



REVIEW OF THE ENERGY BILL RELIEF SCHEME

EIUG Position Paper

Introduction

1. This position paper sets out the EIUG's position on the terms of reference of the review of the energy bill relief scheme (EBRS), the increase in gas and electricity prices since Spring this year and the forward energy price curves up to winter 2023, the measures other countries have taken in response to these increased energy prices, in particular for their energy intensive industries (EIs), and the wider carbon leakage and supply chain risks if manufacturing in the UK were to become commercially unviable for EIs if Government withdraws its current support.
2. The EIUG calls on the UK Government to classify EIs as vulnerable and support them beyond March 2023 with energy costs, but without relying on indefinite state support. Due to the nature of their manufacturing processes, EIs are disproportionately exposed to high energy prices and most are exposed to international competition as well, making it more difficult to absorb or pass-through recent energy prices rises without rendering themselves uncompetitive.
3. The UK Government has already recognised that certain EIs cannot simply absorb or pass-through increased energy costs and has put measures in place, such as the EI exemption schemes, to mitigate the cost of energy – in particular electricity prices – before energy prices started to rise last year.
4. EIUG considers that all companies in sectors eligible for these schemes to reduce the indirect cost due to the renewable deployment policies in industrial electricity prices should be classified as vulnerable. The European Commission uses similar eligibility in its temporary crisis framework. Adopting sectoral eligibility – without a

business level test – from the these schemes would therefore minimise competitive distortions with the EU.

5. Direct support for eligible companies offers the most VfM as it can be better targeted and would avoid additional transactions cost. Since BEIS already administers the EII exemption schemes, there are existing governance and management processes in place.
6. The EIUG therefore calls on Government to trigger article 44 of the Subsidy Control Act regarding national economic emergency and provide targeted and temporary emergency support to EII's most exposed to the increase in energy prices.

EBRS Review Objectives

7. The EIUG agrees with the objectives of the review to target support at those organisations most in need and unable to adjust or absorb energy prices rises without relying on indefinite state support. The sections below show the increase in gas and electricity prices over the past month and the forward prices up to winter 2023. Due to the nature of their manufacturing processes, EII's are disproportionately exposed to high energy prices.
8. The Government has already recognised that EII's are vulnerable and has put various measures in place to reduce the cost of energy, including compensation schemes for the indirect emission cost due to carbon pricing, the schemes to reduce the indirect cost due to the UK renewable policies and climate change agreements, to mitigate the cost of energy prices – in particular electricity prices – before energy wholesale prices started to rise to unprecedented levels last year.
9. Some EII's will have hedged themselves against these prices rise for a certain time but these hedges will expire at some point and suppliers will pass on the higher wholesale energy costs to these industries.
10. Most EII's trade internationally and will therefore be exposed to international competition. Exposure to international competition will make it more difficult to absorb recent energy prices rises because

reflecting them in higher product prices will price them out of the market. BEIS will have sectoral international trade data.

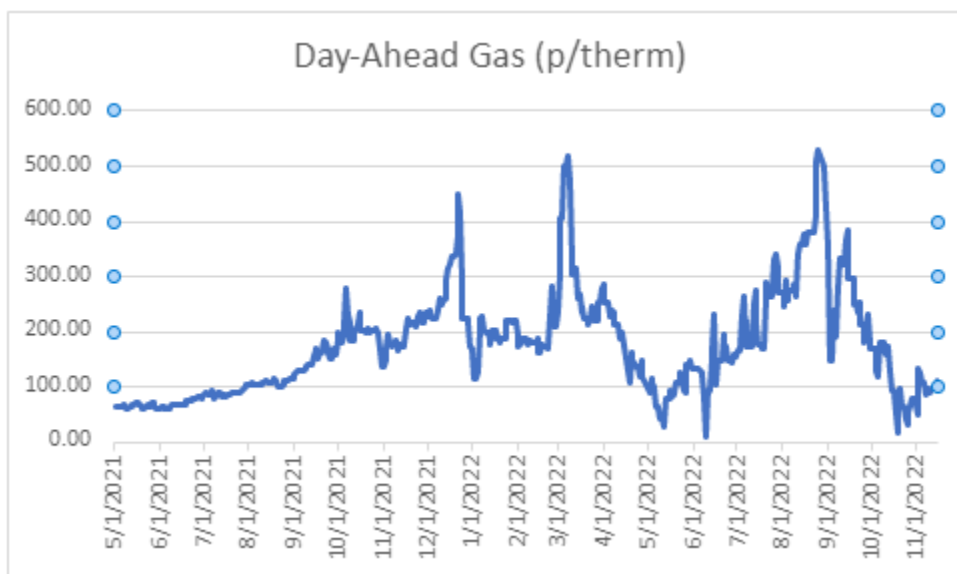
11. Were the UK Government to withdraw its support for EILs, but other countries to continue their support, it would put UK energy intensive industries at a significant competitive disadvantage. The section below sets out what support some other Governments in Europe provide under the European Commission temporary crisis framework for state aid and it has extended this framework for to the end of 2023, allowing EU Member States to continue providing financial support beyond the end of this year.
12. Energy prices naturally incentivise EILs to increase energy efficiency because energy costs form a significant proportion of production costs. On top of that, the Government has put various policies in place to further encourage investment in energy efficiency, such as Climate Change Agreement, ESOS, SECR and minimum efficiency standard for manufacturing equipment. Furthermore, as energy efficiency measures in EILs are often capital-intensive with long pay back periods, they will not offset the increase in wholesale energy prices in the next few years. Nevertheless, EILs will continue to invest in energy efficiency.
13. Government should use the time between the closure of the REMA consultation and its consultation response to identify how best to prioritise moving away from an electricity wholesale market where gas sets the marginal price to reduce the impact of higher energy costs. This should include taking steps to convene expert and other stakeholders to inform possible design options to a lower electricity price environment where possible, thereby avoiding UK electricity being at an unsustainable level for the foreseeable future.

