Energy Intensive Industries Roundtable Series
Session 2: Getting energy prices right – ensuring competitiveness of UK EIIs

Introduction

Building on the discussions from the first roundtable in June, the aim of this second session held on the 20th October was to discuss the most recent increases in energy prices. There were four key themes running throughout the roundtable:

1) How energy costs have hampered, inward investment and growth for the energy intensive industries (EIIs), with first hand case studies from 2 EII manufacturers.
2) How UK industry has arrived at such high wholesale energy costs in comparison to our nearest neighbours with a summary from the International Energy Agency.
3) How energy pricing can adversely affect wider industry and supply chains.
4) What short term and long term policy intervention needs to be taken to achieve a competitive energy intensive industry.

This roundtable is the second in a series of 4, with the last two sessions being held post COP 26 and into the New Year focussing on technology and the international market.

The session was kindly chaired by Mark Pawsey MP, co-chair of the APMG and is sponsored by the Energy Intensive Users' Group (EIUG).

Opening remarks – Mark Pawsey MP

Mark Pawsey MP is the Conservative MP for Rugby and has been an MP continuously since 6 May 2010. He is a member of the BEIS Select Committee and is the Co-chair of the All Party Manufacturing Group.

- Mark began by noting that if the discussion on the competitiveness of EIIs and the cost of their energy consumption was timely in June, it is even timelier now. Since June 2021, there has been a 250% increase in gas prices reaching 275 p/therm in August.
- This of course has been quite heavily publicised in the media and this discussion now, more so than ever, must focus on how we reduce the barrier to competitiveness for UK manufacturers.
- Mark also mentioned his close links to industry with Cemex with a large cement production plant sitting in the heart of the Rugby constituency, as well as the BEIS Select Committee visiting the Tata Steel Port Talbot plant in June 2021.
- Mark outlined the session, stating the purpose of the agenda as well as the agenda for the meeting. APMG members, EIUG, and invested stakeholders will discuss the reasons behind the price increase, what government intervention should look like, and also the international context from our speakers.

"MY OBSERVATION IS THAT, IF IT WAS TIMELY IN JUNE, NOW COMING TO THE END OF SEPTEMBER IT IS EVEN MORE SO IN RESPECT TO WHAT WE'VE SEEN ON ENERGY COSTS."

Speaker: Dr Richard Leese

Dr Richard Leese is Chair of the Energy Intensive Industries Group, board member of the UK Emissions trading Group and Director of the Mineral Products Association.

- Richard outlined the key sectors that make up the Energy intensive User Group, namely: Paper, Steel, Chemical, Glass, Cement, Lime, Ceramics and Industrial gases. Stating that green jobs in some ways are already here and are within the 200,000 people that the EIIs collectively employ and are already working to decarbonise the industry.
- However, the majority of UK EIIs are energy and trade intensive and largely internationally owned, and need to be competitive in the global market. With energy costs being the highest proportion of operating cost and currently increasing, it is more likely that investment will be taken out of the UK.
- Energy prices are currently being influenced by a number of factors and have become extremely difficult for industrial consumers to manage. Gas Prices this winter are significantly beyond previous winters, with price curves the highest they have ever been. Another concern is that the electricity pricing of the UK is also continuing to diverge from European pricing, this has been recognised by both BEIS and Ofgem. Additionally, this data is from early September to date, the UK has yet to hit deep winter where costs and consumption will again increase.
- In the short term, the EIUG are calling for action from government, particularly at the Comprehensive Spending Review for both BEIS and Treasury to support industry with:
    - Introducing winter cost containment measures on gas, electricity and carbon prices – to ensure that those most exposed to these costs can continue to compete internationally, coupled with immediate cessation of uncompetitive policy 'on-costs', such as 'Carbon Price Support'.
    - A modification to gas emergency measures to ensure that sufficient gas is available and that the 'priority site' value threshold is reduced from £50 million to £1 million.
    - Immediate action by Ofgem to reduce EII network costs, as they carry a disproportionately higher network cost compared to competitor industries in the EU who are offered network tariff discounts.
- In the Long-term
    - Full relief of legacy cost for renewables including 100% exemption from the Renewables Obligation and Feed in Tariff schemes plus a higher percentage reduction from Contracts for Difference costs for all EII sectors
    - Full relief from indirect carbon prices for all EII sectors
    - Don't rebalance on-costs from electricity to gas: provide an EII exemption from the green gas levy and other forthcoming policy costs aimed at decarbonising gas supply before cost competitive alternatives are available

"ENERGY COSTS ARE A HIGH PROPORTION OF OPERATING COSTS IN ENERGY INTENSIVE INDUSTRIES. ENERGY COSTS DIRECTLY IMPACT COMPETITIVENESS IN INTERNATIONAL MARKETS. "

Speaker: Dr Martin Brunnock

Martin Brunnock, is the Tata Steel UK Hub director, a fellow of the IOM3 and a chartered engineer.

