

# Reindustrialising Britain

The case for industrial zones



**ONWARD** ➤

Zachary Spiro

## About Onward

Onward's mission is to develop bold and practical ideas to boost economic opportunity, build national resilience, and strengthen communities across all parts of the United Kingdom. We are not affiliated to any party but believe in mainstream conservatism. Our vision is to address the needs of the whole country: young and old, urban and rural, for all communities across the UK – particularly places that have too often felt neglected or ignored by Westminster.

We believe in an optimistic conservatism that is truly national – one that recognises the value of markets, supported by a streamlined state that is active not absent. We are unapologetic about standing up to vested interests, putting power closer to people, and supporting the hardworking and aspirational.

## Thanks

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## About the author

Zachary Spiro is an Associate Director at Flint Global, where he specialises in policy analysis and advisory services, and is a Policy Fellow of Onward. He is a former parliamentary researcher, where he advised the Chairs of the Public Accounts and Liaison Committees, and has worked on political campaigns.

# Contents

Foreword - Lord Houchen, Mayor of Tees Valley	4.
Executive Summary	5.
Table of Recommendations	7.
Introduction	8.
Addressing the Challenge of De-industrialisation	13.
The Governance of Industrial Zones	15.
Removing Regulatory Barriers in Industrial Zones	23.
Supplying Energy to Industrial Zones	34.
Conclusion	38.
Endnotes	39.

*“Any control which fatally hampered or handicapped industry would, in any Western nation, and especially in one so highly industrialised and so dependent on manufacture as Great Britain, deal a blow of the gravest character to the national existence”*

Royal Commission on the Distribution of the Industrial Population, 1940<sup>1</sup>

## Foreword

The Tees Valley has a stronger link to British manufacturing than most. Since the Industrial Revolution, Teesside has been home to chemicals, manufacturers, materials and energy firms and, of course, British Steel's manufacturing hub in Skinningrove.

Despite this proud history, industry in Britain has, for many years, been competing with one arm tied behind its back. As shown in this excellent paper, ministers spent decades trying to direct industry away from the locations that made the most sense for businesses. In recent years, the additional costs and levies placed on industry has made our energy the most expensive in Europe, a fact I am only too familiar with from speaking to investors and business owners in Teesside.

Addressing this will require bold solutions, and I am glad that Onward has stepped forward to offer them in this timely report. From my work chairing the South Tees Development Corporation, I have seen first hand how the right systems of devolution can empower local leaders to deliver transformative investment, changing the fortunes of their local communities and the lives of the people in them. But as this paper sets out, local leadership can be frustrated by policy problems that only Westminster can alleviate - our creaking energy network and national over-regulation of construction being just two examples.

This paper, which builds on the lessons from the Tees Valley as well as the best examples from around the world, provides a valuable and welcome contribution to the continuing debate on how to revitalise British industry. I hope that the Government, the Conservative Opposition, and any political parties interested in that topic will give it careful reading.

***~ Lord Houchen of High Leven, Mayor of the Tees Valley***

## Executive Summary

Supporting British industry has been a priority for British Governments for decades. The UK Government had a Secretary of State for Industry continuously from 1970 until 2007. Theresa May revived the title in 2016, under the auspices of the Department for Business, Energy and Industrial Strategy. Since then, successive Governments have published a dizzying array of plans, policy and frameworks, with Labour ministers having issued their *Modern Industrial Strategy* in June of this year.

This prioritisation has stemmed from the long-term decline in British manufacturing and industrial sectors, with the share of UK GDP taken by manufacturing having more than halved in just the past 20 years. This has had a significant impact on geographic inequality, with the average London worker now 50% more productive than the average in former powerhouses of global industry like the Midlands.

This deindustrialisation is despite the UK being extraordinarily well-placed for a renaissance in capital intensive, R&D sectors - home to world-leading research, as well as being the third largest destination for venture capital investment on the planet, often raising more than twice as much as other major European countries.

Government attempts to address the problems have not worked because policymakers have been looking in the wrong places. Decades of policy failure have prevented British firms from having access to the core ingredients for industrial businesses: plentiful space for R&D and manufacturing, and cheap, reliable energy.

This failure has been significantly the result of choices by politicians. A system of national and local land control that intentionally rationed space for businesses to expand or invest, as well as politicians who frequently saw industry as merely a tool to tackle unemployment, rather than vital to Britain's economic performance. An unreformed system of environmental regulation that forces every developer to spend months undertaking detailed surveys and assessments, all with no guarantee of being able to build anything once they're done. Policymakers loading up businesses with policy and network costs to pay for green subsidies and grid expansion, even as prices soared above that of European comparators.

The combination of these forces has led to an extreme shortage of the infrastructure and built environment necessary to create the industries of the future. In just data centers and laboratories alone, the UK is missing approximately £60bn in capital investment relative to the US.

To revitalise Britain's industrial sectors, as well as prepare it for the technology sectors of the future such as life sciences and AI, there needs to be radical reform, to create new industrial zones with different governance, regulatory and energy arrangements to the rest of the country. These could be located all across the great cities and industrial areas of Britain, including the North and Midlands, as well as the Greater South East.

The specific proposals in this paper are all based on extending existing government policies, or robust international examples. They are:

- **Governance of Industrial Zones** - Creating new, geographically defined industrial zones, in which elected regional mayors, not local councils, will be responsible for local planning decisions and policy frameworks. Planning requirements set by local authorities will be removed. This will result in democratically elected mayors, representing an entire economic agglomeration, making policy decisions.
- **Regulation of Industrial Zones** - Within industrial zones, national regulations on environmental impact assessments, wildlife conservation and statutory consultation will either be significantly streamlined or removed. The capacity of groups to challenge the granting of permissions via Judicial Review will be significantly curtailed, as will authorities' abilities to slow down development through enforcement of noise complaints. This will significantly reduce the time, cost and legal uncertainty associated with development.
- **Energy Systems in Industrial Zones** - Development within industrial zones will be prioritised for grid connections, using powers the Government is currently introducing via the Planning and Infrastructure Bill. Localised energy generation will also be facilitated and encouraged, with industrial developers able to purchase behind-the-meter energy from nearby generators - including new gas generators - without needing to go through the grid and pay exorbitant policy and network costs. This will result in industrial sites inside industrial zones having faster, and far cheaper, access to energy.