Energy Prices

14. The graph below shows the day-ahead gas wholesale prices over the past year and a half. Before June 2022 prices fluctuated between 60p and 70p per therm. It started to increase due to increase in demand and supply chain issue after economies easier covid

lockdown measures. Gas price spiked in the run up to Christmas 2021, after the Russian invasion of Ukraine at the end of February 2022 and in August 2022 due to uncertainty around security of energy supply in Europe for the winter. At this point only state-owned enterprises bought high volumes of gas to fill gas storage sites. The average daily day-ahead gas price in September 2022 was 255p/therm. The day-ahead gas price has come down since, but is still higher than in Spring 2021.

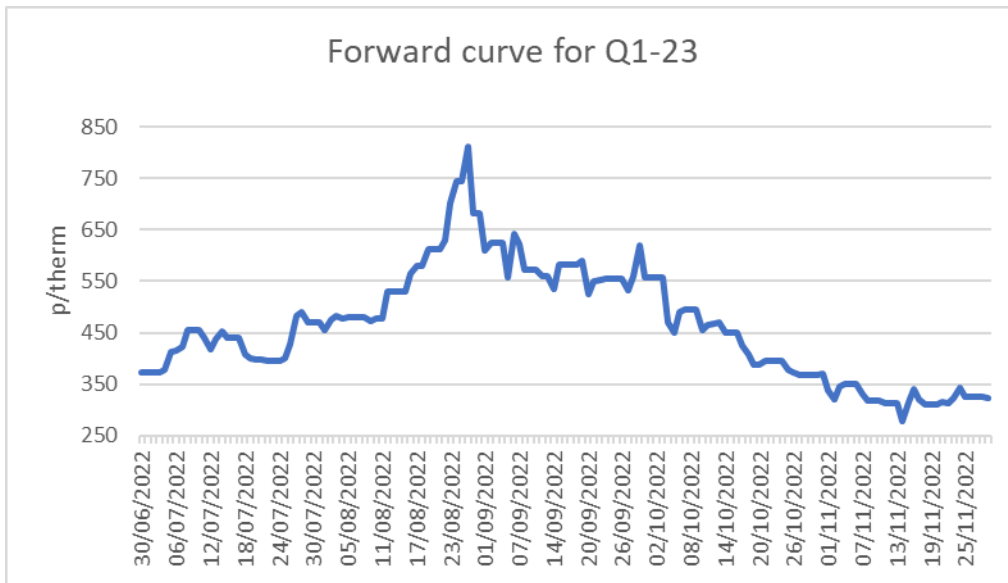
Figure 1. Day-ahead gas wholesale price between May and half November 2022.



Source: Inspired Energy

15. The graph below shows the forward price for gas delivery in the first quarter of 2023. These prices have come down from their peak in August but with trading over 250p/term in mid-November are still significantly higher than the day-ahead gas price since September.

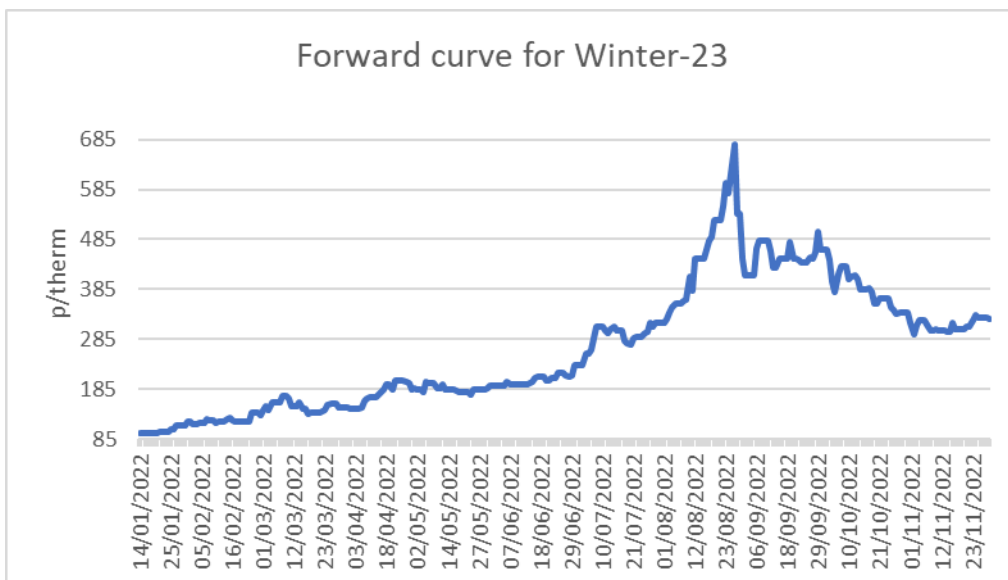
Figure 2. Forward gas price for delivery in Q1 2023



