

## The Aldersgate Group response to the Business and Trade Committee's inquiry into the UK's approach to industrial policy

January 2024

### Background

The Aldersgate Group represents an alliance of major businesses, academic institutions and civil society organisations, driving action for a competitive and environmentally sustainable UK economy.<sup>1</sup> Our corporate members represent all major sectors of the economy, such as Associated British Ports, Aviva Investors, BT, CEMEX, the John Lewis Partnership, Johnson Matthey, Michelin, Nestlé, Siemens, SUEZ, Tesco, and Willmott Dixon. They believe that ambitious environmental policies make clear economic sense for the UK, and we work closely with our members when developing our independent policy positions.

The Aldersgate Group has completed a significant body of work on UK industry and the low-carbon energy sector, including recent reports:

- [\*Keeping pace in the global race to Net Zero – responding to the Inflation Reduction Act,\*](#)
- [\*A zero-carbon power grid and the electrification of heavy industry: how to deliver on a twin challenge,\*](#)
- [\*Economic benefits of industrial decarbonisation – a low carbon industrial future for the UK,\*](#)
- [\*The missing link: establishing strong UK supply chains for low carbon industrial products.\*](#)

### Response summary

- The UK has strengths and competitive advantages to build on. This includes emerging low-carbon sectors and innovation, as well as the UK's foundation industries that play a key role across supply chains in the UK and represent 21% of UK exports.
- A globally competitive environment, coupled with a lack of certainty, and policy barriers in the UK are placing UK industry strengths and opportunities at risk. For example, without further policy support for heavy industrial decarbonisation, the sector's contribution could reduce by £224billion or 5.9% total GVA in 2050 and introduce supply chain vulnerabilities.
- The UK urgently needs to set out a response with an industrial strategy placing decarbonisation at its heart and articulated government objectives. The Government should work in partnership with industry, supply chains, the energy sector, and institutional investors to set out key interventions and objectives. At a minimum, the strategy should provide long-term vision and certainty for the UK's low-carbon industrial growth, with joined-up policy, public investment, and regulation to build an

---

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

enabling environment with confidence for businesses and investors to invest alongside. This should include clarity on the decarbonisation pathways for industry and manufacturing sectors, as well as dispersed sites, and support for late-stage research and development towards the commercial application of new low-carbon technologies.

## 1) The UK's strengths and competitive advantages

The UK has industry strengths and competitive advantages to build on, and as set out in Mission Zero, "Net Zero is the economic opportunity of the 21<sup>st</sup> century".<sup>2</sup> This inquiry submission focuses on the UK's foundation industries and examples across sectors for the transition to net zero. Where industries may not have a global comparative advantage, it remains important to consider the potentially strategic role they play in supply chains for the UK's leading sectors and other spill-over benefits.

Foundation industries represent 21% of the UK's exports, contributing £152bn in Gross Value Added (GVA) to the economy and supporting over 1.4m jobs across the UK.<sup>3</sup> These industries are essential to the supply chains of critical sectors - for example, green steel for wind turbines, chemicals for battery storage and glass for solar power technology.

The Revealed Comparative Advantage (RVA) index is one metric available to identify comparative advantage. Sectors are defined as having a comparative advantage if they export more as a percent of total UK exports than the global sector does as a percentage of total global exports. RVA above 1.00 indicates a sector where the UK is better at exporting than the rest of the world, and the higher the number, the stronger the RVA. In a study for Aldersgate Group, WPI Economics identified UK comparative advantages in heavy industries listed in Table 1.<sup>4</sup>

---

<sup>2</sup> Skidmore, (HM Government 2023), [Mission Zero: Independent Review of Net Zero](#)

<sup>3</sup> WPI Economics for the Aldersgate Group (2023) [Economic Benefits of Industrial Decarbonisation – A Low Carbon Industrial Future for the UK](#)

<sup>4</sup> WPI Economics for the Aldersgate Group (2023) [Economic Benefits of Industrial Decarbonisation – A Low Carbon Industrial Future for the UK](#)

