

Aldersgate Group representation to Autumn budget 2024

October 2025

Background

The Aldersgate Group is a coalition of major businesses, academic institutions and civil society organisations, driving action for a competitive and environmentally sustainable economy.¹ Our corporate members represent all major sectors and believe that ambitious environmental policies and good regulation are key to unlocking growth and decarbonisation. Among many others, they include Associated British Ports, Aviva, BT, Michelin, Cemex, Nestlé, Siemens, SUEZ, Tesco, and Willmott Dixon.

Introduction

The Aldersgate Group welcomed the recognition in the Spending Review that delivering on net zero will support long-term economic growth and better living standards. We urge the government to maintain ambition and look forward to seeing further detail on the Warm Homes Plan, GB Energy, planning reform, and the Carbon Budget Delivery & Growth Plan. Our business members think that ambitious environmental policy makes clear economic sense for the UK: the government is right to place clean energy and the transition to a low-carbon economy at the heart of its growth strategy. However, the importance of nature restoration, the circular economy and land use to our economy were not sufficiently reflected in Defra's settlement. 55% of global GDP is moderately or highly dependent on nature² and our growth sectors are dependent on ecosystem services like ample high-quality water. We welcome the opportunity to continue to work with the government on delivering environmentally sustainable growth, including through the Net Zero Council Delivery Group and the Council for Sustainable Business.

Following a welcome Spending Review and recognising the challenging fiscal context, this submission is focused on one urgent priority area: the **electrification of heavy industry and manufacturing**.

Futureproofing industrial growth through targeted support for electrification

Industrial electrification was a previously overlooked policy area and this government's attention to the topic is hugely welcome. Existing and newly announced schemes, namely the British Industry Supercharger and the British Industry Competitiveness Scheme, help address competitiveness challenges for UK industry. However, these schemes are not sufficient or designed to make electrification viable for most industrial applications.

¹ Individual recommendations cannot be attributed to any single member and the Aldersgate Group takes full responsibility for the views expressed.

² WEF (2020) [Nature Risk Rising: Why the Crisis Engulfing Nature Matters for Business and the Economy](#)

We recommend that the government develops an electrification business model to support the competitiveness and decarbonisation of manufacturing and heavy industry. This will ensure UK industry is future-proofed against energy insecurity, ready to meet the opportunities of growing low-carbon markets and increase attractiveness for investment. We urge the government to act without delay to enable widespread electrification, unlocking both environmental and economic benefits.

The electrification of industry is important

UK foundation and manufacturing sectors are economically vital for growth and economic security, as recognised in the government's Industrial Strategy. Manufacturing alone accounts for £220 billion in output, provides 2.6 million jobs with wages 8% above the economy-wide average, and contributes 42% of the UK's total exports, 48% of UK R&D, and 17% of total business investment.³

The future for many industrial businesses is powered by electricity from clean energy sources.⁴ Industrial electrification is crucial to meet the government's environmentally sustainable growth ambitions.⁵

- **Productivity and efficiency gains:** For those able to electrify, potential benefits include efficiency and productivity gains, opportunities to upgrade production systems, and the implementation of new digital and automated processes.^{6 7} For example, industrial heat pumps, the electric alternative to fossil fuel-based boilers, can reduce final energy use by 15-35%.⁸
- **Market and export opportunity:** Demand for low-carbon goods is rising, driven by increasing corporate commitments, evolving consumer preferences, and regulations on embodied or whole-life carbon. This is the case in the EU, the UK's largest trading partner, where significant low-carbon product regulations are under development. Electrification offers UK businesses the opportunity to capture some of this growing market.
- **Economic and energy security:** Electrification offers businesses a long-term pathway to reduce exposure to volatile international fossil fuel prices, by relying on increasingly domestic and renewable energy production. Analysis by the Energy and Climate Intelligence Unit (ECIU) found that UK industry faced £29 billion in additional energy costs between 2021 and 2024 compared to 2016–2019, following the energy crisis prompted by the war in Ukraine.⁹ These high

³ Make UK (2025). [UK Manufacturing: The Facts 2025](#).

⁴ Fraunhofer, I.S.I., 2025. [Direct electrification of industrial process heat, An assessment of technologies, potentials and future prospects for the EU](#).

⁵ Climate Change Committee, 2025, [The Seventh Carbon Budget: Advice for the UK Government](#)

⁶ Rosenow, et al., 2025. [The heat is on: Policy solutions for industrial electrification](#).

⁷ Green Alliance, 2025. [Plugging into industrial electrification](#).

⁸ IEA, The Future of Heat Pumps, Paris, 2022.