Source: Inspired Energy

16. Forward prices for winter 2023 have come down as well since their peak in August, but still trade around 200p/therm higher compared to Spring 2021 which is still more than triple the price.

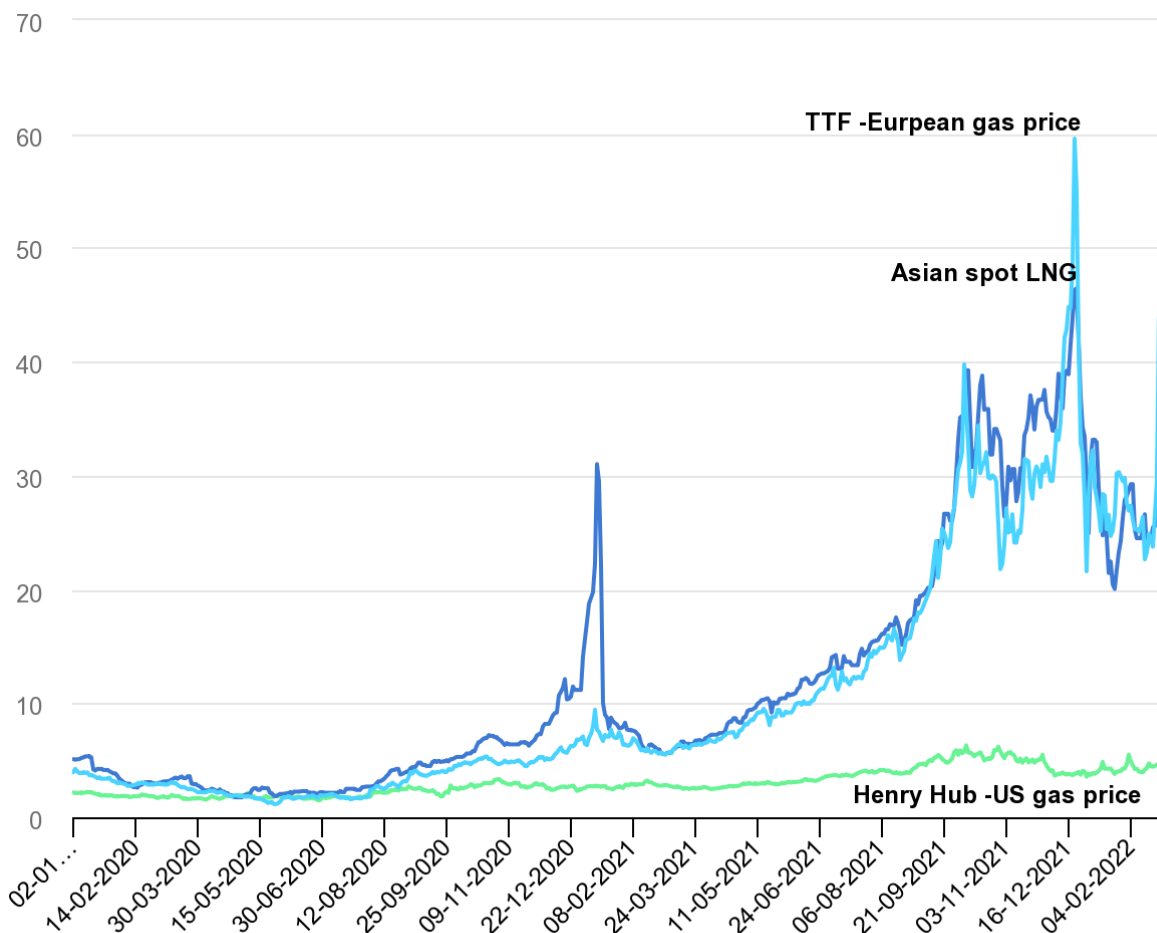
Figure 3. Forward gas price for delivery in winter 2023



Source: Inspired Energy

17. Since the UK is connected to the European gas market and gas prices in Europe have significantly increased so have UK gas prices (and Asian spot LNG prices). However, the gas prices on the Henry Hub in the US have not moved to the same extent as European and Asian gas prices. This has opened up a significant competitive disadvantage for European gas-intensive industries competing with American manufacturing products. The high European gas prices have already resulted in the (temporary) closure of some European fertiliser manufacturers, but not US ones.