**Table 1. Revealed Comparative Advantage Study of UK Heavy Industry Sectors**

Sector	RVA
Alcoholic beverages	4.15
Power-generating machinery and equipment	3.31
Other transport equipment	2.26
Non-ferrous metals	1.74
Miscellaneous manufactured articles n.e.s.	1.40
Professional scientific and controlling instruments and apparatus, n.e.s.	1.28
Road vehicles (including air-cushion vehicles)	1.22
Chemicals and related products, n.e.s.	1.20
Miscellaneous edible products and preparations	1.09
Non-alcoholic beverages, n.e.s.	1.04
General industrial machinery and equipment, n.e.s., and machine parts, n.e.s.	1.04
Dairy products and bird's eggs	1.02
Machinery specialised for particular industries	0.92

Source: WPI Economics<sup>5</sup>

The UK has long been considered a leader in fighting climate change. In 2022, 41% of UK energy came from renewable sources and despite global competition, the UK remains the fourth most attractive country in the world for renewables investment.<sup>6</sup> The turnover of the UK's low-carbon economy grew by 30.8% in 2020-21, generating £54.4bn.<sup>7</sup>

The UK's strengths in low-carbon technology innovation present opportunities for growth, decarbonisation and increasing supply chain security. For example, businesses in emerging sectors such as hydrogen and carbon capture, utilisation and storage (CCUS) turnover £1.7bn across the UK and are expected to grow at a rate of 20% per year.<sup>8</sup> The UK is also well positioned to displace imports of solar panels with alternatives to crystallised silicon panels that dominate the current market. UK solar panel manufacturer OxfordPV has developed the world's most efficient solar cell, which, unlike traditional panels, can be made into a thin, transparent film and applied to uneven surfaces and windows.<sup>9</sup> This reduces the need for vast areas of land for solar farms and unlocks a new portion of the consumer market previously deterred by the appearance of solar panels. These cells are based on perovskite, the most abundant mineral on Earth, which is "affordable, sustainable and eventually could replace silicon entirely".<sup>10</sup> With support to scale up, the UK glass sector has an enormous opportunity to tap into.

<sup>5</sup> WPI Economics, on behalf of Aldersgate Group (2023), [Keeping pace in the global race to net zero: Responding to the Inflation Reduction Act](#)

<sup>6</sup> George, (Edie 2023), [UK remains fourth most attractive country for renewables investment, despite mounting global competition](#)

<sup>7</sup> ONS (2023), [Low carbon and renewable energy economy, UK: 2021](#)

<sup>8</sup> WPI Economics for the Aldersgate Group (2023) [Economic Benefits of Industrial Decarbonisation – A Low Carbon Industrial Future for the UK](#)

<sup>9</sup> Aldersgate Group (2022), [The Missing Link: Establishing Strong UK supply chains for low carbon industrial products](#)

<sup>10</sup> Oxford PV (2023), [Oxford PV sets new solar cell world record](#)

## 2) Risks to the UK's competitiveness and example policy barriers

**In a globally competitive environment, UK strengths and comparative advantages are at risk.** The 2022 US Inflation Reduction Act (IRA) commits much attention and funding (\$369bn in subsidies over a decade) to reshoring supply chains and manufacturing, incentivising significant investment from the private sector.<sup>11</sup> The EU has responded with the Green Deal Industrial Plan (GDIA) and the Net Zero Industry Act.

Without further policy support for industrial decarbonisation, the heavy industry sector's contribution to the UK's economy is at risk, potentially wiping out over £224bn or 5.9% total GVA in 2050.<sup>12</sup>

The global competitive context is coupled with policy uncertainty or barriers in the UK, contributing to a lack of investor confidence. Example risks and policy barriers are described below to illustrate the breadth of relevant policy levers that can act as enablers or barriers if unaddressed, to low-carbon industry growth.