## Table of Recommendations

Recommendation	International Case Study	UK Regulatory/ Legislative Base
<b>1</b> Create mayor-run development corporations for the purposes of reindustrialisation, covering a geographically-defined area of up to ~14sqkm	Hsinchu Science Park, Taiwan  JTC Corporation (formerly Jurong Town Corporation), Singapore	Exercise of powers under: <ul style="list-style-type: none"> <li>Local Government, Planning and Land Act 1980</li> <li>Planning and Compulsory Purchase Act 2004</li> <li>Levelling Up and Regeneration Act 2023</li> </ul>
<b>2</b> Existing local authority-set 'validation requirements' should be disapplied for development inside these development corporations	I-95 Reconstruction, USA	Exercise of powers under Levelling Up and Regeneration Act 2023
<b>3</b> Radically streamline or remove the environmental and habitat regulations which apply to development in industrial zones	Building Chips in America Act, USA	Amendments to <ul style="list-style-type: none"> <li>Town and Country Planning (Environmental Impact Assessment) Regulations 2017</li> <li>Habitats Regulations 2017</li> <li>Wildlife and Countryside Act 1981</li> <li>Environment Act 2021</li> </ul>
<b>4</b> Limit the possibility of judicial review of decisions for applications in these sites	I-95 Reconstruction, USA	New primary legislation and amendment to Civil Procedure Rules regarding Aarhus cost protection
<b>5</b> Increase the speed of development in Industrial Zones by expanding construction time through limiting noise complaints and expanding construction hours	<i>International examples, e.g. Vancouver</i>	Amendments to <ul style="list-style-type: none"> <li>Environmental Protection Act 1990</li> <li>Control of Pollution Act 1974</li> </ul>
<b>6</b> Reform and removal of statutory consultees	Building Canada Act, Canada	Amendment to Town and Country Planning (Development Management Procedure) (England) Order 2015



7	Support energy generation co-located with industry in industrial zones, where private networks can supply energy without grid or policy costs	Three Mile Island Refurbishment, USA	Derogation or amendment to Electricity Act 1989
8	Ministers should prioritise demand side connections in industrial zones using powers in the Planning and Infrastructure Bill	<i>Extension of current Government policy</i>	Exercise of powers under Planning and Infrastructure Bill (currently in Parliament)

## Introduction

*“[The UK] is just missing one thing. It is surprising – this is the largest AI ecosystem in the world without its own infrastructure”*

Jensen Huang, NVIDIA CEO<sup>2</sup>

*“The Nissan plant in Sunderland pays more for its electricity than any other Nissan plant in the world”*

Alan Johnson, Nissan SVP<sup>3</sup>

Industry is at the heart of Britain’s economic history. Britain was the birthplace of the Industrial Revolution and, by 1948, manufacturing constituted 36% of its GDP.<sup>4</sup>

However, the UK has not been immune to the global pattern of declining industrial and manufacturing sectors in developed countries since the end of the Second World War. By 1980, manufacturing had fallen to 27% of GDP. Since then, this process has continued and in the past 20 years alone, manufacturing has more than halved as a share of total UK economic activity.<sup>5</sup>

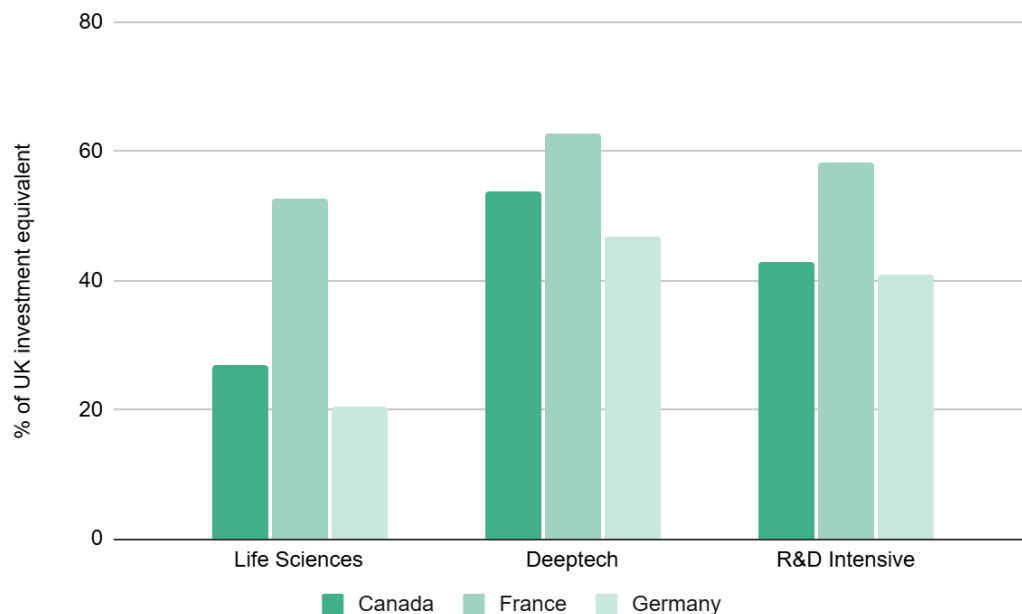
This fact alone does not constitute an argument for attempting to re-capture the industries of the past. Much of the industry that has moved to other countries – such as coal mining, or textile manufacturing – is not coming back and nor should it. The question is how the UK can be best placed for the next technological revolution, taking advantage of our world-leading R&D and venture capital ecosystem.

The opportunity for the UK to be a future technological powerhouse is immense. Across Europe, the UK alone accounts for more than one quarter of all venture capital fundraising, and 30% of all European venture capital investments.<sup>6</sup> In 2023, the UK became the third largest venture capital market in the world, overtaking India and seeing a higher share of global VC deals than Germany, France and Canada combined.<sup>7</sup>

In key sectors such as life sciences, deeptech and other R&D intensive sectors the UK often receives more than twice as much investment as major European countries.<sup>8</sup> In addition, the UK is the third-largest AI market in the world, with a tech sector worth more than \$1 trillion.<sup>9</sup>

**Figure 1: Late stage venture capital investment in other G7 countries as a % of UK in key sectors**

Source: British Business Bank<sup>10</sup>



The question is how the UK can make the most of this extraordinary potential.

### Policy failure is holding UK industry back

Currently, these growth industries are being hamstrung by a policy framework that does not provide the basic inputs that industry needs – rapid delivery of plentiful space for R&D and manufacturing, and cheap, reliable energy accompanied by rapid grid connections. These requirements are particularly pronounced for these promising UK industries – which “often [have] complex and costly infrastructure requirements, that often go above and beyond generic business R&D needs”.<sup>11</sup>

As a result of overlapping policy failures, the UK has an extreme shortage of the infrastructure and built environment necessary to create the industries of the future. In relation to data centres and laboratories alone, the UK has approximately £120bn in missing capital investment relative to the US – even adjusting for the latter’s larger size.<sup>12</sup> This total doesn’t include missing manufacturing or electricity infrastructure.