Figure 4. Natural gas prices in Europe, Asia and the United States, Jan 2020-February 2022

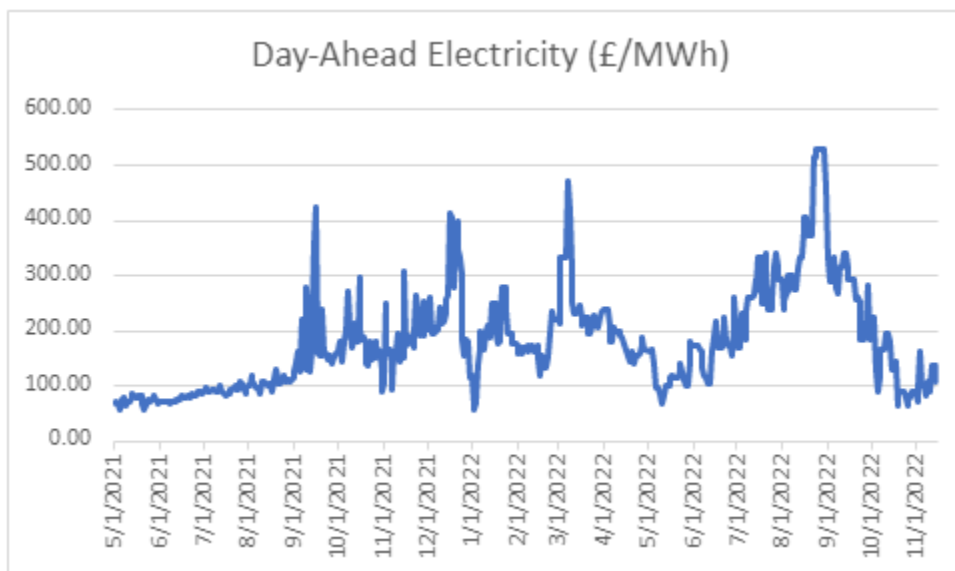


Source: [IEA](#)

Electricity prices

18. The graph below shows the day-ahead electricity wholesale prices over the past year and a half. Before June 2022 prices fluctuated between £57/MWh and £89/MWh. Electricity prices started to increase at the same time and for the same reasons as gas prices plus gas-fired power stations generally set the marginal price in the electricity wholesale market. Electricity price therefore also spiked in the run up to Christmas 2021, after the Russian invasion of Ukraine at the end of February 2022 and in August 2022 due to uncertainty around security of energy supply in Europe for the winter. The average daily day-ahead electricity prices in September 2022 was £273/MWh. The day-ahead electricity price has also come down since, but is still higher than in Spring 2021.

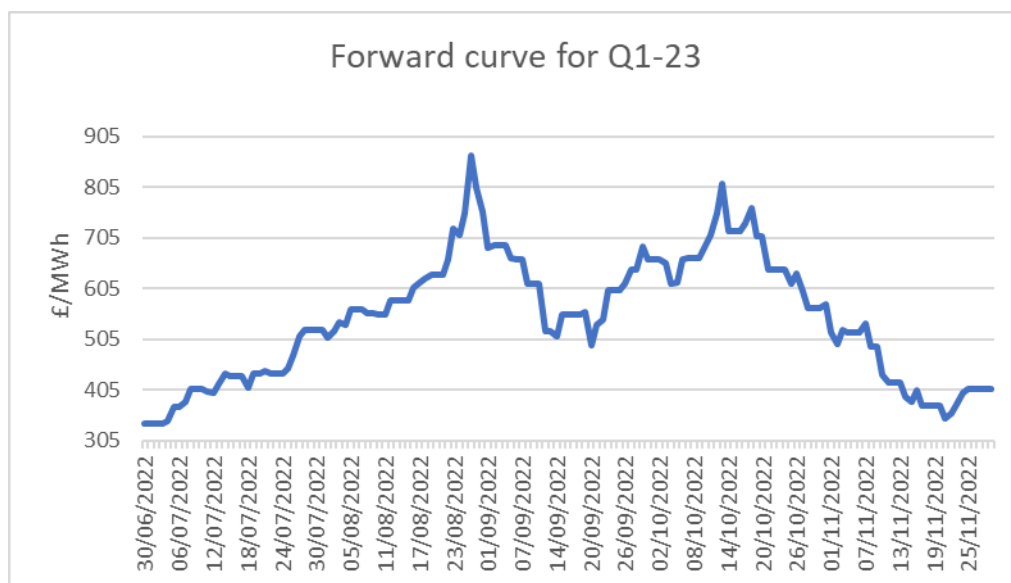
Figure 5. Day-ahead electricity wholesale prices between May and half November 2022



Source: Inspired Energy

19. The graph below shows the forward price for electricity delivery in the first quarter of 2023. These prices have come down from their peaks in August and xx as well but with trading over £400/MWh in mid-November are also still significantly higher than the day-ahead gas price since September.