### **Energy**

Decarbonisation presents a significant opportunity for the UK manufacturing sector to deliver low-carbon materials, products and services. However, the UK is forecast to have the slowest growth in low-carbon electricity generation between now and 2030. France and Germany will have more than double the installed clean energy capacity of the UK per capita by 2030.<sup>13</sup>

Example barriers to address and suggested solutions:

- **Planning:** 40% of all infrastructure projects have been delayed at the planning stage since 2017.<sup>14</sup> Hornsea 4, a large-scale offshore wind farm approved in July 2023, was the first major offshore project approved since 2017. Barriers preventing the consenting and construction of energy infrastructure should be removed whilst ensuring natural habitats are protected. Industry needs clarity and ease to ensure their access to grid infrastructure for electrification.
- **Cost:** operational costs deter industrial manufacturers from electrifying processes, such as transitioning from Blast Furnaces to Electric Arc Furnaces. applying carbon capture technology or installing on-site biomethane or green hydrogen production. As a result, progress on industrial decarbonisation is severely off track to meet the Government's legally binding targets.<sup>15</sup>

### **Transport**

Road vehicles became the UK's third most exported good at the end of 2022, around 78% of finished vehicles exported, with a value of £31.8bn.<sup>16</sup> SMMT estimates the transition to electric vehicles (EVs) could present aggregate opportunities worth £106bn between now

<sup>11</sup> Energy UK (2023), [Funding the Future](#)

<sup>12</sup> WPI Economics for the Aldersgate Group (2023) [Economic Benefits of Industrial Decarbonisation – A Low Carbon Industrial Future for the UK](#)

<sup>13</sup> Energy UK (2023), [The Clean Growth Gap](#)

<sup>14</sup> Royal Town Planning Institute (Accessed: Jan 2024) [Planning reform: Infrastructure planning](#)

<sup>15</sup> Climate Change Committee (2023), [2023 Progress report to parliament](#)

<sup>16</sup> SMMT (2023), [Open Roads: Driving Britain's global automotive trade](#)

and 2030.<sup>17</sup> In this sector, several key barriers will need to be effectively addressed, which include:

- **Industrial energy prices:** battery manufacturers have declined to invest in the UK at a sufficient scale, owing to high electricity prices (among other factors), which are on average double those in the European Union.<sup>18</sup> Competitiveness of industrial electricity prices could be improved by moving policy and network charges from electricity bills to general taxation and supporting industry through Power Purchase Agreements (PPAs) and financial incentives for electrification.
- **Infrastructure:** in the North West of England, the number of EVs to every charger has almost doubled between 2021 and 2021, from 49 to 85.<sup>19</sup> The delivery of charge points must become a national infrastructure priority, led by central Government, with increased levels of coordination between local authorities. Currently, investors in public charging infrastructure must understand the different costs and planning requirements of different local authorities, creating a barrier to infrastructure development.

### **Heat and buildings**

The rate of heat pump installation needs to accelerate almost tenfold within the next four years to meet the government target of 600,000 a year by 2028.<sup>20 21</sup> To achieve this, it will be important to address the following barriers:

- **Low demand:** due to the cost of switching and poor public awareness, UK demand for low-carbon home heating is amongst the lowest in Europe.<sup>22</sup> Potential solutions include the launch of an independent, impartial, and central Energy Advice Service to help consumers understand and navigate relevant energy efficiency retrofits and upgrades.<sup>23</sup>
- **Loss of incentives:** landlords cancelled plans to invest in energy efficiency measures after the recent decision to scrap requirements for a minimum EPC C energy efficiency level in all rental properties by 2028.<sup>24</sup> Reforms to make the EPC regime fit for purpose and regulation for Minimum Energy Efficiency Standards (MEES) to require all homes to be EPC C by 2035 would support demand creation - as seen in the automotive sector with the phase out of petrol and diesel cars leading to innovation and investment in EVs across major European manufacturers.<sup>25</sup>

---

<sup>17</sup> The Society of Motor Manufacturers and Traders (2023), [Back our five pledges and secure £106 billion EV prize](#)

<sup>18</sup> Middleton, (Fleetworld 2022), [Eurocell chooses Netherlands not UK for first European gigafactory](#)

<sup>19</sup> The Times (2023), [Electric car infrastructure creaks under demand](#)

<sup>20</sup> MCS Foundation (2023), [Record number of heat pumps installed in UK homes in 2023](#)

<sup>21</sup> Parliamentary Office of Science and Technology (2023), [Heat Pumps](#).

