adapt to face up to its structural and crisis-related challenges, but it will also need unprecedented levels of support to compete in the face of raging global competition and spiralling energy prices, further exacerbated by the war in Ukraine.

While it is undeniable that low carbon steel has the potential to revitalise UK industry as a whole, making domestically produced 'green steel' globally competitive in a new net-zero age is arguably its biggest challenge to date.

"In such a volatile environment, steel businesses are looking to their vast pool of assets to finance their future. As a result, Asset Based Lending (ABL) has come to the fore in creating predictability and stability in an otherwise uncertain market."

Annabel Todd, Regional Business Development Director, BREAL Zeta

"While most of our UK customers were able to operate through COVID and the majority are now back to operating at pre-pandemic levels, there are still logistical bottlenecks that the UK steel sector is facing as a result, from shortages of labour and drivers as well as vessels and space in the ports. We are currently seeing prices of flat roll products reaching stratospheric levels. This level of volatility can create overcautious or over-exuberant behaviour from customers, which increase risk across the sector. The marked fluctuations in iron ore prices also make it extremely difficult for producers, distributors like us and for service centres and stockists to plan ahead. The stockists, people selling it from the floor as opposed to selling it in advance when they buy it, are seeing tremendous profitability at the moment."

Julian Verden, Stemcor



## SUPPLY AND DEMAND

The UK directly consumes 10 million tonnes of steel every year in infrastructure, construction and a myriad of manufactured products. The Government's study into future market opportunities for UK steel products, conservatively estimates that the UK market will be worth £6 billion per annum by 2030 – a rise of £4 billion from today.

With the growing requirement for high-grade steel in applications such as high-speed rail, energy-efficient buildings, electric vehicles and wind turbines, future domestic demand is very strong. It has been reported that capturing this opportunity could be worth an additional £4 billion in sales to UK steel producers and could result in a 50% increase in the sector's contribution to the UK economy to over £3 billion. (Source: BEIS – Future capacities and capabilities of the UK steel industry).

Demand for steel fell significantly during the first coronavirus lockdown in early 2020 as construction and manufacturing sectors stalled, leaving some companies facing liquidity issues and leading to further calls for emergency Government support.

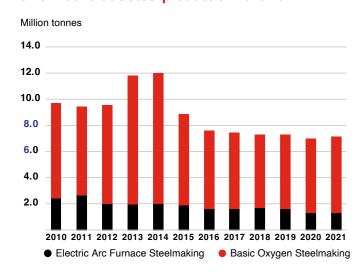
Metals and steel sales prices sharply increased in 2021 and in Q1 of 2022, peaking immediately after Russia's invasion of Ukraine in February. The price rise has driven up margins of many steel stockholders and service centres, which were able to buy in at low cost and sell on at higher prices. Many businesses have used this opportunity to deleverage, significantly improving their balance sheets.

However, some metal and steel manufacturers have not been able to pass-on these soaring input costs. particularly those supplying the construction industry which hold fixed contracts, and the inability to pass on price increases has eroded profit margins. (Source: Atradius, UK Metals Credit Risk 2022).

No longer able to absorb surging energy costs and mounting transport prices, steel producers have been passing on these costs to their customers via higher product prices. However, it remains to be seen whether the market will bear further price elasticity.

The UK's steel trade deficit was -£0.8 billion in 2020 (a deficit is when exports exceed imports), its lowest level since 2015. 53% of UK steel exports are to the EU. (Source: UK Steel Industry: Statistics and Policy)

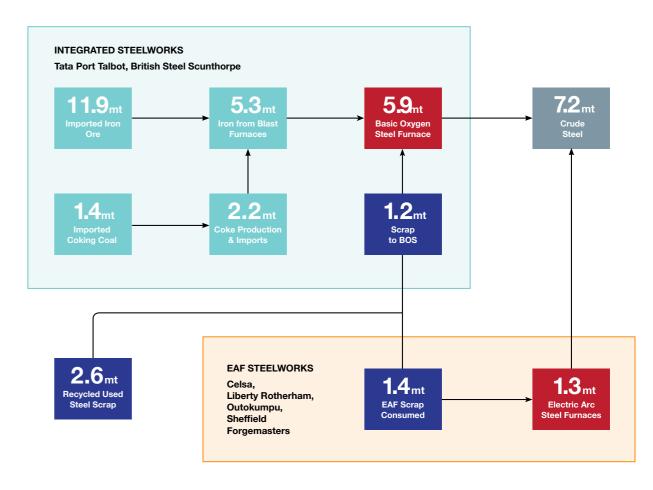
### UK annual crude steel production 2010-2021