As is shown in this paper, these shortages of both industrial space and energy are the result of intentional and accidental policy choices in several key areas. These include – unsurprisingly – the UK’s land use framework, covering both the governance of land allocation and the national regulation of environmental protection, and the structure of the UK’s energy system.

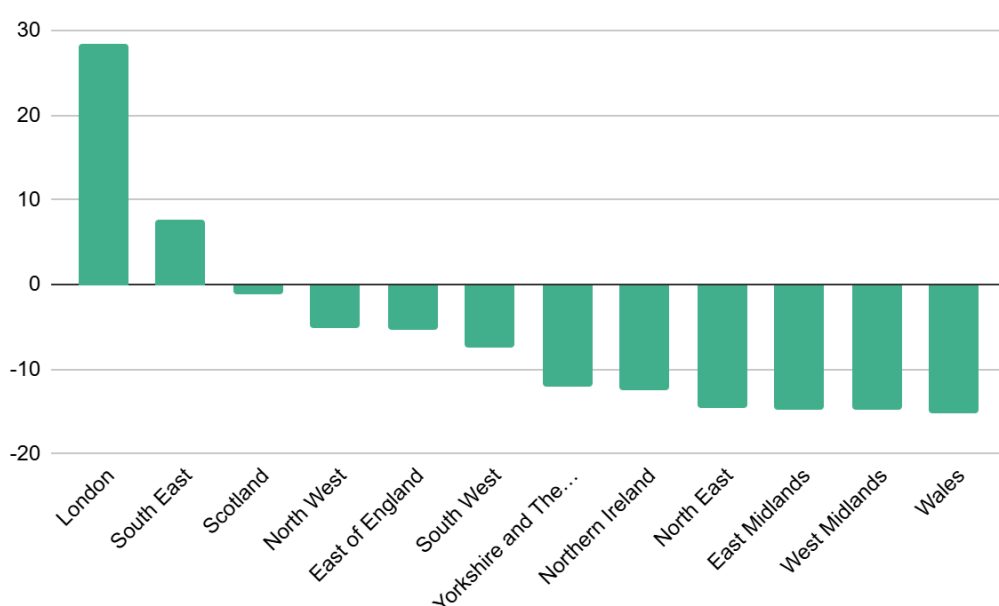
For example, politicians in the 1940s and onwards undertook a deliberate policy of dismantling the UK’s industrial base through rationing access to land. Over decades, politicians repeatedly defended these policies, explicitly arguing that they knew better than factory owners or investors where industrial resources and jobs should be placed. This mistaken denial of market

forces was repeated with energy and the UK's net zero policies so that today the difference between the UK's price of industrial energy and that of comparator countries is almost entirely down to policy or network costs.

These policy failures have had profound consequences for the UK's economic performance. De-industrialisation has contributed to the UK's North-South divide, with the average Londoner 50% more productive than the average worker in the Midlands. Nationally, this represents hundreds of billions of pounds in lost incomes and economic activity, as well as an enormous waste of opportunity for the people of these regions.

**Figure 2: Output per hour worked relative to UK average, 2023 (UK average = 0)**

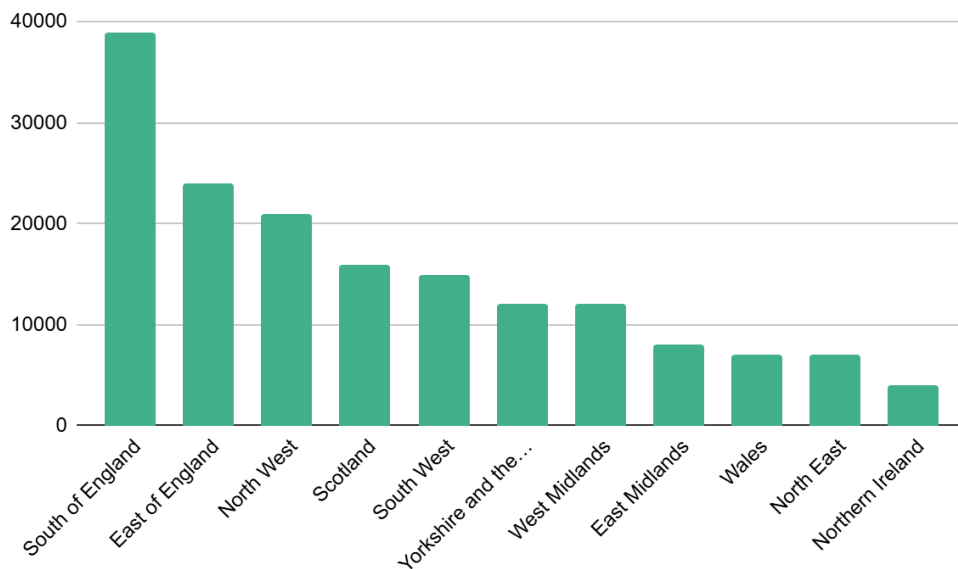
Source: ONS<sup>13</sup>



Expanding economic opportunity across the entire country means supporting the UK's industrial base. While London is at the heart of Britain's service economy, it was the Midlands<sup>14</sup> and the North<sup>15</sup> that powered Britain's industrial rise. Venture capital-backed jobs - meaning those in high growth companies backed by investors and skewed towards the industries of the future - in the UK are not just in the greater South East - the North West has approximately as many venture-backed jobs as in the East, the region containing Cambridge.

**Figure 3: Employment across venture capital backed businesses by nation and region (excluding London)**

Source: BVCA<sup>16</sup>



Creating the conditions for industrial expansion is therefore not just about delivering benefits to the regions which are already relatively affluent. By supporting economic activity across the country, reindustrialisation would help address the disparities central to the UK's underperformance, combatting the relatively low productivity of Britain's second cities and their lack of knowledge-based jobs.<sup>17</sup>

## 1. Addressing the challenge of de-industrialisation

The ambition of British reindustrialisation was articulated in the Labour Government's recent Industrial Strategy document,<sup>18</sup> which noted that “National economic growth will only come from increasing the productivity of places across the UK, many of which underperform relative to their international comparators.”

However, despite the Industrial Strategy document's positive language, there is very little by way of policy solutions to deal with the most pressing challenges to the UK's industrial expansion.

On energy, the document contains a limited set of reliefs from policy costs for certain categories of energy users, such as steel, ceramics and chemicals.<sup>19</sup> This alone will not lead to the construction of new energy sources. On planning, the Government relies on measures in the Planning and Infrastructure Bill<sup>20</sup>, which do not fundamentally reform the incentives or structures of the veto-ridden local planning system. Moreover, there are no substantial reforms planned to the paperwork-ridden and time-consuming system of environmental or wildlife protection, which even the UK's Office for Environmental Protection has described as “unnecessarily burdensome, causing expense and delay”.<sup>21</sup>

The ambition articulated in the Industrial Strategy, therefore, is short of the radical, wholesale reform that is needed. It does not adequately address the challenges faced by the UK as it enters the middle of the 21st century.