⁹ ECIU (2025) [Industrial Energy Costs in the Gas Crisis](#).

costs had a significant impact on industrial output, with real output in energy-intensive sectors falling by 33.6% over the same period.¹⁰

- **Easing regulatory compliance:** electrification reduces exposure to the carbon price. Under the UK Emissions Trading Scheme, the carbon price is expected to rise in line with the net zero-aligned cap and potential future linkages with EU schemes. By decarbonising through electrification, businesses can significantly reduce future carbon costs, whether via the UK carbon market or other jurisdictional carbon taxes at the border.
- **Decarbonisation:** The Climate Change Committee has found that electrification is a cost-effective decarbonisation route for much of industry and could deliver 57% of the emissions reductions required by 2040, aligned with the UK's net zero pathway.¹¹ Industry represents 12% of the UK's total greenhouse gas emissions in 2023.¹² Only around 3% of industrial process heat is currently electrified.¹³

The case for government intervention is strong

- **Barriers to electrification are too high for many businesses:** The primary barrier to electrifying the UK's industrial and manufacturing sectors is the high cost of industrial electricity compared to both international competitors and domestic gas prices. High electricity costs - caused by gas setting the UK wholesale price of electricity most of the time and policy costs predominantly levied on electricity bills - are preventing businesses exploring electrification and are driving investment to countries with more competitive prices.¹⁴ Efficiency benefits and exposure to the carbon price are not sufficient to make electrification economically attractive for businesses competing for global investment.
- **UK businesses need a level playing field to enable international competitiveness:** In addition to their comparatively lower electricity prices, some EU member states provide more comprehensive support. For example, Germany offers generous exemptions for vulnerable consumers to maintain lower electricity costs and has introduced a Carbon Contract for Difference (Climate Protection Contract) that subsidises the operating cost gap between low-carbon and fossil fuel-based installations over 15 years.¹⁵ As part of its Clean Industrial Deal, the EU is also developing a temporary discount scheme to promote electrification and industrial competitiveness.
- **System benefits:** the electrification of UK industry offers a strong demand signal to drive further investment in renewable power generation, storage and related

¹⁰ ONS (2025) [The impact of higher energy costs on UK businesses: 2021 to 2024.](#)

¹¹ Climate Change Committee, 2025, [The Seventh Carbon Budget: Advice for the UK Government](#)

¹² third highest-emitting sector

¹³ Rosenow, et al., 2025. [The heat is on: Policy solutions for industrial electrification.](#)

¹⁴ Energy UK, 2025. [Reducing non-domestic electricity prices to drive economic growth.](#)

¹⁵ Rosenow, et al., 2025. [The heat is on: Policy solutions for industrial electrification.](#)

infrastructure; can contribute to demand-side flexibility, supporting a stable grid and reducing overall system costs; and supports co-benefits for air quality and public health.¹⁶ The National Infrastructure Commission has highlighted that heavy industry could play a significant role in managing energy system flexibility, with demand-side flexibility potentially reducing distribution network investment costs by around 15%, cumulatively saving £6.7–7.9 billion by 2050.¹⁷

Targeted financial support would help unlocked industrial transition

We urge the government to introduce targeted support for industrial electrification to make the switch to electric technologies an economically rational choice. Such support would accelerate the uptake of electric heating technologies across manufacturing and industry at the pace and scale required for a net zero pathway.

While this intervention should primarily focus on the manufacturing and industrial sectors, we recognise the broader potential for accelerating non-domestic electrification. A well-designed scheme should therefore be designed in such a way that it can be expanded or adapted over time to support other suitable sectors. A targeted electrification scheme should provide businesses with the investment certainty needed to adopt efficient electrified technologies. It should be simple for firms, including SMEs, to access and straightforward for government to administer.

Wider considerations for success

The government should ensure that an overall enabling policy environment is in place to support this industrial transition,¹⁸ including:

- **Access to finance:** upfront capital costs can be high. The government should consider introducing a successor to the Industrial Energy Transformation Fund (IETF), for example, a blended finance model in partnership with the National Wealth Fund, to help unlock private investment in electrification projects.
- **Demand-side measures:** greater demand for low-carbon products can support investment certainty. We welcomed the recent DESNZ consultation exploring a range of policies to grow this market and recommend an ambitious approach.¹⁹
- **Access to the grid:** Ensuring adequate grid capacity and timely grid connections is therefore essential to enable industrial electrification at pace. A recent Aldersgate Group and UKERC brief modelled a high industrial electrification scenario and found that, without additional investment, the distribution network

¹⁶ H Plumptre, October 2024. [Green Alliance briefing, 'Clearing the air: a cleaner, healthier future for the UK's steel industry, communities and workers'](#)

¹⁷ National Infrastructure Commission, 2025, [Electricity distribution networks: creating capacity for the future](#)

¹⁸ Aldersgate Group, 2025. [Next steps for UK industrial decarbonisation policy in 2025](#)

¹⁹ Aldersgate Group, 2025. [Response to DESNZ consultation on Growing the market for low carbon industrial products: policy framework.](#)

becomes significantly constrained from 2030 onwards.²⁰ Without complementary infrastructure development, industrial sites in many regions may be unable to access electricity.

²⁰ Aldersgate Group and UKERC, 2025, [Electrifying industry and distribution networks](#).