"It is difficult to quantify the impact of Brexit on the UK steel and commodities sectors, given the impact of multiple other external factors at the same time as Brexit. Hilco's discussions with steel companies suggest the main Brexit impact has been on speed/ cost of logistics and paperwork/red tape in import and export, which have meant that a significant number of trading relationships with Europe have been reduced or cut. Others have commented on both Brexit and the ongoing conflict involving Russia and Ukraine being big factors in the energy price rises recently experienced – UK energy prices are currently a lot higher than EU prices within the steel manufacturing sector." Chris Hall, Hilco Global

## THE KEY PLAYERS

#### UK steelmaking 2020, materials & production



Source: Make UK: UK Steel Key Statistics Guide

#### 9 STEEL 2023

## **TIER ONE SUPPLY CHAIN**

#### **UK Produced Steel**

Taking iron ore and/or scrap steel and melting it to semi-finished steel products: slab, bloom and billet.

#### **UK Rolled**

Where basic steel products are further manufactured into 'finished steel products': e.g., sections, rebar, plate, panels and more complex products.

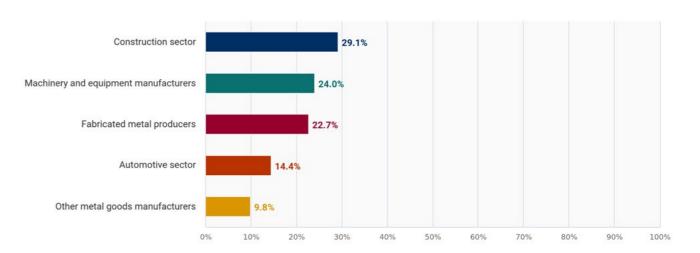
#### **Fabricators/Steelwork Contractors**

The preparation of finished steel products. This involves designing, cutting, drilling, bolting, welding and transportation and erection on site.

#### Stockholder

Purchasing steel from a range of sources inside and outside the UK and potentially undertaking some initial processing.

## **MAJOR MARKET SEGMENTATION**



Source: IBIS World, Iron and Steel Manufacturing

"The primary steelmakers in the UK, such as Tata Steel and British Steel, buy raw material commodities, process them in a blast furnace and make the primary steel. Liberty has an electric arc furnace, which utilises scrap metal and electricity to make steel (secondary). Then you have the processors, who buy in the slab of steel and process it. The steel market is very cyclical and steelmakers typically have limited control over what impacts them. So, raw materials like coal, coke and iron ore are commodities based on indices prices that can fluctuate based on global macro factors,. The same can be said for customer demand, where order books are typically no longer than a 3 month horizon. Together these makes it difficult to forecast the future."



**INFRASTRUCTURE** 

A resilient and sustainable domestic supply of steel is vital to all large-scale projects funded by the public purse, including the building of homes, schools, hospitals, road and rail networks, digital technology and our energy infrastructure. The provision of steel in the UK is critical to our ability to renew the network of water and sewage systems and update our flood and security defences. It is essential to the production of food and medical equipment that sustain and care for us.

It has been estimated that Central Government projects will require 6.5 million tonnes of steel in the next five years. The use of UK produced steel rather than imported steel could boost our economy by over £4 billion and support 14,000 jobs in steel companies and their supply chains.

Maximising the use of UK made steel in public projects has many economic, social and environmental benefits, from ensuring that public money stays within the UK and supporting well-paid manufacturing jobs outside London and the South East, to reducing the level of transport emissions from imported steel.

Looking at construction in the UK more widely, the construction of buildings and infrastructure in the UK directly contributes over £100 billion a year to the UK economy. However, the indirect impact of this activity, via materials and equipment purchased from UK supply chains, boosts this economic contribution greatly.



