

2025 Autumn Budget submission from the Chemical Industries Association

The Chemical Industries Association (CIA) Autumn Budget submission is divided into two main sections.

The first section addresses the pivotal role of our sector for the country based on our direct contributions to the UK economy, our role at the core of Advanced Manufacturing underpinning all domestic manufacturing and our essential contribution to the development of green technologies.

The second section of our submission covers the actions from Government that would foster further innovative developments and investment into our sector and our country.

Our proposals are the result of detailed discussions with chemical businesses across the UK and our regular quarterly business survey.

We are calling for action in three areas:

- 1. Net Zero Growth**
- 2. Investment in people**
- 3. Fostering innovation**

Executive summary

The Government has promised to bring stability and improve policies around the future of UK industries. While Industrial Strategy is a step in the right direction, CIA believes that we need further action to support our economy. The pre-election pledges of 'Making Britain a Clean Energy Superpower' and 'Securing the Highest Sustainable Growth in the G7' are only obtainable by establishing a collaborative relationship between industry and Governing bodies.

CIA believes that the three suggested actions will provide long-term stability that will support the chemical sector in the delivery of Net Zero innovations, establishing resilient supply chains, and reducing regional economic disparities.

Every advanced economy needs a flourishing and innovative manufacturing sector with a chemical industry at its core. Chemicals are one of the six vital foundation industries with our products being present in over 95% of all advanced manufactured goods. Due to their role within supply chains, the chemical sector is not only a major component of manufacturing and critical infrastructure, but also a key part of the Net Zero transition.

Since COVID-19, UK chemical production has shrunk by 35% due to strong competition from Asia and the US, weak European demand, internationally uncompetitive energy prices and a lack of clarity over future regulations. In order to attract the necessary investment to continue delivering the building blocks for other industries, CIA has identified three areas where actions from Government are necessary. These areas are: regulations that supports the transition to Net Zero without deindustrialising, promoting collaboration with industry to deliver on labour market needs, and a policy framework that incentivises companies to invest in the UK ensuring the future of British industries.

Over the past 10 years the manufacturing share of GDP has decreased by 11% and it is currently over 4 percentage points lower than the G7 average. For the manufacturing (and chemical) sectors to regain the importance they once had, we need the Government to show the world that the UK is open for business. To succeed in this, we need stability - stability on energy prices, stability on industrial policy, stability of regulation and stability on the political front.

We are confident that the measures outlined in this submission will provide significant support to chemical and pharmaceutical businesses across the United Kingdom. These actions will help the industry supply the raw materials essential for both traditional manufacturing and innovative Net Zero technologies, while also supporting skilled employment across all regions.

The chemical industry is a critical national industry because it supplies materials for nearly every other sector, from pharmaceuticals and food to technology and defence. As a Critical National Infrastructure (CNI) sector, stability is vital for the nation's economy, security, and essential services, and includes specific assets like chemical plants that need protection from potential threats.

We are essential for other industries, providing inputs for almost all manufactured goods, including pharmaceuticals, food, electronics, and materials for transportation.

However in the words of more than one Chief Executive, we are living on borrowed time. For the UK chemical sector the past 10 years have understandably led to questions about the future. An output index measure showing that from a start of 91.7, we are now at 86.8. Catastrophic? No, not if we recognise world events,

something we cannot ignore. In 5-years from a pandemic-based high of more than 144, this cyclical-based sector has fallen by 60-points in terms of output in less than 5-years. And more worryingly is that despite some companies saying there is some stability, there is no visible uptake in industry-output.

The Chemical Industries Association

The CIA is the UK's leading trade association dedicated to representing and advising chemical and pharmaceutical companies across the United Kingdom. Our membership counts over 110 chemical businesses that operate in the UK and include major multinationals as well as SMEs.

Chemical manufacturing is an extremely broad sector which encompasses numerous types of products, including: petrochemicals, biofuels, cleaning products, dyes, active ingredients for pharmaceutical manufacturing, and cosmetics. As one of the foundation industries, our products are present in over 95% of all advanced manufactured goods and are an essential component to creating materials and innovations essential for the Net Zero transition.

This essential role within the innovation process and industrial production, coupled with the direct impact of the sector on the UK economy, puts our industry at the centre of the Government's Levelling Up, Global Britain, Scientific Powerhouse, and Net Zero ambitions, whilst being a key player to 'Make Britain a Clean Energy Powerhouse'.