### Trade-offs and prioritisation are necessary to reindustrialise

Ultimately, the principle underpinning the approach advocated by this paper is that political reality requires prioritisation. There is broad agreement across the political spectrum that growing UK industry and jobs is very important - and therefore that also means that it is more important than some other issues.

For instance, in the specific locations where industrial and scientific infrastructure is urgently needed, this is more important than the presence of bats or wild birds in those locations. It is more important than forcing developers to undertake flood surveys on land that is not at flood risk. It is more often than not more important than complex archeological or heritage assessments. In addition, reindustrialisation is more important than granting local politicians, elected on extremely low turnouts, a veto power over British economic growth and innovation.

In particular, more industrial activity will require a rapid increase in the UK's energy usage. This paper is neutral on what the sources of that energy will be. However, constraints around the intermittency of renewables and the long timescales required to build nuclear power stations (averaging at more than a decade<sup>22</sup>) mean it is likely not feasible for cheap, market-driven energy supply for industrial use to be generated by carbon neutral sources alone.

### What does system reform look like?

To address these problems, the Government should create a new generation of industrial zones - geographically-specific areas across the country in which the governance, regulatory and energy

rules are changed or relaxed. These would have local mayors, rather than councils, act as planning authorities for development; radically reduce the scope of time-consuming national environmental and wildlife rules; and allow the construction of co-located energy generation which can supply power without needing to go via the national grid.

If done correctly, these would address three of the major causes of deindustrialisation: anti-development and uncertain planning rules, lengthy and time-consuming pre-construction administrative processes, and high energy prices driven by policy and network fees. Industrial zones would radically improve the investability, deliverability and finances of development in these areas, supporting expansion, economic revitalisation and jobs.

## 2. The Governance of Industrial Zones

In the United Kingdom, all development on privately held land is illegal unless granted explicit permission, linked to a specific proposal, by the state. This permission can be granted either by local authorities or national ministers in Westminster.

This discretionary system has led to a catastrophic shortage of economic infrastructure across the entire country, fundamentally caused by the refusal to permit market-led development except in narrow circumstances. As a result, the UK is suffering from a simultaneous shortage of laboratory space,<sup>23</sup> data centres,<sup>24</sup> logistics and industrial facilities,<sup>25</sup> and, of course, housing.<sup>26</sup>

This shortage is caused by the political incentives that are hard-wired into the architecture of these systems. The local system of planning permission is controlled by local councils, who are elected on tiny mandates<sup>27</sup>, with electoral wards of only a few thousand people.<sup>28</sup> As a result, councillors are highly influenced by small groups of motivated residents mobilising against development. Investment decisions by national politicians, as shown by HS2, are prone to gold-plating, negotiation with Parliament, and a rotating cast of ministerial decision-makers with different priorities.<sup>29</sup>

This system of control was explicitly conceived to grant powers to national and local politicians to constrain development and unwind the agglomeration of both industry and economic activity. Preventing economic growth isn't an accidental feature of national or local planning. It's the system doing what it's supposed to.

### Neither national nor local control of industrial land use has worked

The instincts of national politicians have historically been to grant themselves a veto over the formation of industrial clusters. The modern planning of industrial development in the UK began with the Barlow Commission into “*The Distribution of the Industrial Population*”, which commenced work in 1937, but did not publish its final report until 1940, after the start of the Second World War. The objective of the report was:

*“To inquire into the causes which have influenced the present geographical distribution of the industrial population of Great Britain... to consider what social, economic or strategic disadvantages arise from the concentration of industries or of the industrial population in large towns or in particular areas of the country; and to report what remedial measures if any should be taken in the national interest”*<sup>30</sup>

The Barlow Commission concluded – in response to concerns about the threat of aerial bombing, as well as environmental and health risks – that “*in the case of congested [industrial] conurbations, decentralisation or dispersal is the right policy, and... further growth of industry in them is to be discouraged*”.<sup>31</sup> A proposed National Industrial Board was to be tasked with this dispersal.

After the Second World War ended, this proposal was incorporated into section 14(4) of the Town and Country Planning Act 1947. The Barlow Commission's ideas were the genesis of this proposal: the report was named no fewer than ten times by Lewis Silkin, the Bill minister, during his speech introducing the Bill's Second Reading in the House of Commons.<sup>32</sup> The legislation stated:



*“[a]n application to the local planning authority for permission to develop... an industrial building... shall be of no effect unless it is certified by the [Board of Trade] that the development in question can be carried out consistently with the proper distribution of industry”.*<sup>33</sup>

But the 1947 Act was also intended to empower the anti-growth sentiments of hyper-local decision-makers: local authorities. It thwarted the outward expansion of the UK's towns and cities. Silkin made this point explicitly, saying:

*“Nor must our already large towns be permitted to sprawl, and expand, so as to eat up the adjacent rural areas... Green belts must be left round towns... The continued drift from the countryside must be arrested”.*<sup>34</sup>

### National politicians used industrial land control to try to drive social outcomes

With the passage of the 1947 Act, the instincts of national and local politicians to prevent the development of industrial clusters had been achieved. It had given ministers a veto over new industrial development with the stated goal of breaking up the UK's industrial clusters and redistributing economic activity in the face of market forces. And for all other development, it had built a system explicitly intended to prevent new construction around existing areas.

The stated purpose of the national government granting itself a veto over industrial development through the industrial development certificate (IDC) regime described above was to ensure the “proper distribution of industry” throughout the country. But what did ministers think was the proper distribution of industry?

From the beginning, national politicians were clear that the proper distribution of industry was that industrial clusters should be broken apart. The list of Development Areas in Schedule 1 of the Distribution of Industry Act 1945<sup>35</sup>, which permitted direct Treasury support for industry in these locations, is indicative. None of the listed areas included the UK's great cities. Manchester, Birmingham, Leeds, Sheffield were all excluded.

This anti-agglomeration instinct endured between governments. By 1960, Development Areas had been renamed Development Districts by the Local Employment Act 1960, with an updated list provided by the Conservative then-President of the Board of Trade, Reginald Maudling, to the House of Commons.<sup>36</sup> While the entire county of Cornwall had largely been added to the list of areas into which the Government wished to direct industry, the historic centres of UK industry were still missing.

The Local Employment Act 1960 also required that the Government “have particular regard to the need for providing appropriate employment in development districts” when issuing IDCs.<sup>37</sup> This view, that the anti-market powers of the IDC regime would, if used properly, lead to increased employment in disadvantaged areas, was now law.