## THE VALUE OF THE UK STEEL INDUSTRY

Steel provides the foundations on which an economy and a country is built. It is the world's most recycled material and the second most used material in the world; everything man-made is either made of steel or made with the aid of steel. It is no surprise then that demand for steel continues to grow including in the UK, supplying this demand from domestic producers would have a direct impact on job creation and economic growth across the UK.





## **EVERY 1,000 TONNES OF UK PRODUCED STEEL DELIVERS:**

- 4.5 jobs in the steel industry
- 10 jobs total supported in the steel industry and our supply chains
- £383,561 direct contribution to the UK economy
- £876,712 total contribution to the UK economy, including supply chains

Source: Make UK

"Given the commoditised nature of steel and the importance of the product to national defence and infrastructure projects, it is more important that the UK has the ability to produce steel for such projects. Whilst trade with the EU will no doubt continue, the current additional bureaucracy and logistics costs may make dealing with EU businesses more expensive or slower."

Chris Hall, Hilco Global

"Having a domestic steel industry is very much in the UK's national interest. Steel is critical for the UK's supply chain (which brings wider investment into the UK) and is utilised in lots of key defence and infrastructure projects. The MoD taking over Sheffield Forgemasters is a good example of the importance placed on this issue."

John Berry, Teneo

Chris Hall, Hilco Global

# SPIRALLING ENERGY COSTS THREATEN UK STEEL INDUSTRY

#### UK industrial electricity prices soar

Persistently high electricity prices are threatening the UK steel sector's ability to compete with European competitors. The UK steel industry is now facing some of the highest industrial electricity prices in the world, damaging its competitiveness and presenting a major barrier to meeting the Net-zero target. To put this in context, electricity costs can represent up to 20% of the costs of converting basic raw materials into steel, which equates to a greater proportion of operating costs than labour.

#### Huge price inequality in energy costs

As the report published by UK Steel, 'Closing the Gap', attests, the UK Steel Sector has experienced a significant electricity price disparity compared with its European counterparts, including c. £54m of energy costs above those faced by German steelmakers. Over the last five years the price disparity has cost the sector £254 million, or 130% of annual capital investment. Persistent cost disadvantages in the UK lead to underinvestment, which in turn results in further erosion of competitiveness.

#### Steel electricity price disparity 2021-2022 UK, Germany & France



■ Wholesale costs (excl. carbon costs) ■ Network costs

■ Policy costs incl. carbon costs, after exemptions

Consistently higher UK electricity prices increase production costs, reduce available capital and deter inward investment, severely reducing the sector's ability to invest in decarbonisation and transition to CO2 free steel production.

The report, Closing the Gap urges the Government and Ofgem to move to a model similar to that in Germany, where a 90% exemption is provided to all three elements of network charging (transmission, distribution, and balancing). This would lower the average electricity price for steel producers by almost £10/MWh according to UK Steel's benchmark data.

The move towards decarbonisation methods for the sector will result directly in a significant increase in electricity consumption in the coming years, intensifying the issue as rising UK electricity prices hamper the sector's ability to invest in the transition to CO2 free steel production.

The costs of supporting renewable energy generation are expected to increase from £10.6bn in 2019/20 to £13.1bn in 2023/24, as the UK embarks upon this major environmental challenge (Source: Office for Budget Responsibility, Environmental levies). However, this also raises questions surrounding viability, since putting in the required electricity lines would come at a significant additional cost and would demand amendments to local infrastructure.

"While demand for steel is very high at the moment, and with prices having returned to more typical levels, the current major issues for manufacturers of steel are around energy pricing and raw material price fluctuations. Global transportation costs appear to have lessened since 2022 Q1 peaks, but are still higher than historic levels which naturally increases raw material prices, in turn."



## **GREEN STEEL – MOVING TOWARDS NET-ZERO**

The global steel industry is one of the world's largest emitters of carbon dioxide, representing approximately 7-9% of global CO2 emissions. If steel were a nation, it would be the 5th largest producer of carbon emissions in the world. The UK's total consumption of steel alone gives rise to over 29 million tonnes of CO2 each year, equivalent to 8% of the UK's domestic total. The global steel industry may find approximately 14% of steel companies' potential value is at risk if they are unable to decrease their environmental impact. (Source: McKinsey). British Steel, owned by China's Jingye, faces tough negotiations with Prime Minister Rishi Sunak as it asks for £500m to help cut its carbon output. (Source: The Telegraph, 25th October 2022).