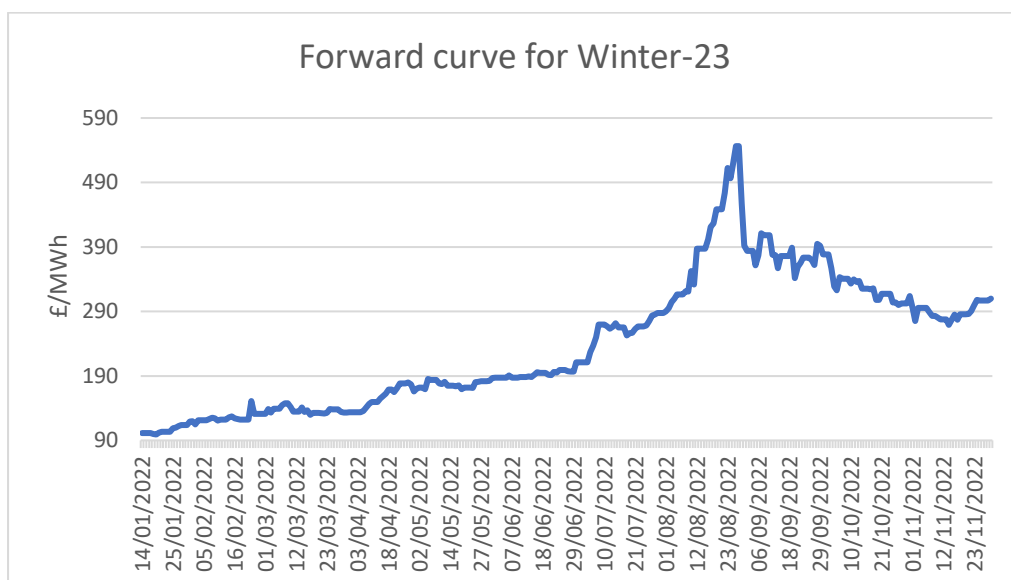
Figure 6. Forward electricity price for delivery in Q1 2023



Source: Inspired Energy

20. Finally, forward electricity prices for winter 2023 have come down as well, but still trade nearly £200/MWh higher compared to Spring 2021.

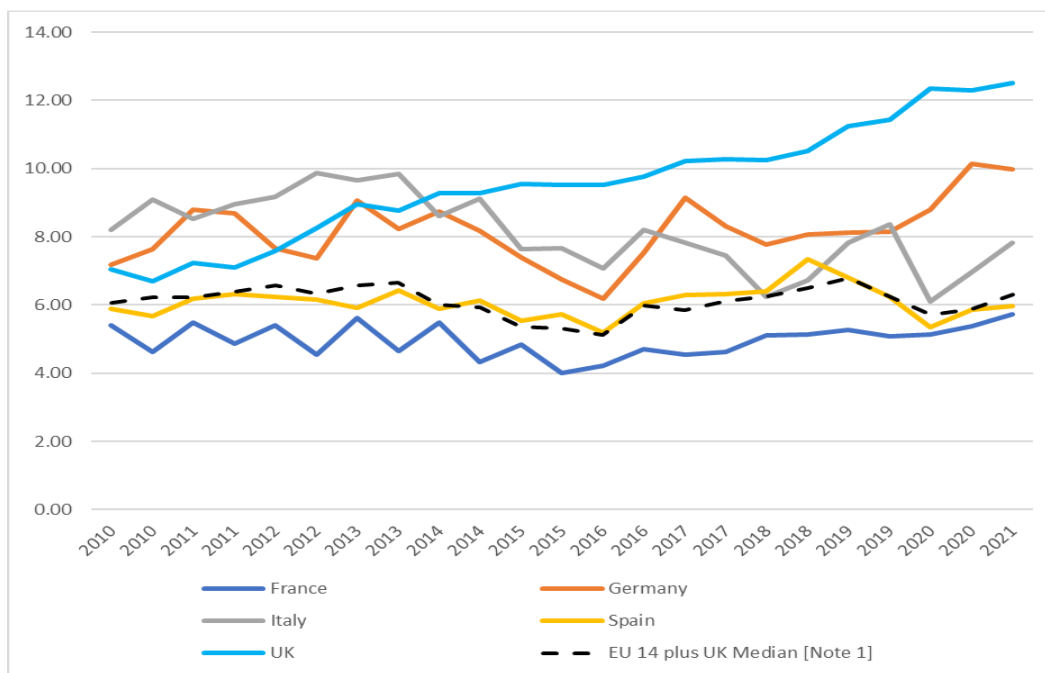
Figure 7. Forward electricity price for delivery in winter 2023



Source: Inspired Energy

21. Whilst gas and electricity prices have come down since their peak earlier this year, they remain significantly higher relative to the previous years and are likely to remain substantially higher in the foreseeable future. These increases in wholesale price come on top of years of higher industrial electricity prices. BEIS analysis for the [review](#) of the schemes to provide relief to energy intensive industries for a proportion of the indirect costs of funding renewable electricity policies show that the UK has already had some of the highest electricity costs in Europe and beyond.