- Tata Steel is the largest steel maker in the UK with a £2bn turnover, and has invested over £1.3bn into the UK market in the last 10 years, employing 8000 people.

- Tata produce flat steel products for a range of industries, with the focus on automotive, construction, engineering and packaging. Two thirds of the steel we make in the UK is delivered to customers in the UK.
- It is clear that the UK need a strong industry for decarbonisation and in turn, the UK steel industry needs the right policy in place to allow the right investment.
- Martin stated that currently Tata Steel in the UK is operating as normal, however recent events have made it difficult to secure a supply of energy at a reasonable price. As a result of the recent price increases, our energy costs will run to tens of millions of pounds higher than we had forecast in our annual plan – with the same money we could have built three new 30MW turbines (and associated infrastructure) at our power station to burn waste gasses. Recently, a new turbo alternator has been commissioned with the potential to generate an extra 30 MW but despite this, prices are currently unprecedented, with the next 2 quarter looking concerning for Tata Steel in the UK.
- Technical gasses are also a significant exposure, the increased cost of which is also running into the millions of pounds. Extending eligibility for compensations to producers of technical gasses (e.g. BOC) would reduce cost for steelmakers
- Tata Steel's Port Talbot integrated works, currently generates c70MW of electricity from their own gases produced on site. Power purchase agreements with renewable energies are also difficult to negotiate with contract length typically being set too long, i.e. 30 years.
- Sourcing clean and competitively priced energy is a long term structural issue, and as a globally traded asset, Tata Steel in the UK and other companies' ability to invest in UK schemes is undermined if we are not competitive.
- UK steel producers have historically paid 80% and 62% more for electricity than competitors in France and Germany. The jump in recent wholesale prices has seen this cost disparity jump even higher, with the UK monthly average twice that of France and Germany.
- the policy cost disparity that UK steelmakers have suffered for years has also jumped in recent months compared to European competitors – the total disparity is now over £100MWh per month more than Germany and is costing UK steelmakers an additional £22m per month. Loans do not solve the problem as this is not a liquidity issue, government must address structural issues. For example, Italy green leveies have been lifted for a period of time.

"ENERGY PRICES MUST BE CONSIDERED WHEN THINKING ABOUT THE OPTIONS WE ARE GOING TO USE TO DECARBONISE…THEY REALLY DO RELY ON US HAVING A STABLE ENERGY PLATFORM AT A COMPETITIVE PRICE."

Speaker: Debbie Baker

Debbie Baker is Public Affairs Director at CF Fertilisers, she sits on the council of the Chemical Industries Association and Business Growth Committee at Cheshire and Warrington LEP.

Debbie began by outlining CF Fertilisers and their position in a number of industrial supply chains

- CF focus on producing ammonia (hydrogen in moveable form), nitric acid and nitrogen fertilisers, servicing 40% of UK demand. With sites in Ellesmere Port and Teesside, the business contributes, contributes around £674 million through its supply chain, into the economy in the North each year. Earlier this year, CF had to close their plants as energy prices become unsustainable. By the time production was paused, CF were paying x5 US gas cost and x12 Russian gas cost.

The closure of ammonia production plant had widespread implications for the wider industrial supply chains and sectors beyond chemicals to include food production, energy generation, paper and construction products.

- Energy decarbonisation on costs hamper UK EII competitiveness. Even with EII compensation in place, 49% of electricity costs is made up of green taxes. Rebalancing oncosts to gas from electricity will further undermine competitiveness for ammonia production. Moreover, many key international competitors don't currently face any direct carbon costs.
- Debbie called for a long term review on how the cumulative impact of energy and decarbonisation taxes are negatively impacting the competitiveness of energy intensive industries as they transform to low carbon production.

"AS THEY SEEK TO DECARBONISE PRODUCTION, ENERGY INTENSIVE INDUSTRY ALREADY FACE A COMPLEX WEB OF UNCOMPETITIVE ENERGY DECARBONISATION ON COSTS"

Speaker: Gergely Molnar

Gergely Molanr is an Energy Analyst – Natural Gas at the International Energy Agency.

Gergely began by explaining why energy pricing has recently risen, stipulating that it is not only an issue with gas, but energy commodity prices in general. However, natural gas takes centre stage.