#### Steel holds the key to a greener planet

Ultimately, future climate solutions will demand the production of more steel, not less, with global steel demand forecast to increase more than a third by 2050 as green transitions ramp up. Steel is integral to creating our future low-carbon infrastructure, from low impact energy-efficient housing and wind turbines to electric vehicles. However, this will require a radical shift in production methods and unprecedented levels of investment.

#### **Key Targets**

There are two key targets for the UK steel sector:

- The Government's 2050 Net Zero target, which could require the steel sector to reduce its emissions by over 95%.
- The Climate Change Committee's 6th Carbon Budget for 2033-37, which includes a recommendation for all ore-based steelmaking to be near zero emission by 2035.

#### **Electricity Intensive**

Net Zero steel production will be significantly more electricity intensive than traditional methods of production. All the major technologies required - greater use of electric arc furnaces, blast furnaces fitted with carbon capture, utilisation, and storage (CCUS) technology, Hydrogen steel production - will vastly increase a steel company's demand for electricity. For example, electric arc furnaces require three times more grid electricity to produce the same volume of steel as a blast furnace. (Source: Net Zero Steel, A vision for the future of UK Steel Production, UK Steel)

"Given the intense global focus on net carbon-neutral targets, modernising and reducing emissions from the UK steel industry will be a huge priority for the Government. This can be seen with press around Tata Steel exploring plans to replace two blast furnaces at its Port Talbot steelworks in Wales, with electric arc furnaces (EAF). Any changes like this will be highly complex and will require major investment. In addition, a potential sale of the Tata Steel Netherlands business fell through, with the proposed buyer stating that the cost to align the operations with Government carbon targets was too prohibitive.

"Electric arc technology is interesting due to its environmental benefits, the fact it allows much more ability to vary production levels (and react to market changes quicker) and also benefiting from the UK's position as a net exporter of scrap steel. However, there are still questions over whether EAF steel can consistently reach the same quality as that from a blast furnace and how seamlessly you could transition from current blast furnace production to EAF."

John Berry, Teneo

#### Importing steel is not the answer

Make UK commented that; "a responsible UK decarbonisation policy must take ownership not just for the emissions we produce within our borders but also those related to the huge volumes of goods we import each year." While a reduction in UK steel production may therefore enable the reporting of lower emissions, it will not address the issue of 30 million tonnes of CO<sup>2</sup> emissions with imported products.

#### **Green Steel demands radically new production methods**

Traditionally, steel is made using a blast furnace, which emits an average of more than two tonnes of CO<sup>2</sup> per tonne. Green steel requires new manufacturing processes to replace coking coal, traditionally needed for ore-based steelmaking.

Steel-making requires stripping oxygen from iron ore to produce pure iron metal. In traditional steel-making, this is done using coal or natural gas in a process that releases CO<sup>2</sup>.

One method of green steel production involves the replacement of coal in the furnace with green hydrogen but instead of emitting vast clouds of CO<sup>2</sup>, nothing more than water vapour is produced. Other methods such as carbon capture and storage (CSS) and electric arc furnaces can also be applied to support both primary and secondary (scrap iron) steel production.

#### The evolution of steelmaking: Scrap steel is a stepping stone towards carbon neutrality

#### **Traditional steelmaking**

- Produces greenhouse gases
- Coking coal used in blast furnaces
- Carbon capture and storage reduces emissions, but are costly
- Using natural gas halves the emissions

#### Recycled scrap\*

- Emissions halved, even with coal power
- Using renewable energy cuts emissions further
- The limitation is scrap supply

#### **Green steel**

- Hydrogen/electricity instead of coal
- Very low emissions from clean energy
- Clean byproducts: water, hydrogen and/or oxygen
- \* Scrap steel is generated from either steel waste during steelmaking home scrap or downstream manufacturing prompt scrap. Using scrap steel enhances the ESG credentials of steel plate manufacturing given that it is fully recycled. However, this process requires coal in its initial development stage. In addition, scrap that is generated from end-of-life steel products obsolete scrap suffers from low regulation and may raise ESG concerns.