20 % of total UK business R&D spend



4,000 businesses directly employing **150,000** people while supporting over **500,000** jobs in the economy



High productive sector with **£198,363** GVA* per employee, **310%** higher than whole economy average and **228%** higher than manufacturing



One of the UK's largest exporters of manufactured goods with annual exports of **£55bn**



Salaries over **20%** higher than manufacturing and **30%** higher than the whole economy average

MADE IN THE UK

Sold across the world

Our Chemical Industry



Chemical and pharmaceutical exports (£bn)



Gross Value Added (£bn)*

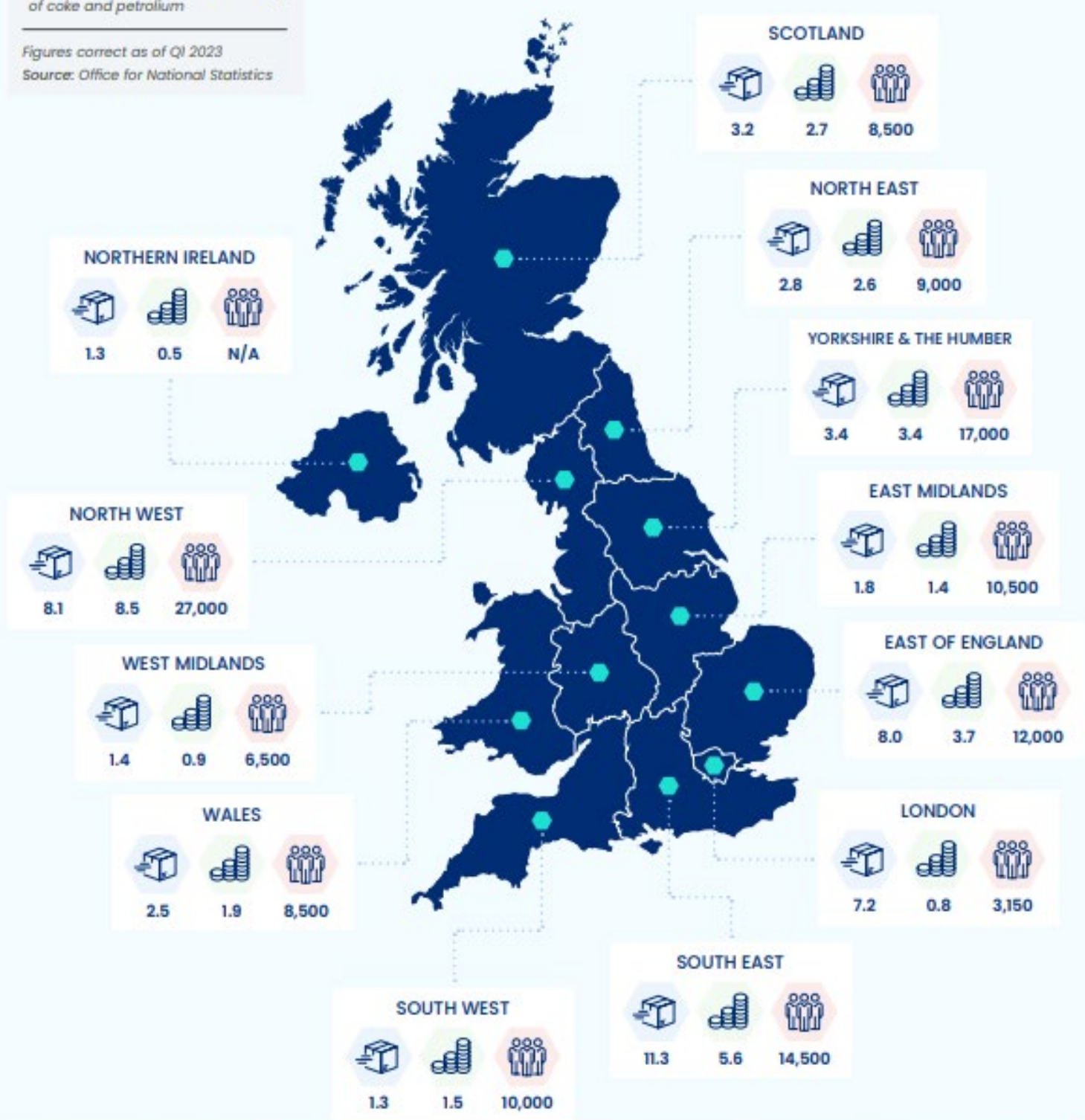


Employment

*Data includes SIC 19 - Manufacturing of coke and petroleum

Figures correct as of Q1 2023

Source: Office for National Statistics



The context around our three action areas

Despite UK economic growth exceeding expectations in the first quarter of the year, the broader economic environment remains challenging for all sectors, particularly manufacturing. With capital and energy being major inputs in industrial production, tight monetary policy aimed at curbing inflation, coupled with high energy prices, has significantly impeded industrial productivity. Over the past three and a half years, industrial production has declined significantly, and the latest data show that current output levels are down 9.5% compared to the last quarter of 2019.

Persistent global challenges, stemming from political uncertainty and weak economic growth, have led forecasters to predict that industrial activity will continue to lag behind overall economic growth in 2025. This complex global industrial landscape, along with domestic issues such as high costs of labour and energy, threatens to undermine foreign investment and market share for UK manufacturers.

Given the challenges currently facing UK manufacturers, CIA warns Government against increasing taxes on businesses, as they are the ones delivering economic growth to the country. Chemical production is currently over a third lower than pre-pandemic, but international demand for chemicals remains high, indicating that over the past few years the UK has lost market share. If the UK wants to maintain its resilient supply chains and continue having a domestic manufacturing base, it needs to support local businesses and production sites.

British businesses are the main drivers of economic growth. For this reason, if Government establishes a positive environment that promotes business growth, that will also result in higher GDP growth and a lower debt-to-GDP ratio. Increasing taxes on business would likely result in lower economic growth, while delivering stable, pro-business policies could improve the state of public finances.