- Although in 2021 commodity prices recovered strongly, we are now seeing an over 3000% increase in gas price since end of May 2020. Gergely reiterated that this is not due to a single shock event but a number of causes including, but not limited to:
    - Droughts: Turkey, Brazil, California
    - Severe cold spell: Texas, Northwest Asia
    - Planned maintenance and unplanned outages/repairs: Panama Canal congestion, Hurricane Ida Gulf Coast, LNG plant outages (e.g. Peru LNG, Snohvit LNG, Gorgon LNG, etc.)
    - Feed gas supply issues (Nigeria LNG, Trinidad & Tobago)
- Demand was also found to be higher than expected due to longer and colder winters. Gas demand dropped in Q1 2020 due to a mild winter and Covid-19, in contrast global gas demand grew by about 8% year-on-year in H1 2021. In addition to the rapid economic recovery, a prolonged heating season that lasted in April/May in Europe, droughts in Brazil and Turkey, lower wind power generation are significant contributing factors.
- It is also important to note that Europe's supply picture is changing, plummeting domestic production with lower LNG flow and lower Russian pipeline deliveries tightening the European gas market. This is compounded by inventory levels that are 15% lower than their 5 year average. In Brazil, water reservoir levels are 20% lower compared to their 5-year average. Coal stock levels in India are also low, with over 100 coal power plants having 0 to 8 days inventory only.
- Gergely also emphasised that energy price increases are not due to clear energy transitions.

"I THINK IT IS IMPORTANT TO HIGHLIGHT IS THAT THE KEY REASONS FOR THE SHARP INCREASES IN ENERGY PRICES IS NOT DUE TO CLEAN ENERGY TRANSITION."

Additional papers from IEA

- IEA Statement on recent developments in natural gas and electricity markets: https://www.iea.org/news/statement-on-recent-developments-in-natural-gas-and-electricity-markets
- IEA Gas Market Report Q4 2021, inckuding Global Gas Security Review: https://www.iea.org/reports/gas-market-report-q4-2021
- IEA Commentary: What is behind soaring energy prices and what happens next? https://www.iea.org/commentaries/what-is-behind-soaring-energy-prices-and-what-happens-next
- IEA Commentary: Despite short-term pain, the EU's liberalised gas markets have brought long-term financial gains https://www.iea.org/commentaries/despite-short-term-pain-the-eu-s-liberalised-gas-markets-have-brought-long-term-financial-gains

Discussion

Point 1: Why is the UK most affected?

- Most EU countries have mitigating steps to support vulnerable gas users. How can the UK do the same?

Point 2: Stephen Kinnock MP on Steel on Port Talbot

- Stephen is chair of the APPG on Steel with Port Talbot in his constituency. He remarked that there is a severe need for a regulated wholesale price which matches the nearest neighbours. He believes that there should be an 85% in the reduction of network and policy costs with EIIs. Being 100% compensated for indirect cost of carbon.
- Levelling up is not possible to develop without a strong Foundation industry.

Point 3: Government's reception to policy recommendations

- It was agreed that the idea of loans is a nonstarter for industry as this current energy crisis is not an issue of liquidity. Additionally, loans simply "kick the can down the road", by deferring the cost which is not useful as prices are set to continue at this rate for the next two quarters.
- It was generally noted that BEIS Secretary of State Kwasi Kwarteng MP has been supportive with his comments however proposals have not been received with any concrete solutions.
- Some attendees also pushed that the cost of inaction is much greater than the cost of action.
- There must be further investigation of the evidence on carbon leakage, currently Treasury believe the evidence is inconclusive, however industry have multiple examples of where investment in UK has been lost due to competitiveness issues.

Point 4: The situation for ceramics

- The longer the energy pricing crisis is left unmanaged, the more companies will be exposed.
- In the future, there are expected on-costs being added to gas consumption to support the roll out of Hydrogen and Carbon Capture and Storage (CCS), while this makes sense for now, in the long term it will again add additional costs for EIIs.
- Within the CSR and other government policy, there must be support for the development of innovation technology such as hydrogen firing, CCS, and electrification.

- The British Ceramic Confederation in their CSR submission proposed a Ceramics Sustainability Hub as part of an initiative to support the industry's transition to net zero.

Point 5: Alex Cunningham MP on short term additional gas capacity

- In the past, the Rough field in Humberside was the world's first gas storage facility which was able to collect and store gas reserves during the summer for winter.
- The presence of gas storage capacity has been reduced and is a challenge for industry, Chancellor, business ministers, and Treasury must work with industry to recast the role of OfGem.
- A key focus should be on the high energy tax. The news of the CCS facilities is hugely welcomed however there is an interim period where those facilities will not be available and we must work to make sure industry is not lost during this transitional period.