Ministers of all parties would repeatedly express this view as they used the IDC regime to prevent development in developed areas. When asked in 1961 to respond to the view that

*“investment could be distorted, and that there is a real risk that if a company does not get a new factory in the area of its choice it may go abroad”, Reginald Maudling said:*

*“It seems to me to be a good thing both economically and socially to try to guide industrial developments into areas where people are available for employment, rather than increasing the shortage of labour in other districts.”<sup>38</sup>*

When market forces tried to get around the law, politicians tightened the law. A few years later in 1965, Labour Ministers would defend the lowering of the threshold of industrial development requiring an IDC to just 1,000sqft (from a previous threshold of 5,000sqft). As a result of the change, the Government now had a veto over any industrial site or expansion larger than a ten metre by ten metre box. In response to the suggestion that the Government “are returning more and more to controls for controls’ sake without any resultant benefit”, George Darling, the Minister of State at the Board of Trade, robustly defended the policy’s effect of preventing industrial expansion, saying:

*“First and most encouraging is that speculative building in the wrong places... has now completely stopped. The other is that we have been able to steer... a small but very valuable proportion... to far better sites than they would otherwise have had.”<sup>39</sup>*

The precise specifications of development that required an IDC changed over time. However, the basic principle that any major industrial development was subject to ministerial veto remained until 1982<sup>40</sup>, when it was removed by the Thatcher Government. This removal was on the grounds that, despite that Government relaxing the policy “substantially” a few years earlier, the IDC requirements themselves were “a psychological barrier to investment, unnecessarily delay the planning process and are detrimental to industrial efficiency”.<sup>41</sup>

### **Both national and hyper-local political control of land use have crushed British industry**

Evidence shows that when an IDC was rejected, the overwhelming majority of responses by investors were either to reduce their plans, abandon them, or close the factory altogether.<sup>42</sup> The possibility of rejection inherent in the IDC regime also had a huge impact on decision-making by investors. Of investment in Development Areas that arose after the original proposals were blocked in the South East, up to 83% was explicitly linked to the IDC regime and threat of rejection.<sup>43</sup>

With the end of the IDC regime, control of industrial development passed to the local planning system. This has been left largely unchanged from the 1947 Act, with its explicit purpose of preventing expansion into the countryside and restricting access to space. As a result, industrial development in the UK since 1947 has been based on policy systems with a complete mismatch with how today’s economy works, enforced by politicians who mistakenly try to direct industry into inappropriate areas.

Consequently, land for industrial, scientific or R&D development is severely constrained. History shows that national politicians have repeatedly failed to responsibly use their powers to direct development. Local councils are the central actors in the existing, failed planning system - which

was designed with the express purpose of preventing new development. As shown below, they have imposed thousands of pages of useless paperwork on industrial and R&D development, costing investors huge sums of money and months of time. Moreover, every single planning reform in the last 20 years has boosted development only insofar as it has taken power and discretion away from local councils.<sup>44</sup>

Reindustrialising Britain therefore requires that power be devolved to a different kind of policymaker.

**Recommendation 1: Create mayor-run Development Corporations for the purposes of reindustrialisation, covering a geographically-defined area of up to ~14sqkm**

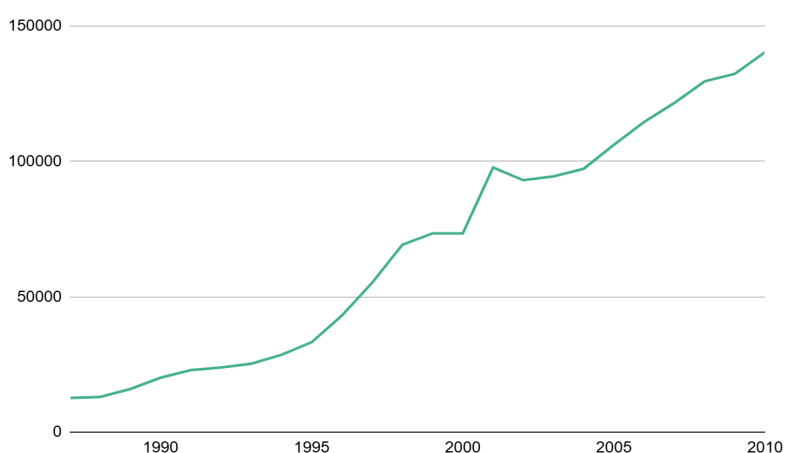
As shown above, neither national nor local authority decision-makers have demonstrated that they are reliably able to responsibly use existing planning powers. To solve this, the Government should approve and create Development Corporations – geographically defined areas for which the Development Corporation, rather than the local authority, is the sole planning authority<sup>45</sup>. To ensure democratic accountability, these should be headed by the local mayor, and tasked with the specific purpose of facilitating and approving industrial and scientific developments in an area of up to 14 square kilometres, based on the Hsinchu Science Park, detailed in a case study below.

**International Case Study: Hsinchu Science Park, Taiwan**

The Hsinchu Science Park was set up in 1980 by the Taiwanese government as a destination for capital intensive, R&D-based businesses and industry, covering ~14 square kilometres.<sup>46</sup> It is home to the world-leading semiconductor foundry TSMC, as well as almost 200 companies specialising in integrated circuits, and a further 154 in biotechnology.<sup>47</sup> The number of employees in the science park has significantly increased over time, to more than 150,000 today.<sup>48</sup>

**Figure 4. Hsinchu Science Park employees over time (1987 – 2010)**

Source: You-Lin Tsai, April 2015



At the park's inception, management of the park was handed to politicians responsible for the entire economic unit, with the then-Minister of Economic Affairs having overall responsibility. Planning was led by teams reporting to the minister, rather than local officials.<sup>49</sup> The Park authority was also responsible for infrastructure development within its borders, to coordinate construction with the needs of investors and industry.<sup>50</sup> Land was also acquired and parcelled by the state to facilitate development.<sup>51</sup>

### Urban Development Corporations can align economic and political incentives

Urban Development Corporations can currently be created by statutory instrument under the Local Government, Planning and Land Act 1980<sup>52</sup>. The fact that they were intended to prevent local authorities from blocking development, was recognised during the Second Reading of the 1980 Act, during which a MP commented that *"If ever there was a case of flagrant disregard for local democracy, it exists in the proposals for the urban development corporation."*<sup>53</sup>

Despite this criticism, the UK has a long history of using development corporations to break local authority vetoes and to secure significant redevelopment. These include:

- **London Docklands Development Corporation (LDDC):** Created by statutory instrument in 1980<sup>54</sup> covering approximately 20 square kilometres of inner East London land which had fallen into dereliction in the decades after the Second World War. The first Chief Executive of the LDDC was Reg Ward<sup>55</sup>, who had previously served as a local authority chief executive, rather than in elected office. The result was the transformation of the Docklands, with more than 16m sqft of office space developed and more than 100,000 jobs in Canary Wharf alone<sup>56</sup>.
- **Merseyside Development Corporation (MDC):** The MDC was created through similar authority under the 1980 Act, and covered some 3.5 square kilometres<sup>57</sup>. The MDC was tasked with the *"the substantial task of regenerating the designated area by bringing land and buildings into effective use, encouraging development, upgrading the environment and stimulating private investment"*<sup>58</sup>. The MDC was responsible for the redevelopment of, among others, the Albert Docks<sup>59</sup>, which was at the centre of Liverpool's former World Heritage Site. A report by the National Audit Office found that the MDC was responsible for 22,000 new jobs, galvanised £700m in private sector investment, and for almost 700,000 sqm of commercial development.<sup>60</sup>
- **Milton Keynes Development Corporation (MKDC):** Milton Keynes was a New Town created under the New Towns Act 1965, with the MKDC created as the vehicle through a statutory instrument in 1967.<sup>61</sup> The MKDC operated for 25 years, covering 89 square kilometres, and planned for the population of Milton Keynes to increase from 60,000 to 250,000. As a result of the removal of planning powers from the local authority, *"the working relationship between MKDC and the local authorities was minimal"*. However, in the Council's own admission, *"total [housing] completions after 1992 rarely reached the levels achieved during the MKDC period"*.<sup>62</sup>

The Government has already accepted the principle of moving planning powers from local authorities to regional mayors. In the English Devolution Bill, which is currently passing through Parliament, the Government is proposing giving new mayors powers to issue planning permissions for specific developments in their areas, as well as removing the current veto held by local authorities over the granting of that permission.<sup>63</sup>

Using development corporations run by the local mayor has three benefits:

- Breaking the local authority veto over development, yet retaining a local democratic element in planning through the mandate of the directly-elected mayor.
- Preventing national politicians from blocking or mismanaging development at a local level.
- In time, facilitating geographically-defined master planning, providing a stable and predictable environment for investment decisions.

#### **International Case Study: JTC Corporation (formerly Jurong Town Corporation), Singapore**

The Jurong Town Corporation was founded in 1967 by an act of the Singaporean Parliament, to “spearhead the planning and development of industrial infrastructure for Singapore’s economic development”<sup>64</sup>, with a particular focus on the Jurong region of the island. Today, the Corporation – renamed JTC – is responsible for broader planning and development of specific, geographically-defined science and industrial estates across the island.

JTC’s statutory powers include, among others, being able to “prepare and execute proposals, plans and projects for the erection, conversion, improvement and extension of any building” and to “purchase, acquire or lease any land and premises”<sup>65</sup>. JTC itself will either issue or tender for master plans for specific sites, and then procure the development of those sites through a public tender. In the words of the JTC Chairman, “By providing relevant and future-ready industrial infrastructure, JTC has played an instrumental role in attracting companies to make Singapore a key base for their operations, and providing a conducive operating environment for businesses”<sup>66</sup>.

JTC has been responsible for master planning and developing a 5 square kilometre former industrial site<sup>67</sup>, as well as the management of the 6.2 square kilometre Jurong Innovation District<sup>68</sup>. In its most recent annual report, JTC has an industrial and research portfolio of £12.5bn, and since 2019, has leased out over 2m square metres of ready-built industrial space, with an occupancy rate of 80% and earning approximately a 10% return on its property portfolio per year.<sup>69</sup>

Ministers should also use other existing powers to ensure the smooth running of Development Corporations and that their purpose is to facilitate industrial development, such as:

- Disapplying industrial zone Development Corporations from the requirement to prepare a local plan, using powers under Section 33 of the Planning and Compulsory Purchase Act.<sup>70</sup>

- Creating a presumption in favour of the use classes that constitute industrial development – including General Industrial (Class B2) and Storage or Distribution (Class B8) and R&D (Class E)<sup>71</sup> – with industrial zone-specific National Development Management Policies through Section 93(2) of the Levelling Up Act 2023.<sup>72</sup>

**Recommendation 2: Existing local authority-set ‘validation requirements’ should be disapplied for development inside these development corporations**

In addition to issuing the specific consents for planning permission, local authorities are also able to set their own local framework for deciding how the decisions will be taken. This power exists under the Town and Country Planning Act, which grants local authorities the power to “require that an application for planning permission must include such particulars as they think necessary”<sup>73</sup>

In practice, this results in local authorities setting long lists of additional assessments and reports that it considers necessary to properly submit a planning application – called local validation requirements. These also add significantly to the uncertainty associated with an application – more assessments and requirements means developers are less confident that they will be able to secure overall permission to build out on their site.

Local validation requirements vary from local authority to local authority, but often run to thousands of pages, and can constitute the majority of paperwork required for a planning application. Lawyers and development managers confirmed that these paperwork requirements often recreate a significant part of the fieldwork needed for an EIA – such as landscape, air quality or arboricultural assessments – meaning that even where development has been screened out of needing an EIA, local policies will still require a large portion of equivalent time and money to be spent.

From dozens of planning applications analysed for this paper, local validation requirements can represent more than 75% of the paperwork needed for an application. These included:

- **Expansion of the UK Atomic Energy Agency, South Oxfordshire District Council<sup>74</sup>** – For the application to build a fusion demonstration plant, 3412 pages – or 83% of the more than 4,000 pages of total paperwork required – were due local validation requirements. This included hundreds of pages of visual impact, noise and archeological assessments, as well as a contaminated land assessment. This was all despite the development being screened out of requiring an Environmental Impact Assessment.
- **Kao Data Centre, Stockport Metropolitan Borough Council<sup>75</sup>** – Local Validation Requirements constituted 91% of the more than 2,500 pages needed for development consent. Of these, 1577 pages alone were for an environmental statement, despite the development being screened out of requiring an Environmental Impact Assessment.

Of the dozens of applications analysed in this paper, 71% of the total paperwork from an entire application was accounted for by the combination of local validation requirements and Environmental Impact Assessments.



Many local validation requirements are often of questionable relevance to the development, or should properly be handled by local authorities themselves. Local authorities can require flood risk assessments, even at sites that are not deemed to be at national risk of flooding. Contaminated land assessments are also often needed, despite developers having a clear and overwhelming interest in not rendering their own site unusable through spreading contamination.

Detailed transport assessments and travel plans are required by a combination of local policies and national guidance, despite the entire purpose of the plan-led system being that the local authority is supposed to have already anticipated the impact of development on transport demand.