The three actions that we are advocating for would increase both economic growth and productivity. According to recent data from the Office for National Statistics (ONS), UK productivity growth has remained weak since the 2008 financial crisis, with output per hour worked significantly lagging behind that of other G7 nations. Real GDP per head has risen by only 5% over the past 16 years, after rising by 46% over the previous 16 years. This sluggish productivity has stunted economic growth and decreased the purchasing power of workers, contributing to the current public finances gap and cost-of-living crisis.

The chemical sector is vital to regional clusters because it drives economic activity through shared infrastructure, supply chain integration, and access to a skilled workforce. Clusters benefit from co-location with suppliers and customers, which creates efficiencies through pipeline networks, waste treatment, and research and development, while also providing high-productivity jobs. These concentrated industrial areas are hubs for innovation, knowledge sharing, and a strong local economy. Moreover, threats to the competitiveness of companies in a cluster put at

risk employment in all parts of a local, often long, supply chain and in shared resources, meaning a whole, substantial economic contribution to parts of our country that can least afford it.

The UK is also grappling with significant regional disparities. The economic divide between regions, with London and the South East outperforming other parts of the country, is stark. For example, productivity in London is about 30% higher than the national average, whereas regions like the North East and Midlands continue to trail. The role of manufacturing is particularly important. Production hubs tend to be outside urban areas and — for chemicals — mainly concentrated in the North and central Scotland. Supporting these types of industries not only provides the country with a strong domestic manufacturing base but also helps to address national resilience and security concerns by bringing forward investment in key locations where we employ highly skilled and highly paid individuals.

All advanced economies need a flourishing manufacturing sector to ensure strong domestic supply chains and drive innovation for Net Zero. According to the World Bank, manufacturing accounts for an average of 13.1% of G7 economies, 14.7% of European Union member states, and 27.4% of the Chinese economy, but just 8.8% of the UK economy. The industrial strategy recognised the chemical industry as at the ‘core of Advanced Manufacturing underpinning domestic manufacturing’. Since chemicals are present in over 95% of all advanced manufacturing, a strong domestic chemical sector delivers secure and resilient supply chains.

Globally, the UK’s manufacturing sector is facing stiff competition, particularly from regions like Asia, where lower labour costs, looser regulations, and abundant raw materials create a highly competitive environment, especially for energy-intensive manufacturing. Comparatively, the UK lags behind its global competitors. Without measures to address high production costs, the UK manufacturing sector risks falling further behind. Since 2016, the UK has seen a dramatic drop in its global ranking for inward foreign direct investment (FDI), falling from second to 15th place.