Figure 8. Industrial electricity prices in the European countries for extra-large electricity consumers including taxes (excluding VAT and other recoverable taxes and levies) in p/KWh



Source: BEIS (2022), [Review of the scheme to provide relief to energy intensive industries for a proportion of the indirect costs of funding renewable electricity policies](#)

Energy price relief schemes for business in other countries

22. European countries have taken various measures to provide some relief for higher energy cost for business. The table in annex I shows a selection of European countries and their respective eligibility, instruments, and estimated value. Most countries listed have introduced some form of a loan guarantee scheme for businesses, but Germany and France have introduced specific schemes for

energy intensive industries in addition. Portugal and Spain have introduced specific schemes for their gas-intensive industries, in addition to direct grant to predominantly gas-fired power stations with the aim of reducing the wholesale electricity price.

23. The French and German Government have introduced direct grants for certain energy intensive industries to reduce their energy costs, with an estimated budget of £5 billion. The eligible cost is the energy volume procured between 1 February 2022 and 30 September 2022 and a certain increase in the price that an eligible EII pays. Under their schemes, the price increase is calculated as the difference between the price paid in a given month in the eligible monthly period and twice the price paid on average for the reference period 2021 multiplied by the aid intensity which is capped at certain absolute amounts. EIIs must prove that the monthly price paid has at least doubled compared to the price paid on average in 2021.

24. The French and German schemes are compliant with the European Commission's [temporary crisis framework](#) to support the economy in the context of Russia's invasion of Ukraine. This framework sets out the methodology EU Member States need to apply in providing state aid to impacted companies and sectors to mitigate the economic impact of the war. The Commission has amended its framework to prolong all measures until 31 December 2023.

Risk of Carbon Leakage

25. Along with the increase in energy prices, one of the major challenges to energy intensive industries is the risk of carbon leakage. In its [Net Zero Review](#), Treasury's analysis suggests that some UK manufacturing sectors have substantially lower emissions intensities compared to some trading partners and that many of these sectors are also relatively open from a trade perspective. Though the risk of carbon leakage appears relative modest for most sectors, its analysis concludes that "*the main exceptions are basic metals, refineries and non-metallic minerals*". If the analysis in HMT's Net Zero Review had a more granular approach to sectors and was

forward-looking, it would have shown that the more energy intensive sub-sector of the overarching sectors analysis also see a risk of carbon leakage, such as paper and pulp and certain chemicals sectors.

Risks to Supply Chains

26. Without continued support to mitigate the energy price increases for EILs, it may not be commercially viable for them to continue manufacturing in the UK. As a consequence, this may have impacts in their downstream supply chain. Analysis for potential Brexit impacts and experience during Covid-lockdowns have given Government a reasonable overview of potential risks to supply chains if certain EILs stop manufacturing. Nonetheless, it is still worth highlighting the role EILs have in supply chains and the risk that poses to end-consumers, and the economy more broadly, if it is no longer viable for EILs to manufacture due to higher energy prices in the UK.

27. As the largest element of the construction supply chain, a supplier of raw materials and products to many other industries, cement is the key component in producing ready-mixed concrete, precast concrete, and mortar. New homes, schools, hospitals, workplaces, roads, and railways as well as civil engineering infrastructure that provides the UK with clean water, sanitation and low carbon energy, depend on concrete. Furthermore, many diverse industries such as steel, chemicals, glass and construction rely heavily on lime and lime is also used in the production of sugar, the treatment of contaminated land, the desulphurisation of flue gases from power stations and the purification of water for human consumption.

28. UK consumption of paper and paper board can be broadly split into speciality paper, graphics, tissue, and packaging¹. Consumers of speciality paper product include the NHS for surgical mask and clothing and disposable sanitary products as well as newsprint for media outlets. Consumers of packaging include food manufacturers to transport food to supermarkets, light manufacturing to transport

¹ See [CPI EVR3 2021 Final.pdf \(thecpi.org.uk\)](#)

their products to sale points as well as online retailers. Businesses and domestic consumers buy toilet tissue, nappies and hygiene products.

29. The supply chain of the (petro)chemicals industry is even more complex and the picture in annex II tries to give a simplified overview. Chemistry-making and chemistry-using businesses are fundamental to the UK's manufacturing industries and it is estimated that over 96% of all manufactured goods have chemical industry content. The use of carbon dioxide in downstream products is reasonably well known now, but chemicals are also used in other critical products, such as food packaging, renewable technologies, drinking water, pharmaceuticals, building and insulation products.
30. Steel is one of the most widely used materials in the world, essential to construction and manufacturing industries. Steel is required to build schools, hospitals, homes, road and rail networks, digital technology and energy infrastructure as well as machinery in the production of food and medical equipment, water and sewage systems and in flood and security defences. It is also critical to the transition to a net-zero economy as steel is used in wind turbines, electric vehicles and energy-efficient housing.