Source: Grattan Institute

"Following 2026, we will see a move towards CO<sup>2</sup> surcharges for carbon created when steel is produced. During that initial period, the EU will expect every importer to have worked out with their suppliers precisely how much carbon was thrown out into the atmosphere on every net tonne of the material sold and have that recorded at the time of import, on payment of a significant penalty if that is not carried out. This will be a big responsibility and is going to create a lot of work for importers."

Julian Verden, Stemcor

A combination of fierce international competition and high domestic costs has caused many UK steel plants to struggle to remain competitive in a global market. The end of the Brexit transition period, the coronavirus pandemic, soaring energy prices and an increased focus on steel decarbonisation, are placing Government strategy and policy with regards to the steel industry firmly under the spotlight.

In recent years, measures taken by the Government to support the steel sector have included:

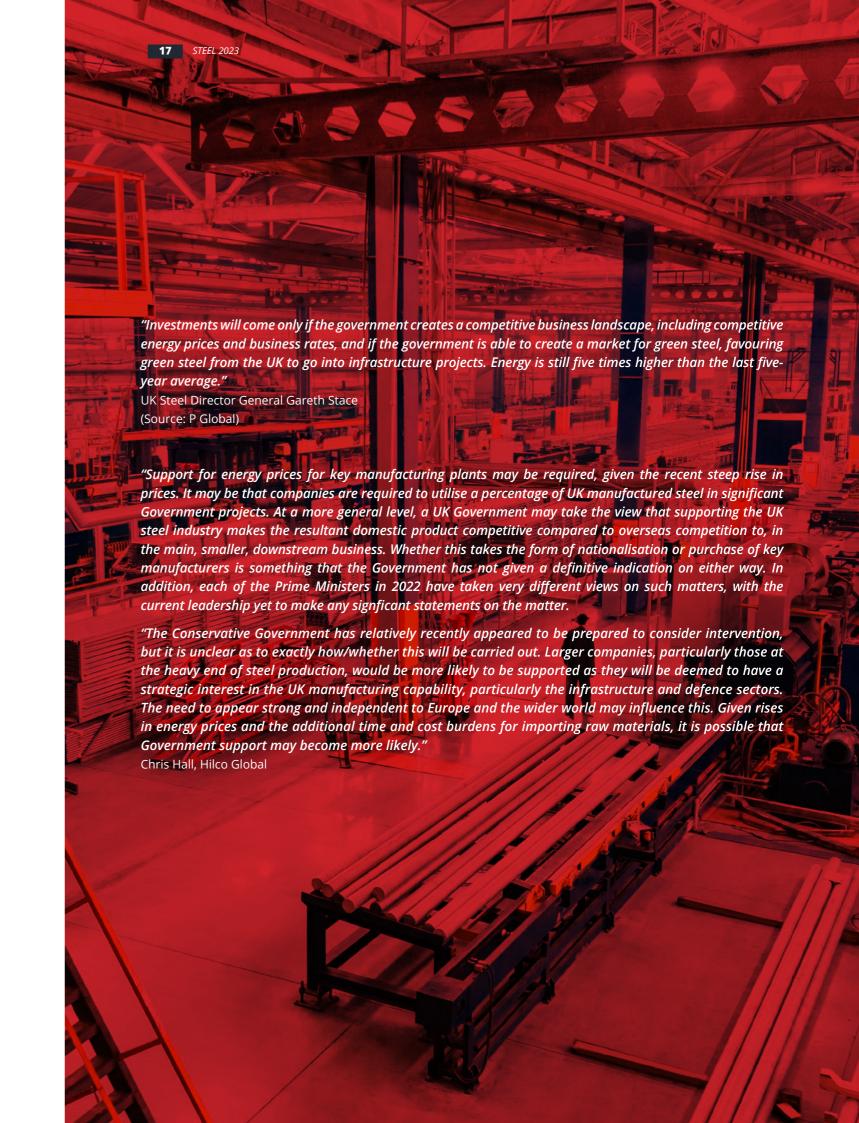
- Setting out and publishing an infrastructure pipeline outlining the UK's future infrastructure needs to beyond 2030. This has been developed to help producers understand the steel requirements for the UK over the next decades, enabling more effective capacity planning.
- Committing to support UK steel manufacturers through public procurement policy including setting guidance for the public sector on steel procurement.
- Providing compensation for energy-intensive industries for indirect costs (higher electricity prices) incurred from low-carbon energy and emissions polices.