To restore the prominence of the manufacturing sector, including the chemical industry, the UK Government must demonstrate that the country is open for business and an attractive destination for investment. Achieving this requires stability — stability in energy prices, industrial relations, regulatory frameworks, and the political environment.

The three roles of Chemicals

The next three sections will expand on the three ways in which the UK chemical sector is fundamental to the economy. These areas were identified by S&P Global in their report titled “Project 2035: The Chemical Industry Transition Pathways for a Resilient and Sustainable Future”.

The three roles are:

- > Chemicals: key player for Net Zero
- > Chemicals: core of Advanced Manufacturing
- > Chemicals: direct contributions to the economy

Chemicals: key player for Net Zero

We provide the advanced materials necessary in the transition to a low-carbon economy: batteries, wind turbine blades and solar panels; clean fuels like hydrogen, ammonia, biofuel, e-fuel and sustainable aviation fuel; lightweight materials for transport; and insulation to keep our homes warm. Continued access to a diverse, innovative and prolific domestic chemical sector will enable the UK to compete in newly arising low-carbon industries, ensuring that the electric vehicles we drive are made here because batteries are made here. Without skilled, equipped and competitive chemistry assets, green growth industries will be wholesale importers.

Some specific examples of strategic technology that are reliant on chemicals:

Transport:

Road – batteries, biofuels (including E10), synthetic ‘e-fuels’, and lightweight materials

Shipping – methanol and ammonia

Aviation – Sustainable aviation fuels and hydrogen

Power:

Generation – solar panels, wind turbine blades, carbon capture technologies for gas and biomass fired power stations

Electricity transmission and distribution – wires are protected by layers of chemical insulation

Storage – Batteries and hydrogen

Buildings:

Heating – Heat pumps, insulation, double glazing

Chemicals: core of Advanced Manufacturing

A study from Petrochemicals Europe ¹ shows that chemicals are present in over 95% of all manufactured goods. Additionally, data from input-output tables from the ONS show that over 43% of UK chemicals are purchased by other manufacturing sectors as chemicals are a key intermediate good used in manufacturing. The Industrial Strategy recognised the role of our sector as at the core of Advanced Manufacturing underpinning all domestic manufacturing.

Together with being crucial for manufacturing products, chemicals also form part of the country's Critical National Infrastructure (CNI) and support other CNI sectors such as Defence, Energy, Health and Water:

- Some of the chemical compounds produced in the UK and essential for the UK defence infrastructure include ammonium nitrate and nitrocellulose, which are key raw materials used in the formulation of explosives, while carbon fibres are increasingly being used in aircraft manufacturing.
- Chemical businesses are at the core of research around green energy, including the production of green and blue hydrogen as well as producing key materials for solar panels, wind turbines and energy storage and transportation.
- Chemicals are at the base of all health systems, both within pharmaceutical products and healthcare goods. We provide key ingredients for pharmaceuticals (including the COVID vaccine), hydrogen peroxide used in sanitisers, latex for surgical gloves and chemicals used in laboratory testing.
- Water treatment facilities rely on the use of chemicals for coagulation, flocculation and disinfection processes key to water purification. Some of the chemicals used in these processes are chlorine, chloramine, aluminium salts and iron salts.

Chemicals: direct contributions to the economy

As well as being a key enabler of the Net Zero transition and at the base of modern living, the chemical sector makes substantial direct contribution to the UK economy.

¹ Available at: https://www.petrochemistry.eu/wp-content/uploads/2023/08/Petrochemistry-FlowChart_V102023_HQ-withoutFolds-1.pdf

Direct contributions to the economy as shown by our graphics:

- The UK chemical sector encompasses almost **4000 businesses** that **employ over 150,000 people** across the UK, with majority of our workforce concentrated in industrial hubs outside of city centres.
- We offer extremely **competitive salaries**, that are **20% higher** than the manufacturing average salary and over **30% higher** than the UK average.
- Due to the high value of our products, our contribution to Gross Value Added is 3 times higher than for the average economy and 2.3 times higher than the manufacturing average, making us the **second most productive manufacturing sector** in the country by productivity.
- Being at the forefront of innovation, chemical businesses are responsible for almost **20% of total UK R&D spending** and we employ over **8000 people** solely focused on R&D.
- Since chemicals are at the core of modern living, they are one of the most traded commodities world-wide. In the UK, chemicals are the second most exported good and in **2024** the value of all **exported UK chemicals was £55bn**.
- Estimates from the ONS show that our industry **turnover in 2023** was over **£70bn**.