International examples where these local requirements have been removed have resulted in a rapid decrease in build timelines.

#### International Case Study: I-95 Reconstruction, USA

On June 11, 2023, a tanker caught fire underneath a bridge that was part of Interstate Highway 95 in Pennsylvania, leading to the bridge's collapse. The destroyed portion of the road carried approximately 160,000 vehicles daily<sup>76</sup>.

In response, the Governor issued an emergency declaration disapplying state law from preventing the state government from supporting the repair of the road:

*I hereby waive any laws or regulations that would restrict the application and use of the Department's equipment, resources and personnel to assist local jurisdictions... I hereby authorize the Secretary of Transportation, at his sole discretion, to waive any provision of the Vehicle Code or any other law or regulation which he is authorized by law to administer or enforce as may be necessary to respond to this emergency event<sup>77</sup>*

Originally, the road repairs were estimated to take months to complete<sup>78</sup>. As a result of the declaration, it took 12 days.<sup>79</sup>

The solution is to remove local validation requirements for development in industrial sites using existing powers to create National Development Management Policies (NDMPs) in the Levelling Up and Regeneration Act 2023.<sup>80</sup> NDMPs can be issued via statutory instrument<sup>81</sup>, and over-ride local development policies when they come into conflict.

A statutory instrument could powerfully disapply existing local authority validation requirements, while permitting mayors to issue new policies if they chose. For industrial zones, this would result in mayors starting with a blank slate, but able to reflect the priorities of the entire economic unit that represents

Other countries have already started taking steps to streamline processes and remove uncertainty from consenting and planning processes. The UK should follow their example.

### 3. Removing Regulatory Barriers in Industrial Zones

While the local planning system, its incentives and rules are a significant barrier to development, these can fundamentally be overcome with a willing set of local decision-makers. However, local decision-makers cannot overcome the national regulatory framework, which also imposes enormous costs and delays on developers.

These costs and delays are particularly created by rules governing environmental and ecological assessment - specifically Environmental Impact Assessments, Habitat/Ecological Assessments, and Biodiversity Net Gain.

#### Environmental Impact Assessments create barriers to development

Environmental Impact Assessments (EIA) are the mechanism through which the impact of a proposed development on the environment is assessed before an application is made. The current regulatory framework is detailed in the Town and Country Planning (Environmental Impact Assessment) Regulations 2017<sup>82</sup> (the EIA Regulations). Regulation 3 of the EIA Regulations contains an explicit prohibition on any major development (defined in the Schedules of the EIA Regulations) unless an EIA has been conducted, or a 'screening opinion' has been acquired concluding that an EIA isn't necessary.

The EIA regime fundamentally stems from retained European Union law, with the UK's EIA Regulations being the domestic incorporation of the EU's EIA Directive.

In recent years, the paperwork required by the EIA regime has ballooned. A government review in 2023 concluded that *"contrary to the intentions of the regulations, there is still evidence of high costs and significant administrative burden associated with conducting an environmental assessment under the [EIA Regulations]"*. Examples given in the review include *"an average environmental statement for a 500-home development cost £150,000-£250,000; took 8 - 18 months to complete; and ran to 4,350 pages"*<sup>83</sup>. These costs have expanded in recent years - *"A review of recent projects... shows a range of 56-267 for the number of documents submitted in the corresponding environmental statements, compared to 55-96 documents for projects submitted before 2017."*<sup>84</sup>

This extraordinary length is also seen by research conducted for this report. The EIA for a laboratory development in Whitechapel, London, ran to 3,673 pages<sup>85</sup>. Another for a data centre in Newham was 3,070 pages long<sup>86</sup>.

Planning consultants and development directors told us that the EIA process was so burdensome that sites were frequently chosen for the specific purpose of avoiding needing to do an EIA. One lawyer said that developers preferred land which was chemically contaminated over land where development would need an EIA. In other words, the existing EIA process imposes such high costs that it is directly distorting investment in the UK's physical and economic infrastructure.

#### The EIA regime's flaws derive from expansive legal principles



Multiple planning lawyers consulted for this report explained to Onward that the fundamental causes of the burdensome and expansive EIA process are the regulations themselves, and their interpretations by the UK's courts. There are two causes:

1. Principles from the EU EIA Directive from which the UK's EIA regulations are derived
2. Unclear drafting in the UK's EIA regulations

First, the EU EIA Directive (from which the EIA regulations are derived) describes a regime that is *procedural*, rather than *substantive*. The key question for an EIA is whether the right process has been followed, rather than whether the right outcome has been reached. In the words of Lord Leggatt, giving judgment for the Supreme Court in *R (Finch) v Surrey County Council*,<sup>87</sup> the EIA regime is “essentially procedural in nature. It is not concerned with the substance of the decision... but with how the decision is taken”.

One of the key questions embedded in the EIA regime is whether there has been effective public involvement in the assessment of any decision-making. Again, this is not because public involvement would necessarily lead to a different outcome, but rather because public participation is seen in the EIA regime as inherently worth achieving. This stems from recital 16 of the EIA Directive:

*“Effective public participation in the taking of decisions enables the public to express, and the decision-maker to take account of, opinions and concerns which may be relevant to those decisions, thereby increasing the accountability and transparency of the decision-making process and contributing to public awareness.”*<sup>88</sup>

This was summarised by the Supreme Court as meaning that “public participation is necessary to increase the democratic legitimacy of decisions... the public participation requirements serve an important education function, contributing to public awareness of environmental issues”.<sup>89</sup>

These principles, derived from the EIA Directive, mean that what is termed an Environmental Impact Assessment does not actually have the purpose of informing decision-makers about relevant impacts on the environment from a proposed development. Instead, it is an exercise in “democratic legitimacy” and of “public awareness” – essentially an information campaign legally required of private companies as a precondition of development.

### **But poor drafting makes the regime sprawling and unpredictable**

Second, the UK's EIA regulations are drafted unclearly, in a way that lends itself to an ever-increasing regulatory burden.

EIA Regulations do not impose an exhaustive list of topics that should be included in an EIA. Rather, the regulations state that information should be included on twelve different categories of effects. These categories are<sup>90</sup>:

- Direct effects
- Indirect effects
- Secondary effects

- Cumulative effects
- Transboundary effects
- Short-term effects
- Medium-term effects
- Long-term effects
- Permanent effects
- Temporary effects
- Positive effects
- Negative effects

Much recent litigation has been about the precise meaning of these terms, which is not defined anywhere in the regulation itself. A recent ruling by the UK Supreme Court<sup>91</sup> ruled that the “*impact on climate of the combustion of the oil*” produced by a well site in Surrey needed to be included in the EIA as an “*indirect*” effect of the development. Because it was not included, the EIA for the proposed development was incomplete, and the grant of planning permission was quashed.