The UK steel industry represents the number one opportunity for the UK Government to meet its decarbonisation targets, enabling the sector to become a long-term sustainable competitor in a global marketplace. However, to allow this transformation to happen, the Government needs to address a number of critical considerations:

- The establishment of fair-trading environments and green markets
- The critical investment required for infrastructure and technology changes
- Greater parity with EU players in respect of electricity prices
- Ensuring that the UK steel sector has access to the right scrap for production methods at competitive prices.

Concerning the final point, the UK produces 10 million tonnes of scrap every year, with 80% of it going overseas to be turned into steel and reimported. There exists a real opportunity to derive the full economic and environmental benefits of bringing production back onshore and placing less emphasis on labour-intensive work overseas.

In September 2022, Make UK outlined five key government priorities, namely competitive electricity prices, a UK net-zero steel strategy, a level trading field, UK steel in UK infrastructure and innovation in steel. (Source: Make UK: Five Steel Sector Priorities for a New Government)



Asset-based lending (ABL) is the predominant way for mid-market steel and commodities companies to finance their working capital, equipping them with the liquidity and financial flexibility to compete in a cyclical, global marketplace. ABL is covenant-light, giving steel businesses the flexible financing they need to take on new opportunities as well as to smooth over bumps in the road and accommodate increases and fluctuations in raw material prices.

#### **Financing Recovery and Growth**

To finance/refinance steel businesses that need a significant investment in working capital and equipment to drive recovery and growth.

Since, with ABL, the quantum of funding is based on the combined assets of the business, availability grows as asset levels increase. From a working capital perspective, ABL finance provides revolving credit facilities to enable steel businesses to remain agile and grow, bridging the gap between the cash they will eventually receive from their sales and the amount of their current expenditure. Today, ABL has come to the fore to deliver higher levels of funding enabling steel businesses to better manage their exposures to commodity volatility and situations where inventory prices can ebb and flow with the business cycle.

#### **M&A Transactions**

To finance asset-rich businesses where a transaction or event (e.g., a buy-out) requires a substantial injection of capital.

ABL provides the optimal level of funding for M&A transactions, such as acquisitions, management buyouts and buy-ins. Typically, ABL not only supports the initial purchase but will also generate additional headroom to fund the growth of the business following the acquisition. It can also be used to fund investments in R&D and CapEx to drive further growth. Corporate carve-outs, consolidation plays, buy-and-build strategies (to gain economies of scale, new technologies and extend geographical reach/ global footprint) and vertical integration strategies (to secure the supply chain), have all featured significantly in steel market M&A activity in 2021/2022 and we predict that this will continue in 2023.