On top of all these direct contributions to the UK economy, CIA has estimated that the chemical sector helps the government raise **over £2.5bn a year in taxes**, between employment, corporation, and energy taxation:

- Rough estimates indicate that the chemical sector as a whole should be paying almost **£0.5bn a year in corporate taxes**, based on manufacturing corporation tax receipts and chemical share of manufacturing turnover.
- A conservative analysis from CIA estimates that each year the chemical sector pays over **£1.35bn in environmental levies and taxes²**.

² This analysis is subjected to the following caveats:

Electricity: The estimates exclude the cost of the Feed in Tariffs (FiTs) and Regulated Asset Base (RAB) funding model for nuclear because the ONS does not classify them as 'environmental levies and taxes', so the OBR does not report them. However, it also excludes reductions provided by the British Industry Supercharger and the Climate Change Agreement scheme.

- Based on the average gross chemical salary from ASHE Table 5 and total chemical employment, CIA has estimated that our sector pays over **£0.8bn a year in Employer National Insurance Contributions**.

While these figures are just estimations, they provide an indication of the magnitude of the financial revenue raised by Government from the UK chemical sector.

CIA calls for action

1) Net Zero Growth

Between 2021 and 2024 the chemical industry has reduced its emissions by 38% – and its production has fallen by almost exactly the same amount. We continue to suffer the highest industrial power prices in the world!

One of the five missions that the Labour government has promised to deliver during its mandate is to **‘Make Britain a Clean Energy Superpower’**. This mission includes the promise to cut bills, create jobs and deliver security with cheaper zero-carbon electricity by 2030, accelerating to Net Zero.

With this objective in mind, it is essential to establish a strong and stable framework that supports businesses undertaking green investments and creates conditions that attract investors.

In a globalised world it is essential for the UK to provide a competitive environment that fosters green innovation and attracts international investment. Other countries have already established subsidies and/or regulations to encourage green technologies. In the US, the Inflation Reduction Act (IRA) has set aside \$369 billion in green subsidy packages over the course of 10 years. In Brazil the government has opted for a regulatory-based approach, whilst the EU has combined the two by offering financial support and establishing a clear regulatory framework.

The UK, with the Advanced Manufacturing Plan and Industrial Strategy, has also designated funds and policies to encourage companies to invest in the development of environmentally friendly solutions. While these introductions were well received by industry, the biggest challenge that UK manufacturers face is energy, both in terms of availability and cost.

Gas: This only includes the CCL cost. It does not include the cost of the Green Gas Levy or Hydrogen Gas Shipper Levy. It also excludes reductions provided by the Climate Change Agreement scheme.

The analysis uses the most recent DUKES data on chemical sector electricity use which is from 2024 (~15,000,000 MWh)

As an energy intensive and foundation industry, chemicals are at the core of a greener future. A study conducted by PWC showed that petrochemicals are present in 95% of all manufactured goods and our impact is even larger when focusing on the 2050 Net Zero target. Investment and innovation in green chemistry have led to the development of biofuels, solar panels, lightweight building materials, biodegradable plastic, and many other innovations that are at the forefront of the environmentally conscious solutions.³

The CIA ask Government to:

Close the competitiveness gap on energy

Energy costs are the most significant disadvantage for the UK chemicals sector, with prices on average four times higher compared to our competitors in the US and two times higher than in the EU. Every year, the sector pays at least £1.35 billion in environmental levies and taxes on energy, much of which competing businesses across the globe are not exposed to. Therefore, as a minimum, existing cost relief schemes for trade and energy-intensive industries must be retained whilst urgently building a level playing field for UK businesses opposite their competitors' costs. This should include:

- 1. Abolishing the UK only Carbon Price Support (CPS) mechanism**, which inflates electricity prices for all UK consumers with no environmental or economic benefit.