Conclusion

31. Though energy prices have eased relative to their peak, spot prices remain higher compared to Spring last year and the preceding years and the forward prices for the first quarter and winter of next year look significantly higher, with prices to ease slowly in the subsequent years. However, gas prices are likely to remain far higher than gas prices in the US for the foreseeable future. This wholesale gas price differential between Europe (including UK) and the US comes on top of the electricity retail price differential that was already growing between the UK and Europe.
32. Due to the nature of their manufacturing processes, EIIIs are disproportionately exposed to increased energy prices. Furthermore, most of them trade internationally and will therefore be exposed to international competition. Exposure to international competition will

make it more difficult to absorb or pass on recent energy prices rises because reflecting them in higher product prices will price them out of the market. The UK Government has already recognised that certain EILs cannot simply absorb or pass-through increased energy costs and it has put various measures in place to mitigate the cost of energy prices – in particular electricity prices – before energy prices started to rise last year.

33. These industries are also most of risk of carbon leakage. HMT's Net Zero Review concluded that, though the risk of carbon leakage appears relatively modest for most sectors, "*the main exceptions are basic metals, refineries and non-metallic minerals*". Furthermore, energy intensive industries play a critical role in supply chains and without some further targeted support to mitigate increased energy price, it may not be commercially viable for some of them to continue manufacturing in the UK. This risks a potential shortage of certain products in sectors as diverse as construction, food and pharmaceuticals.
34. Government in some European countries have introduced relief measures to reduce the impact of escalated energy prices on their businesses. France and Germany have taken specific measures to reduce energy cost for their EILs by providing direct grants in addition to their generic measures, based on the European Commission's temporary crisis framework. These grants continue to the end of this year, but the Commission has amended its framework allowing EU Member States to prolong their financial support to 31 December 2023.
35. Exposing energy intensive industries to the escalated energy prices when the EBRIS expires, alongside a potential energy price differential with the US and Europe, will put EILs at a significant competitive disadvantage internationally risking their closure as manufacturing in the UK might no longer be commercially viable. The EIUG therefore calls on the UK Government to classify EILs as vulnerable and to continue to assist them with energy costs beyond 31 March 2023.

36. EIUG considers that all companies in sectors eligible for the schemes to reduce the indirect cost in industrial electricity prices due to the UK renewable deployment policies should be classified as vulnerable. The European Commission has used a similar eligibility for its temporary crisis framework and adopting eligibility from the UK EII renewable exemption schemes would therefore minimise competitive distortion in trade with the EU.
37. Direct support for eligible companies seems to most VfM as this could be better targeted and would avoid additional transactions cost of an intermediary, such as suppliers, to administer it. Since BEIS already administers the EII exemption scheme, there are also already existing governance and management processes in place.
38. The EIUG therefore calls on Government to trigger article 44 of the Subsidy Control Act regarding national economic emergency and provide more targeted and temporary emergency subsidy to EIIs most exposed to the increase in energy prices. Together with the relevant provision in the Industrial Development Act 1984, it will provide the necessary legislative and underpinning to introduce a scheme targeted at the most vulnerable non-domestic energy consumers.

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Director EIUG

Annex I: Energy Price Relief Schemes in Selected European Countries

Country	Business	Instrument	Duration	Total value	Comment
Denmark	energy intensive SMEs and large companies across sectors	loans with subsidised interest rates.	individual loan amount business will cover the liquidity needs respectively for the 12 and 6 months following the granting of the aid. Support will be granted no later than 31 December 2023	€1.34bn	SA.104505 (2022/N)
	All end users	A payment deferral measure for part of utility payments for electricity, gas, and district heating bills with subsidised loans provided to end-users administered via energy suppliers; A subsidised loan measure to cover the administrative costs of energy companies	Six years, consisting of a one-year deferral period where the end-users can defer their payment followed by a one-year grace period	approx. €3.4bn	SA.104461 (2022/N) , probably comes closest to the current EBRS
Poland		Loan guarantees via the National Development Bank	Staggered up to 6 years	Approx. €6.3bn	SA. 102866 (2022/N) and SA. 102867 (2022/N) , as amended to increase the budget
Italy	all undertakings with up to 499 employees ⁶ and self-employed persons	Direct guarantees, provided to cover losses of credit institutions, in relation to loans; Counter-guarantees, which cover the losses on guarantees issued by mutual guarantee institutions		€2.9 billion	SA.103403 (2022/N)

		provided to credit institutions on their loans; Grants equivalent to the present value of unpaid premiums			
	SMEs and MidCap	Direct grants	31 December 2022	€0.7bn	SA.103464 (2022/N)
	SMEs and large enterprises. Aid is granted under the measure through credit institutions and other financial institutions as financial intermediaries.	Loan guarantees	31 December 2022	€10 bn	SA.103286 (2022/N) , The estimated budget is the remaining portion of the €200bn budget Italy had initially allocated under the its scheme approved in case SA.56963 (2020/N)4, as amended in case SA.59681 (2020/N)5.
Greece	Non-household electricity consumers who have a contract on variable electricity supply tariffs and (a) whose power supply is no more than 35 kVA; or (b) who operate as bakeries; or (c) who have an agricultural tariff.	Direct grants	31 December 2022	€0.8bn	SA.103978 (2022/N)
Romania	All businesses	(i) loan guarantees; and (ii) direct grants to compensate parts of the costs due under the guaranteed loans.	31 December 2022	€4 billion	EC press release
Finland	All businesses	Loan guarantees	31 December 2022	€2bn	SA.103386 (2022/N)
	All businesses (apart from financial)	Direct grants, tax and payment	31 December 2022	€0.5bn	SA.103159 (2022/N)