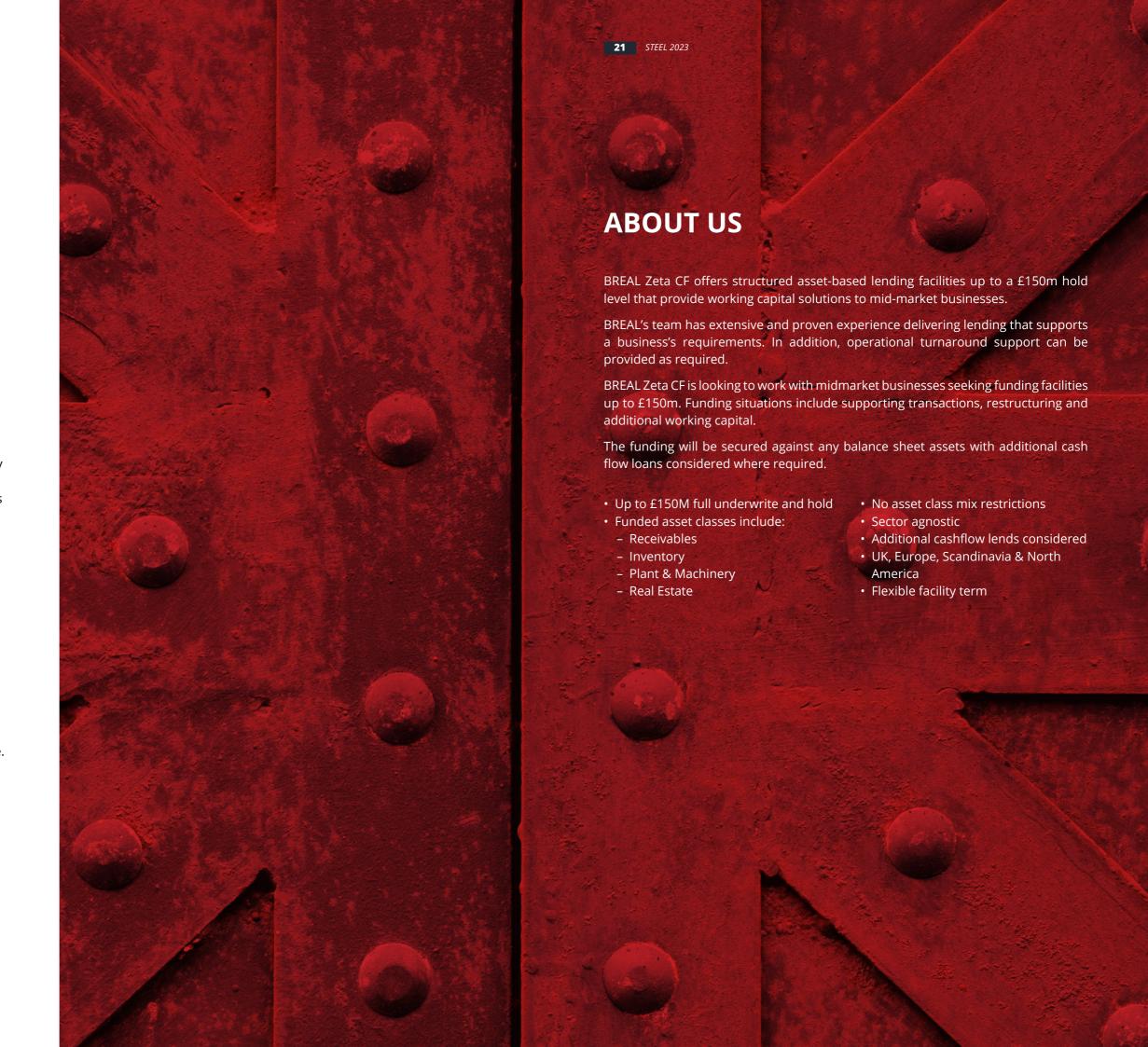
## **CONCLUSION**

The UK steel industry contributes £2.4 billion to the UK economy in terms of gross value added (GVA) and supports 34,500 jobs directly, with a strong regional focus in Britain's industrial heartlands, including Wales, the North East, Humberside and Yorkshire.

The UK steel industry faces numerous issues, many of which are severe. The economic and operational challenges of recovery from the pandemic and disproportionately high energy prices, further inflated by the war in Ukraine, combined with significant transport problems and intense global competition have resulted in insurmountable pressure on an industry, that is already bearing the deep wounds of crisis after crisis.

Due in no small part to rising energy prices, steel prices have also increased, with high demand chasing impaired but recovering production. With significant domestic infrastructure expenditure planned over the next five years and growing domestic demand for the consumption of steel, the opportunities for the industry ahead are significant. But by far the biggest of all is its reinvention as it races towards a green future. With the UK's blast furnace-based producers coming to a key point in their investment cycles, a transformative surge in investment is required to secure the sector's future as it recasts its role as a leader in green steel, based on a bold and ambitious industrybacked roadmap toward net-zero emissions by 2050.

Asset-based lending stands ready and able to support steel businesses at this time of immense transition, challenge and change.





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