Withdrawal of the CPS would decrease the wholesale price by £7.9/MWh (£18t/CO₂ x 0.44tCO₂/MWh), based on the latest DUKES figures. The CPS provides no additional incentive for investment in renewable electricity, over and above the Contract-for-Difference subsidy scheme, and its removal would help close the gap on energy costs and ease fuel poverty.

- 2. Exempt the chemical sector from the Climate Change Levy (CCL).** The CCL is an environmental tax imposed on the energy use of UK businesses. It was conceived in an era of low energy bills, to encourage businesses to become more energy efficient. Since then, the price of UK energy has risen above that of competing nations and the Industrial Strategy makes clear that high energy cost is now a key barrier to manufacturing investment in the UK. The Government has acted to remove policy and network cost from the electricity bills of energy intensive industry (EIs) through the British Industry Supercharger. The CCL is the obvious next lever to pull to improve the competitiveness of our foundation industries and support their decarbonisation. Steel, cement, ceramics and glass

³ More focus on the role of the chemical industry in the net zero transition in 'Project 2035 the chemical industry transition pathways for a resilient and sustainable future'. Available on the [CIA website](#)

are already exempt under legislation inherited from the EU. It is time to extend this relief to the UK's chemical sector.

The annual CCL cost to the chemical sector is £180 million, with participation in the CCA scheme providing relief equivalent to £160 million. Yet participation in the CCA scheme comes with a set of complex obligations and a risk of financial penalties which make it difficult to deliver a business case for UK investment. Owing to the existing CCA relief, the cost to the Treasury of removing this UK-only energy tax would be minimal (£20 million), but it would immediately reduce regulatory burden and simplify the case for investment.

- 3. As already actioned by the EU, urgently review the scope of sectors covered by its indirect carbon cost compensation scheme.** The upcoming scheduled review by end of 2025 must act on sectors now included in the equivalent EU scheme to afford UK chemicals sector the same chances that our European competitors will be given.

It is well understood that the UK Emissions Trading Scheme (ETS) places a direct cost on the emission of carbon dioxide from the on-site combustion of fossil fuels by manufacturers. What is not so widely known is that the ETS also places an indirect cost on electricity consumption in the UK, driving up UK electricity prices for all consumers. This has an outsized impact on chemical manufacturers which depend on electricity to drive motors, compressors and for cooling. It also acts as a barrier to industrial decarbonisation because it increases the cost faced by those looking to reduce their emissions by switching a gas boiler for a heat pump. In recognition of the detrimental impact of indirect carbon cost to the competitiveness of businesses both the UK and EU Government established an indirect carbon cost compensation scheme for energy intensive industries, which provides compensation to industrial processes in specified sectors provided they can demonstrate that they can meet eligibility requirements for electricity-intensity. Matching the EU scheme for the chemicals sector would ensure the competitiveness gap would not be further widened with European competitors.

- 4. Reforming industrial gas pricing,** including no redistribution of levies or taxes given its importance not just as a fuel but a key raw material to manufacture key strategic chemicals going into everyday products. British industry and especially the chemicals sector relies heavily on gas and in delivering the transition to Net Zero, the UK must recognise further increases to gas prices will further undermine the sectors competitiveness and investment ability whilst increasing consumption emissions.

The table below show the gas price impact if only two existing levies (renewable obligation (RO) and Contract for Difference (CfD) were transferred from electricity to

gas. For reference, the average retail gas prices for very large gas consumers in 2024 was 133p/therm. A transfer of RO and CfD to gas bills would increase gas prices by 66p/therm, a 50% increase⁴.

	2024	2025	2026	2027	2028	2029
Gas price impact (p/therm)	66	65	69	66	64	64

Reach Net Zero without deindustrialisation

As recognised in Government Industrial Strategy, chemicals are “at the core of Advanced Manufacturing underpinning all domestic manufacturing.” Due to our position at the root of the supply chain, decarbonising the chemical industry has a ripple effect, reducing emissions across all sectors. Moreover, our sector is pivotal in developing and supplying the materials necessary for low-carbon technologies - like batteries, wind turbines, CCS, solar panels and heat pumps - that we rely on to reach Net Zero. Therefore, a realistic route, backed by timely delivery of policy done right can restore competitive advantage to the UK.

Net zero is not the problem, but deindustrialisation is.

