

Briefing

UK Steel – save it now, then help it go low-carbon.

Tata Steel's decision to pull out of the UK, and to shut-down the Port Talbot Steel Works if it cannot find a buyer, is the latest crisis in a shocking year for the UK steel industry and its workers. The crisis is not just in the UK. It is affecting many countries, and is mainly due to a crash in global steel prices, caused in large part by a surge in Chinese steel exports, because of falling demand for steel in China.

This is affecting all countries, but the EU has put in place fewer measures to help its industries. For example the USA and India have put in place import tariffs. And EU state-aid rules changed in 2008: nations can still bail-out banks, but there are very tough conditions on support for industry.

Steel is a vital part of every-day life. We will need steel in all sorts of low-carbon industries, applications and products in future. The Steel industry in the UK provides high-quality jobs and security for tens of thousands of people.

And so, faced with crisis, there is a need for action. Short-term action – to secure the immediate future of the Port Talbot works and other sites. And there is a need for action for the medium-to-long term, so that we move from a situation where the UK steel industry is on its knees to one where UK steel is a thriving, competitive, energy-efficient, job-rich, secure, low-carbon, integral part of a strong UK manufacturing sector.

This requires a strong, proactive, clear strategy from Government.

This briefing looks at two issues:

- Claims about the impact of climate policies on the steel sector; and
- Some possible solutions to ensure the long-term future of a strong, low-carbon UK steel industry.

For more than 40 years we've seen that the wellbeing of people and planet go hand in hand – and it's been the inspiration for our campaigns. Together with thousands of people like you we've secured safer food and water, defended wildlife and natural habitats, championed the move to clean energy and acted to keep our climate stable. Be a Friend of the Earth – see things differently.

1) The impact of climate policies on UK steel

Climate sceptics such as ex-Northern Rock chief Viscount Ridley lay the blame for the steel crisis squarely on climate change policies putting up costs¹. But Tata themselves have said that competition from China and pension liabilities are the main factors, and the manufacturers association EEF say²: *“no one in the steel sector is calling for an end to UK climate change policy...To try and say the entire thing is down to energy prices would be disingenuous...We have a global crisis in the steel sector and the EU has struggled more than other areas, largely because it has not been able to implement as robust a response to cheap imports as we've seen in the US and India.”*

The discussion on steel's energy costs invariably focuses just on electricity. This is bizarre, because UK steel production's predominant energy source is coal/coke, not electricity. Coal/coke represents 78% of UK steel production's energy use. Gas is 10%, coke oven gas 7% and electricity just 6%.

Within this overall picture, electricity is used more in Electric Arc Furnaces than in Blast Furnaces. In the average UK Blast Furnace 94% of emissions come from on-site burning of fossil fuels; in an Electric Arc Furnace, 67% of emissions come from electricity³. Blast Furnaces dominate UK steel making: in 2013 the UK made 2 million tonnes of steel from Electric Arc Furnaces (EAF), and 9.9 million tonnes from Blast Furnaces. Port Talbot is an integrated steel works – ie blast furnaces, not EAF: its energy use is overwhelmingly coal/coke.

Of Port Talbot's main material inputs, global coal prices have halved in the last 5 years⁴. Iron ore prices have halved. These falls have occurred for the UK's competitors too, but although electricity prices for UK industrial consumers are above the EU average⁵, natural gas prices⁶ for UK industrial consumers is below the EU average.

One of the reasons there has been a focus on the costs of climate change policies is that although they are a small part of costs, they are one of the few things the UK Government has easy control over (unlike global steel prices). And the Government has responded by giving exemptions to heavy industry from almost all climate change policies – large steel works now have exemptions from the renewables obligation, the carbon price floor, and already had free allocation of permits in the EU Emissions Trading Scheme. In fact, Tata Europe have gained windfall profits of around 1000 million euros in the last 5 years from being given more free permits than they needed, which they sold on⁷.

In total, climate policy costs amount to just 1% of steel production costs at a blast furnace steel works – this and other climate policy cost issues are covered extensively by Carbon Brief⁸.

2) Ensuring a bright future for UK Steel

The Government bailed out the banks – when the banks were at fault. The UK steel industry is under threat by factors largely outside its control. If the Government can act to save the banks, it can act to save UK industry too. It may be harder, but ultimately it is solely a question of political will. An overarching strategy is needed, but below are suggestions for actions in four areas which could be considered:

- **Contracts for UK Steel**

Ensure that UK construction projects use more UK produced steel. From offshore wind projects to rail upgrades, there is UK demand for steel. The Government should guarantee that large proportions of UK steel are used. It could do this through procurement policy, for example by insisting that steel used is lower-carbon. This will help buffer UK steel from global price shocks.