Point 6: Technical Notes

- It is important to note that other types of EIIs, such as glass, are unable to turn off their production due to the challenges in reaching the temperatures needed.
- There was also a point that storage capacity in the UK must be increased due to the challenges with just-in-time production and the structure of industrial supply chains.
- Decarbonisation is no longer a want but rather a need for industry.
- Another area to explore is that SMEs and smaller companies may have challenges around finding the right skills and incentives to make energy consumption savings. This could perhaps be packaged in the form of green tax incentives.
- There is also a tension to balance between domestic and industrial consumers. However, domestic consumers have a price cap and there is a cost containment mechanism in the CO2 market to mitigate runaway price spikes. These facilities are not present in the energy system and therefore impact on industrial consumers is not contained.
- EIUG argue that reduction in tax schemes, and exemptions would not undermine the decarbonisation trajectories, however current measures are pushing for deindustrialisation. The industry can and will decarbonise but need to do so competitively.
- A question was also raised on whether a circular economy approach help to reduce the cost and use of resources across the supply chain?

"Nobody ever foresaw that prices would rise to the level they are now…how can businesses compete when there are differentials of that size?" - Mark Pawsey MP

Nest Steps

On 27th October 2021, the Comprehensive Spending Review (CSR) did not outline any additional measures for the Energy Intensive industries. For further information on the EIUG's policy recommendations please visit the EIUG webpage for their latest responses on current events.

The APMG will be hosting two more roundtables, as well as publishing an article in the latest edition of the Manufacturing Management Magazine.

Many thanks to our chair and speakers Mark Pawsey MP, Dr Richard Leese, Debbie Baker, Dr Martin Brunnock and Gergely Molnar for their contributions.

Attendees

Name	Organisation
Alex Cunningham MP	Member of parliament
Andrew Hayes	
Andrew Large	CPI
Andrew McDermott	British Ceramic Confederation
Arjan Geveke	BEIS
Beverley Nielsen	Birmingham City University
Bhaskar Thota	The Manufacturing Technology Centre
Bobbie Davies	Tata Steel
Dan Edwards	SGN
Daniel Parker	Parliament
David Dalton	British Glass
David Mitchell	CIA
David Seall	Policy Connect
Debbie Baker	CF Fertilisers
Diana Casey	Mineral Products Association
Donna Arenson	EY
Edward HEATH-WHYTE	Liberty Steel Group
Edward Pickering	Beaston Clark
Floriane Fidegnon	Policy Connect
Gergely Molnar	IEA
Holly Feeney	British Glass
Holly Whitbread	CPI
Hopi Sen	Warwick Manufacturing Group
Jack Brereton MP	Member of parliament
Jack Semple	EAMA
Jacob Young MP	Member of parliament
Jacqueline Hall	Enginuity
Jessica Morden MP	Member of parliament
Jo Gideon MP	Member of parliament
John Booth	Carbon 3it
Jon Clark	EY
Joseph Dancey	Endeavour Advisory
Justin Madders MP	Member of parliament
Lynda Williamson	Parliament
Mark Pawsey MP	Member of parliament
Martin Brunnock	Tata Steel
Martin Mead	
Matthew Lockwood	Sussex University
Oliver Harry	Encirc 360
Patrick Heskins	BAMA
Paul Pearcy	British Glass
Richard Leese	Mineral Product Association
Richard Warren	Make UK
Russell Hall	Warwick University
Scott Pepper	Gambica
Stephen Kinnock MP	Member of parliament

Steve Hone	
Steve Keeton	
Timothy Pryce	
Victoria Zeybrandt	Policy Connect

About the APMG

The APMG is at the forefront of the policy debate, parliamentary engagement and research related to manufacturing and industry. By holding regular events & seminars in Parliament the APMG seeks to bring parliamentarians together with industry and the commercial sector to better understand the sector challenges. The APMG publish a monthly newsletter to Parliament and its members, with summaries of manufacturing policy stories, industry news, and other political developments, along with research-based briefing papers on topical legislation. The arms-length Manufacturing Commission produce research reports with evidence-based recommendations for government informed by our members.
For more information on our activities, please visit: www.policyconnect.org.uk/apmg

Follow the All Party Manufacturing Group via @theAPMG to engage in the conversation.

For further details, additional briefing or questions about the APMG and this programme, please contact Floriane Fidegnon, Head of Industry, Technology and Innovation at Floriane.fidegnon@policyconnect.org.uk.