Since 2021, no UK chemical sites have been able to switch away from natural gas. Instead, 2021-2024 alone saw a 38% emissions reduction, directly due to closures in our sector, including the relocation of strategic building blocks, job loss, increase in consumer prices and consumption emissions on the rise⁵. The scale of the gap between the carrot and the stick for UK businesses means that it is increasingly difficult to invest in the UK as it is not profitable to do so. To put it simply, investment is flowing, and will continue to flow, to wherever there is access to competitively priced energy alongside a growth enabling and stable policy environment. This means:

5. As the EU have done, the UK should **earmark Emissions Trading Scheme (ETS) revenue to support industrial decarbonisation**. In parallel, make **funds available** to push forward with all industrial Net Zero **cluster projects** as and when they are ready to implement.

⁴ Source: OBR Economic and Fiscal Outlook (March 2025), DUKES gas consumption statistics 2024 and own calculations

⁵ HMG data shows UK consumption emissions via imports have almost doubled whilst production emissions have halved

The recently announced loss of the Industrial Energy Transformation Fund (IETF) has meant that active emission reduction projects have been put on pause, with many not being taken forward. We urgently need confirmation from the Government about how and when this funding will be replaced, in order to secure inward investment and unlock frozen projects.

The UK's ETS generated £3.5bn of revenue for the UK Government in 2024 alone, yet the Industrial Energy Transformation Fund (IETF), our main industrial decarbonisation grant support (£500m in total), has been abandoned leaving no clear energy or industrial decarbonisation support available to the sector.

6. For trade exposed manufacturing, **pause any further free allocation reduction and undertake a review on emissions reduction ahead of any further extension of the UK ETS.** For the UK to properly address carbon and investment leakage, any decision on free allocation withdrawal must not outpace the recognised transition pathway for a given sector. Furthermore, when considering the extension of the UK ETS, we urge the Government to first evaluate the emission reductions affected by the scheme, at a sector level, to establish the case for extending the scheme to all current participants. If it can be shown to be effective at decarbonising and not deindustrialising an industrial sector, then an extension should be pursued. However, if the impact has been site closure and reduced production then alternative policies must be considered.

Chemical sector emissions have decreased 38% since the start of the UK scheme in 2021. Unfortunately, none of this emission reduction was as a result of switching away from the use of natural gas for heat (i.e. to electricity, biomass or hydrogen); rather it was as a result mainly of closure, and then of decreased activity levels. These figures do not account for more recent closures in industrial regions much in need of investment. Each site closure results in a loss of jobs and revenue to the exchequer.

Reduce regulatory burden

Reducing regulatory burden including minimisation of cost and seeking alternative measures is a cornerstone of the recently published Industrial Strategy to support growth. As a high-hazard sector, we recognise and support the need for robust and risk-based compliance but the cumulative regulatory burden - be that through regulatory charges, administration costs or 'another tax' - only undermines competitiveness and ability to invest. Therefore, we are calling for:

7. An immediate **rethink on landfill tax proposals,** identifying options that would (i) target waste streams where both alternative capability and capacity exist as well as (ii) alternative measures to address waste crime.

The proposed 30-fold increase and removal of water discounting relief is estimated to be over £50 million/year for just eight chemical businesses alone. This represents an existential risk.

2) Investment in people

Recent CIA business surveys have highlighted that labour-related challenges are increasingly affecting UK industry, particularly due to rising labour costs and difficulties in recruiting skilled workers. Skills shortages have intensified since Brexit and the COVID-19 pandemic, both of which have significantly reduced the workforce. The Office for National Statistics (ONS) reported that over the past two years the unemployment rate has increased from 4.1% to 4.7% and that vacancies have decreased by 40%.

These tight labour market conditions, compounded by inflation, have driven up the cost of labour, creating additional pressures on businesses. The latest data from the ONS showed that average wage growth in the private sector was 8.2% in the three months to June 2023, reflecting a significant increase in labour costs.

These trends were intensified by the increase to Employer National Insurance Contributions announced last autumn. Those changes have increased the financial burden on employers and are costing the chemical sector over £125 million each year.

The combination of these factors has resulted in a severe shortage of both graduates and experienced workers in the chemical sector. The industry requires an influx of 30,000 skilled workers by 2030 to meet its growth and innovation targets, but current trends suggest a significant shortfall.