<sup>22</sup> Heat Pump Association (2020), [Retrofitting Homes for Net Zero Heating](#)

<sup>23</sup> Energy Saving Trust (2024), [National or local retrofit advice? To cut bills, carbon and improve energy efficiency, we need both.](#)

<sup>24</sup> Lloyds Banking Group (2023), [Decarbonising the UK's homes: A housing stocktake.](#)

<sup>25</sup> CCC (2023), [Reform of domestic EPC rating metrics to support delivery of Net Zero](#)

### 3) The case for industrial strategy

**UK progress towards net zero has stalled, as other nations' ambitions have dramatically increased.** The Climate Change Committee's 2023 Progress Report to Parliament suggests the UK is missing its climate targets on nearly every front.<sup>26</sup> The US, meanwhile, has transformed itself in minimal time into a climate leader.<sup>27</sup>

The UK's spending to reduce emissions as a percentage of GDP is significantly lower than Germany, France, the US, the EU, and even the World Bank developed economies benchmark, standing at 1.2% of GDP.<sup>28</sup> Growth in the UK's low-carbon power generation capacity is set to fall behind all other major global economies for the rest of the decade.<sup>29</sup> In 2022, UK investment in the energy transition fell by 10%, whereas investment increased by 17% in Germany and 24% in the US.<sup>30</sup>

Providing stimulus and crowding in private finance can grow the economy, create jobs, and lower public sector debt relative to GDP. The IMF has found that countries ensuring high-quality public investment see a fiscal multiplier greater than one.<sup>31</sup> For low-carbon spending, the average multiplier over five years is 1.2.<sup>32</sup> McKinsey found that for the average European economy, €2-3 of GVA is generated for every €1 spent on clean energy.<sup>33</sup> The US IRA is predicted to create as many as 9m jobs over the next decade,<sup>34</sup> more than five times the number of people currently employed by the fossil fuels sector.<sup>35</sup> IPPR analysis finds that the UK economy would have seen an additional £562bn in public and private investment in the years 2006-2021 if investment had remained average for a G7 nation.<sup>36</sup>

The UK is facing difficulties ensuring confidence amongst investors. The UK lags behind other countries in terms of business investment and Foreign Direct Investment (FDI) has fallen.<sup>37,38</sup> *Mission Zero* found that businesses and investors in the UK are "frustrated by a lack of long-term thinking, siloed behaviour from government departments, and uncertainty

---

<sup>26</sup> The CCC (2023), [2023 Progress Report to Parliament](#)

<sup>27</sup> TIME (2023), [The IRA Is Our Best Shot at Tackling Climate Change—But Only If We Don't Squander It](#)

<sup>28</sup> Confederation of British Industry (2023), [Green Growth: the UK is falling behind.](#)

<sup>29</sup> Energy UK (2023), [Funding the Future](#)

<sup>30</sup> The Guardian (27 April 2023), [UK investment in clean energy transition falls 10%, bucking global trend.](#)

<sup>31</sup> International Monetary Fund (2020), [The Fiscal Multiplier of Public Investment: The Role of Corporate Balance Sheet](#)

<sup>32</sup> International Monetary Fund (2021), [Building Back Better: How Big Are Green Spending Multipliers?](#)

<sup>33</sup> McKinsey & Company (2020), [How a post-pandemic stimulus can both create jobs and help the climate](#)

<sup>34</sup> BlueGreen Alliance (2022), [9 million good jobs from climate action: The Inflation Reduction Act](#)

<sup>35</sup> Credit Suisse (2023), [US Inflation Reduction Act: A tipping point in climate action](#)

<sup>36</sup> IPPR (2022), [UK business investment fell to lowest rate in the G7 after corporation tax cut to 19 per cent, IPPR finds](#)

<sup>37</sup> IPPR (2022), [UK business investment fell to lowest rate in the G7 after corporation tax cut to 19 per cent, IPPR finds](#)

<sup>38</sup> National Institute Economic Review (2019), [The disappointing picture of business investment](#)



over the length of funding commitments”.<sup>39</sup> Meanwhile, international industrial policy interventions are further increasing attractiveness and incentives to invest outside the UK.