		advantages, repayable advances, guarantees, loans and equity.			
Germany	All businesses	direct grants; tax advantages repayable advances; guarantees and counter-guarantees; loans; equity; mezzanine financing	31 December 2022	€15-20bn	SA.102542 (2022/N) , the aid amount under the measure does not exceed €400 000 per undertaking at any given point in time.
	All businesses (apart from financial institutions)	Loan guarantees and subsidises loans	31 December 2022	€1bn (with max €10bn)	SA.102631 (2022/N)
	Energy intensive industries	Direct grants	31 December 2022	€5bn	SA.103348 (2022/N) , conform section 2.4 of the TCE
France	All businesses (apart from financial)	Loan guarantees	31 December 2022	Max €155bn	SA.102395 (2022/N)
	Energy-intensive industries whose purchases of electricity and natural gas, amount to at least 3% of turnover, as per the Energy Taxation Directive	Direct grants	31 December 2022	€5bn	SA.103280 (2022/N) , conform section 2.4 of the TCE
Hungary	All businesses (apart from financial)	direct grants, tax reductions, equity and loans.	31 December 2022	€1.14bn	SA.103089 (2022/N) , the measure will be co-financed by the European Structural and Investment Funds
Portugal	Gas-intensive industries; (a) Preparation and spinning of textile fibres (NACE 13.10); (b) Weaving of textiles (NACE 13.20); (c) Textile finishes (NACE 13.30);	Direct grants	31 December 2022	€0.16bn	SA.102757 (2022/N)

	<p>(d) Manufacture of made-up textile articles, except apparel (NACE 13.92);</p> <p>(e) Manufacture of other technical and industrial textiles (NACE 13.96);</p> <p>(f) Manufacture of paper and paper products (NACE 17);</p> <p>(g) Manufacture of basic chemicals, fertilisers and nitrogen compounds, plastics and synthetic rubber in primary forms (NACE 20.1);</p> <p>(h) Manufacture of glass and glass products (NACE 23.1);</p> <p>(i) Manufacture of refractory products (NACE 23.20);</p> <p>(j) Manufacture of clay building materials (NACE 23.3);</p> <p>(k) Manufacture of ceramic household and ornamental articles (NACE 23.41);</p> <p>(l) Manufacture of ceramic sanitary fixtures (NACE 23.42);</p> <p>(m) Manufacture of cement, lime and plaster (NACE 23.5);</p> <p>(n) Manufacture of articles of concrete, cement and plaster (NACE 23.6); and</p> <p>(o) Manufacture of basic iron and steel and of ferro-alloys (NACE 24.10).</p>				
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Spain	All businesses (apart from financial institutions)	Loan guarantees	31 December 2022	€10bn	SA.102711 (2022/N)
	Gas-intensive industries: (a) Manufacture of pulp, paper and paperboard (NACE 17.1); (b) Manufacture of man-made fibres (NACE 20.6); (c) Manufacture of glass and glass products (NACE 23.1); (d) Manufacture of refractory products (NACE 23.2); (e) Manufacture of clay building materials (NACE 23.3).	Direct grants	31 December 2022	€0.125bn	SA.102613 (2022/N)
Czech Republic	All large companies that do not benefit from an energy price cap and that are currently facing significant extra costs in light of the increase of electricity and natural gas prices. Ells that incur operating losses may receive further aid up to €8.2 million, with an aid intensity capped at 50% of the eligible costs, with the possibility to increase up to 70%	Direct grants	31 December 2022	€1.23 billion	Commission press release Similar to the German and French schemes

The Commission has also [approved](#) a Spanish and Portuguese proposal for a €8.4 billion measure (€6.3 billion for Spain and €2.1 billion for Portugal) to lower the input costs of fossil fuel-fired power stations with the aim of reducing their production costs and, ultimately, the price in the wholesale electricity market, to the benefit of consumers. The measure will apply until 31 May 2023. The support will take the form of a payment that operates as a direct grant to electricity producers aimed at financing part of their fuel cost. The daily payment will be calculated based on the price difference between the market price of natural gas and a gas price cap set at an average of €48.8/MWh during the duration of the measure. More specifically, during the first six months of the application of the measure, the actual price cap will be set at €40/MWh. As of the seventh month, the price cap will increase by €5 per month, resulting in a price cap of €70/MWh in the twelfth month. The measure will be financed by: (i) part of the so-called 'congestion income' (i.e. the income obtained by the Spanish Transmission System Operator as result of cross-border electricity trade between France and Spain), and (ii) a charge imposed by Spain and Portugal on buyers benefitting from the measure.

Annex II: Petro-chemical supply chain overview