Moreover, thanks to the distribution of our industry, our sector is a key player in the development of the country as a whole. Our production centres are concentrated in non-urban areas, especially in the North and Midlands. In addition, chemical manufacturing requires a high level of skill and, for this reason, the average chemical employee earns 20% more than the average manufacturing employee. Our industry is crucial for bringing high wages and investment to all areas of the country.

Given the chemical sector's reliance on innovation and highly specialised skills, it is imperative for the UK Government to ensure adequate support for companies. This includes enhancing collaboration with universities, facilitating the recruitment of international talent through more accessible visa policies and investing in the upskilling and specialisation of the existing workforce. Addressing these needs is

crucial to maintaining the sector's competitiveness and sustaining its contribution to the UK economy, which accounted for £21 billion in GVA (Gross Value Added) in 2023.

The CIA has four asks with regard to people:

1. Invest more in **training provision** to raise the standard and consistency of delivery in all parts of the country.
2. Deliver a globally competitive **immigration system** that attracts international talent to the UK where roles cannot be filled through domestic skills:
 - a. **Reduce administrative burden** and costs of the Skilled Worker visa
 - b. Reform operation of **Shortage Occupation List** to ensure the immigration system is more in line with industry needs.
3. Reform the **Apprenticeship Levy**:
 - a. Make the **levy transferable** for use across the UK
 - b. Deliver **access to a full range of apprenticeships at all levels and for all ages** to reflect individual business needs.
 - c. Given the biggest declines in apprenticeships in manufacturing have come from SME's who are still largely locked out of the system, **make the system work better for SME's**
 - d. **Introduce** flexibilities in the levy for short courses for **all sectors** not just those currently allowed, **but the supply chains to them such as chemicals**.
 - e. Return to **sector based employer bodies** like Cogent to work with Skills England to ensure the system works for the industry.
4. Consider reversing the increase in **Employer National Insurance Contributions** so as to ease and avoid imposing any further burden on businesses in respect of employment cost.

3) Fostering innovation

With the objective of making Britain a clean energy superpower and securing the **highest sustainable growth in the G7**, it is essential that the UK becomes a prolific innovation hub. Innovation is the engine that drives economic growth, enhances productivity and is the solution to pressing challenges around the environment, healthcare and sustainability. However, innovation does not occur in a vacuum; it requires a supportive environment that encourages creativity, experimentation and the practical application of new ideas. This is where the role of a robust policy framework becomes crucial.

A policy framework that enables innovation provides the necessary structure and guidance to foster an ecosystem where ideas can thrive. Such a framework addresses key areas including funding and investment in research and development, education and skills training, intellectual property rights, regulatory environments and market access. By offering clear guidelines and supportive measures, governments can create conditions that reduce barriers to entry, encourage risk-taking and promote collaboration across sectors.

A well-crafted policy framework that enables innovation is necessary to foster our industries and attract foreign investment.

The CIA asks Government to:

1. **Simplify** bureaucratic application and monitoring procedures when applying for **Government-funded R&D** investment.
2. **Strengthen innovation ecosystems** such as Catapult Networks and centres of excellence such as the Centre for Process Innovation (CPI).
3. Improve incentives for **inventions** made in the UK to be **commercialised** in the UK.
4. Deliver **long-term certainty** for existing and prospective investors on the business taxation and incentives environment.
5. Guarantee long term support for the **Patent Box**.

6. Ensure strong IP regulations within FTAs and multilateral FTAs.

7. Allow patents to be obtained for a ‘second use’ also for known chemicals outside the medical space.

Whilst current UK patent law allows patents to be obtained for a ‘second use’ only for pharmaceutical or medical purposes, the European Patent Office allows ‘second use’ patents also outside medicine. The UK limitation deters the repurposing of existing chemistries and forces innovator companies to develop new chemistry, which increases costs and time to market, thereby lowering competitiveness. We ask that the scope of ‘second use’ patents for chemistries be broadened, as there are cases where the application of known chemistries for new purposes would have brought environmental benefits as well as aided our businesses, especially for innovations related to low-carbon-intensity fuels.

8. Refrain from increasing corporation taxes or introducing any further tax measures directed at businesses. Given that businesses are central to driving economic growth, additional fiscal burdens would risk exacerbating pressures on margins at a time of low profitability and heightened uncertainty. The CIA notes that an increased tax burden on business could lead to reduced economic activity, lower levels of employment, and diminished investment.

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