**To maintain and increase industry growth, public investment and an enabling policy environment play a key role in providing confidence and leveraging private investment.** Where other countries are offering stable, detailed policy frameworks, the UK offers targets with little detail on implementation and strategies developed in isolation, introducing contradictions or leaving policy barriers unaddressed.

The US IRA and EU GDIP are enshrined in a decade-long framework. IRA tax credits are available over 2023-32, providing certainty for investors. Supply side credits commence when a project commences, meaning that a project which comes to life in 2031 could well receive tax credits to 2041. For the state, the benefit is clear, as luring companies now has allowed the IRA's qualifying criteria to become increasingly stringent over the decade as it looks to recoup the foregone revenue of the tax credits.

Where other countries are offering cross-cutting policies that affect the entire economy, the UK has preferred short-term, voluntary sector-led deals. The US is joining up clean energy investment with welfare provision and the EU is providing an ambitious long-term trajectory through the Market Stability Reserve in the EU's Emission Trading Scheme (ETS). The UK's approach to date is not sufficient as market signals to incentivise investment, and a more long-term, holistic approach to industrial strategy is needed.

#### 4) Economic Security

The energy and cost of living crisis following Russia's invasion of Ukraine highlights the link between energy security and the economy.<sup>40</sup> Delivering the net zero economy is an opportunity to address endemic challenges at the heart of the UK economy to achieve the growth and security the Government desires. To deliver a decarbonised power system by 2035, the UK needs to install 200GW of low-carbon generation and storage infrastructure in the next 12 years. Unprecedented levels of deployment require decisive government policy to further accelerate investment and enable industrial electrification and growth. Consideration will need to be given to ensure electrification of industry is made economically viable, linking to energy policy or energy market reform.

**Our approach to net zero must include a focus on industry growth, training, productivity and wage growth.** 28% of heavy industry jobs in the North of England alone, presenting opportunities to address challenges around regional inequality. Stagnant productivity and a tight labour market, which over half a million people have left since the COVID-19 pandemic, are also key economic challenges to address.<sup>41 42 43 44</sup> The Green

<sup>39</sup> Skidmore, (HM Government 2023), [Mission Zero: Independent Review of Net Zero](#)

<sup>40</sup> IMF (2023), [The Energy Price Shock – Impact, Policy Responses, and Reform Options: United Kingdom](#).

<sup>41</sup> Office for National Statistics (2023), [Labour Productivity](#)

<sup>42</sup> Office for National Statistics (2023) [Average weekly earnings in Great Britain: April 2023](#)

<sup>43</sup> Brandily, Distefano, Shah, Thwaites and Valero, (Resolution Foundation 2023), [Beyond Boosterism: Realigning the policy ecosystem to unleash private investment for sustainable growth](#)

<sup>44</sup> Green Alliance and Catch22 (2023), [Giving the green light: creating green jobs for all](#)

Skills Taskforce found that one in five jobs will need to be provided with new skills, but fewer people were receiving workplace training in 2020 than in 2000.<sup>45</sup> <sup>46</sup> UK employers spend only half on employee training than the average EU employer.<sup>47</sup> The number of jobs in the economy is not the challenge, rather the quality of those jobs. Jobs in the supply chain for industrial electrification are typically better paid than average, 20% higher than the average median wage in the UK.<sup>48</sup> These jobs are in manufacturing, not services, with services presenting weaker productivity in comparison.<sup>49</sup>

Secure supply chains are important to consider for decarbonisation and economic security. According to a 2023 OECD report, “the development of secure and competitive supply chains in clean energy technologies is critical to ensure a resilient clean energy transition and energy/economic security”.<sup>50</sup> The UK’s low-carbon energy sector is import-dependent on many raw materials, such as critical minerals, steel, glass, and ceramics. Geographical or market concentrations in clean energy supply chains create bottleneck risks where material shortages, climate change and natural disasters, or policy decisions could disrupt clean energy supply chains. Boosting domestic supply chain resilience and circular economy initiatives can bring economic benefits with novel technology commercialisation, job creation and export opportunities.<sup>51</sup> For those imports that are not always possible to replace - for example, critical raw materials that the UK does not have access to, fostering open markets and developing strategic partnerships will be key.