UK steel production is lower-emission than countries like China⁹. The EEF already have a charter for “Sustainable British Steel”¹⁰. Companies who are making green products in the UK which use steel, should also be sourcing their steel from the lowest emissions plants. Cars which are sold for being low-emission during use should also use materials which are low-emission in production.

- **Use UK scrap, don’t export it**

In 2013, the UK consumed 4 million tonnes of scrap steel, but exported 6.9 million tonnes: 4.7mt outside the EU. The UK was largest EU exporter of scrap steel to non-EU countries (over twice as much as the next biggest country, the Netherlands)¹¹.

| | UK exports of scrap steel, million tonnes, 2013 |
|----------------------------|---|
| To Non-EU countries | 4.7 |
| -Turkey | 2.5 |
| -India | 0.7 |
| -Egypt | 0.5 |
| -Pakistan | 0.2 |
| -Korea | 0.1 |
| -USA | 0.1 |
| -China | 0.1 |
| To EU Countries: | 2.2 |
| -Spain | 1.2 |
| -Portugal | 0.5 |

We could use more of the scrap we currently export in UK-based Electric Arc Furnaces, increasingly using renewable electricity.

- **Invest in energy-efficiency and plant upgrades**

Use the Green Investment Bank or state loans to invest in plant upgrades, and provide support for implementation of industrial Carbon Capture and Storage. These should be part of an overall policy package designed to help industry become ultra energy-efficient and low carbon, and should cover all energy-intensive industry, not just steel. Carbon pricing should be clear, with exemptions designed in where there are competitiveness threats. Finally, there needs to be a clear long-term R&D and innovation programme, funded by Government and industry, to develop and deploy new low-carbon processes, such as highlighted in the Government's 2015 Energy Intensive Industry road maps. The Westminster Government have been slow to act on these Road Maps – this is problematic for steel areas such as Yorkshire (and other energy-intensive industries such as ceramics in the Potteries), but much industrial policy is a devolved issue and so for Port Talbot and Wales, the Welsh Government can implement some measures¹² if Westminster remains slow.

- **New ownership structures**

Steel manufacturing capacity is a priority asset for the UK's infrastructure. But Tata's main obligations are to their global shareholders, not the UK. Even if Tata were not selling, the national interest would be better served with new ownership, which gave higher priority to local workers and to the UK's overall infrastructure and manufacturing needs. If Tata cannot find a buyer, the Port Talbot is a fundamentally efficient and needed industry and Government should step in and nationalise and run the plant, and retain a majority interest, or set up a co-operative ownership structure, rather than see it close. A co-operative structure would need lower profit margins, boosting competitiveness. Tata should also not be able to walk away from its pension liabilities – it is one of the richest corporations on the planet, with operations in over 100 countries, and has obligations to its employees that it should honour.

Friends of the Earth believes the UK Government must act to save the UK steel industry, and then put in place a strong strategy to ensure the UK steel is a thriving, competitive, energy-efficient, job-rich, secure, low-carbon, integral part of a strong UK manufacturing sector.

References:

¹ <http://www.thetimes.co.uk/edition/comment/race-to-go-green-is-killing-heavy-industries-green-targets-set-to-destroy-our-industries-zq5l835gp>

² <http://www.businessgreen.com/bg/news/2453404/reports-prospective-tata-steel-bidder-seeks-carbon-tax-deal>

³ Figs in this para and the preceding para see: <https://www.gov.uk/government/publications/industrial-decarbonisation-and-energy-efficiency-roadmaps-to-2050>, Iron and Steel roadmap, p29, 31, 35-36,

⁴ <http://www.infomine.com/investment/metal-prices/coal/all/>

⁵ http://ec.europa.eu/eurostat/statistics-explained/index.php/Electricity_price_statistics#Electricity_prices_for_industrial_consumers

⁶ http://ec.europa.eu/eurostat/statistics-explained/index.php/Natural_gas_price_statistics

⁷ See <http://www.carbonbrief.org/factcheck-the-steel-crisis-and-uk-electricity-prices>

⁸ <http://www.carbonbrief.org/factcheck-the-steel-crisis-and-uk-electricity-prices>

⁹ Though not lower than all countries, eg ones with high levels of EAF like Mexico, and/or lots of hydro-power eg Brazil.

¹⁰ <http://www.eef.org.uk/uksteel/Representing-our-sector/briefings/Charter-for-Sustainable-British-Steel.htm>

¹¹ <http://www.eef.org.uk/home.php?flash=true>

¹² <http://www.clickonwales.org/2016/01/should-welsh-government-intervene-on-welsh-steel/>