## 5) Design, delivery and oversight of industrial policy

Long-term, stable, joined-up policy and a clear trajectory are required for investor confidence. The UK cannot compete with the scale of subsidy on offer in the EU or EU, rather the UK must identify its greatest strengths and act to bolster them through policy and investment. A new UK industrial strategy should build on strengths and opportunities in key sectors, services and R&D, enabling the UK to respond with agility to the competitive global context and build confidence following years of political instability and policy unpredictability.

The UK may not have to pick specific winners, but it certainly must set out a vision and clear trajectory that goes well beyond a parliamentary term. Institutional frameworks should be put in place to support long-term delivery and manage the potential risks of political instability.

---

<sup>45</sup> HM Government (2021), [Green Jobs Taskforce Report](#)

<sup>46</sup> Cominetti, Costa, Eyles, Henehan and McNally – The Resolution Foundation (2022), [Train in Vain? Skills, tasks, and training in the UK labour market.](#)

<sup>47</sup> Learning and Work Institute (2022), [Employer investment in training plummets 28% since 2005, putting the government’s ambition of a high skill, high wage economy at risk, report warns](#)

<sup>48</sup> Office for National Statistics (2023), [Earnings and hours worked, industry by four-digit SIC: ASHE Table 16](#)

<sup>49</sup> OECD – Economics Department Working Paper No.1531 (2018), [Can productivity still grow in service-based economies? Literature overview and preliminary evidence from OECD countries](#)

<sup>50</sup> The Organisation for Economic Co-operation and Development (2023), [Strengthening Clean Energy Supply Chains for Decarbonisation and Economic Security](#)

<sup>51</sup> Aldersgate Group (2022), [The Missing Link: Establishing Strong UK supply chains for low carbon industrial products](#)



For example, this could include roles for the UK Infrastructure Bank (UKIB) which serves a cross-cutting function in blended finance and the Catapults, working across sectors to spur innovation.

**A cross-sectoral Industrial Strategy should place decarbonisation at its heart and set out the Government's objectives for heavy industrial decarbonisation alongside the key interventions needed to deliver them.** This should be developed in partnership with heavy industry, their supply chains, the energy sector and institutional investors including the UKIB forming a bridge between corporates, OEMs and manufacturers to capture the whole supply chain. At a minimum, this should include:

- **A long-term vision for the UK's green industrial growth**, responding to the global competitive context. This vision should be supported by a **joined-up policy approach** to ensure the policy and regulatory environment is acting as an enabler for successful delivery. **Taking a systems approach, across whole value chains, will be essential to success.** For example, consideration should be given to a critical mineral strategy, to adapting tax policy for the low-carbon economy to incentivise green investment and recoup subsidies with revenue from growing low-carbon industries, planning, carbon pricing with an ambitious approach to revision of the UK Emissions Trading System (ETS) and linking to the EU scheme, skills, industrial electricity prices, incentives for market uptake and demand.
- **Clarity on the decarbonisation pathways for industry and manufacturing sectors**, detailing how, where, and by whom different fuels and technologies (like electrification, hydrogen, and CCUS) will be used across the economy. This should include the development of business models and financial incentives, learning from examples such as Contracts for Difference.
- **A clear roadmap for decarbonising dispersed sites**, which make up around 50% of the UK's industrial emissions. This should involve working with local authorities and business partnerships to ensure that existing local supply chains, skills centres, and areas of comparative advantage are maximised. Planning and permitting guidance are needed for local authorities.
- **Support for later-stage activities** towards the commercialisation of new green technologies. Despite world-leading research capabilities, the UK has long faced challenges in the later stages of technology development and commercialisation, often capital intensive and perceived as higher risk for private investment. The Advanced Propulsion Centre's Automotive Transformation Fund uses a model that supports R&D and capital investments such as gigafactories, an approach that serves as a potential example to expand or replicate in other sectors.
- **In designing an industrial strategy, Government should convene an industrial strategy taskforce.** This can assess areas of vulnerability in UK supply chains in the face of international developments, as well as regional comparative advantages and areas of UK strength in R&D, innovation, and specific sectors of the economy.