This expansive view has in part been formalised in the “Rochdale Envelope”, which requires that developers should consider a “*cautious worst case approach*”<sup>92</sup>, with Government guidance noting “*the more detailed the [EIA] is, the easier it will be to ensure compliance with the Regulations*”.<sup>93</sup>

### EIA rules require developers to try to do the impossible

The case law is unambiguous that information which makes absolutely no difference to a final decision on a project must, nevertheless, be included by developers. This is not an exaggeration - the UK Supreme Court recently ruled that:

“*The fact (if it be the fact) that information will have no influence on whether the project is permitted to proceed does not make it pointless to obtain and assess the information [for an EIA].*”<sup>94</sup>

The above factors - EU-derived principles recasting EIAs as exercises in democracy and public education, and a poorly drafted EIA Regulation which facilitates an ever-expanding list of environmental considerations - mean that EIAs are an expanding and unpredictable burden on development in the UK.

In effect, the EIA regime requires developers to do the impossible. Rather than prove that they *have* considered the environmental impacts of a development, they need to prove that there is nothing that they have *not* considered.

### Habitat and Ecological Assessments require pointless, time consuming surveys

In addition to the Environmental Impact Assessment regime, another nationally mandated regime of nature protection is the assessments required by the UK’s rules protecting wildlife. Major pillars of the current framework are the Conservation of Habitats and Species Regulations 2017<sup>95</sup> (the Habitats Regulations), and the Wildlife and Countryside Act 1981.<sup>96</sup>

Whereas the EIA regime is focussed on detailing information about environmental impact, the Habitats Regulations and 1981 Act specifically relate to the impact on wildlife habitats. In effect, these laws protect certain species of wildlife, and sites of particular ecological interest. Developers must prove – before securing planning permission – that their proposals either do not impact on protected species, or that this impact is being mitigated by features of the development. Each development is assessed on its own terms.

In practice, this means that each proposal for development has to undergo a lengthy survey process to determine what level of protected wildlife is present, if any.

An example of this process can be seen in Natural England's guidance on bats<sup>97</sup>, which notes “*all bat species are European protected species protected under the Conservation of Habitats and Species Regulations 2017*”, adding that:

*“A [bat] survey is needed if one or more of the following applies...*

- *The development site includes or is close to any built structures...*
- *The development site includes or is close to trees, shrubs, rock formations, quarries, natural cliff faces or water bodies...*
- *The development proposal includes lighting of buildings or green spaces close to habitats that bats tend to use...*

*Absence of a record does not mean there are no bats.”*

If evidence of bats is found, developers need to either redesign their proposal so as to avoid “*negative effects on bats*” or, if that is impossible, to “*include adequate mitigation or, as a last resort, compensation measures*”. The results of this onerous and inflexible process have been subject to public criticism, most notably with the infamous HS2 bat tunnel.<sup>98</sup>

In addition to bats, other species specifically protected in law are listed in the Habitats Regulations and the 1981 Act. These include:

- All wild birds<sup>99</sup>
- Great Crested Newts<sup>100</sup>
- Otters<sup>101</sup>
- Water Voles<sup>102</sup>

### More surveys means more delays

However, the habitat protection regime has major costs, even when development is proposed in areas that have no protected wildlife at all. This stems from the requirement – imposed on every proposal – to assess the extent to which protected wildlife is present on the site as a precondition of even submitting a planning application. Determining this requires an extraordinary number of professional surveys, taking place over months and in different seasons, adding huge delays to development.

For example:

- **The Ellison Institute of Transformative Medicine, Oxford<sup>103</sup>**. In 2023, the Ellison Institute proposed partially demolishing Littlemore House, a building that was already part of the Oxford Innovation Park estate. Despite this building both already existing, and being directly adjacent to the rest of the science park as well as the A4074, surveys were necessary for badgers, bats, birds and great crested newts. In particular, bat surveys were taken over a period of ten months: with no fewer than ten individual surveys just for bats in total in May, June, July, August, September, October and December 2022, as well as January, February and March 2023.
- **NXQ, Manchester<sup>104</sup>** - A regeneration in the heart of Manchester, with the plot directly bordering the inner city, five-lane ring road of Great Ancoats Street, replacing a pair of existing, derelict warehouses. Nevertheless, securing approval required eight in-person surveys for bats, taking place over a period of eight months.
- **Former Skelton Grange Power Station, Leeds<sup>105</sup>** - Despite the site covering a former power station and associated service roads, a range of biodiversity surveys took place over a period of six months. These included at least eight in person surveys, and a further 20 automated surveys, for bats and nesting birds.

Part of the problem is the seasonal nature of animal life cycles, meaning that surveys must be taken at different points in the year to assess whether different species are engaged in different activities. Unlike the EIA process, there is no way for a development to be screened out of a Habitats Regulations assessment: these assessments are necessary for every development.

### **New Biodiversity Net Gain rules mean even more paperwork for development**

Schedule 14 of the Environment Act 2021<sup>106</sup> introduced the concept of ‘Biodiversity Net Gain’ to English planning law. As a result, it is legally required that every significant development in England must increase the biodiversity of the site on which it is taking place. This is achieved by increasing the ‘biodiversity value’ of the site by at least 10%,<sup>107</sup> which is to be measured with reference to a biodiversity ‘metric’ also set out in the same law.

Government guidance<sup>108</sup> shows that determining the “biodiversity metric” of a particular site is expensive and time consuming, requiring detailed survey work to catalogue all of the wildlife and habitats in the site. For instance, guidance states that developers should, among other actions, for each habitat on the site:

- Undertake professional surveys to determine the distinctiveness, type and condition of each habitat
- Record the area and length of each hedgerow, tree, watercourse and patches of grassland and woodland
- Assess each individual “habitat parcel” for “strategic significance”
- Record the diameter of each individual tree in the development area (with limited exceptions)

Industry participants have told us that the rules around Biodiversity Net Gain force developers to recreate surveys and assessments that would be required under the Habitat Regulations, or Environmental Impact Assessments (even for sites that have been screened out of needing an EIA).

Moreover, section 102 of the Environment Act 2021<sup>109</sup> also amends pre-existing legislation to impose a generalised, undefined duty on all public authorities to “consider what action the authority can properly take... to further the general biodiversity objective”, which is itself defined as “the conservation and enhancement of biodiversity in England”.

### **Recommendation 3: Radically streamline or remove the environmental and habitat regulations which apply to development in industrial zones**

As has been established above, the legal framework requiring onerous, unpredictable and time-consuming environmental and wildlife assessments needs to be changed, so that it is no longer an obstacle to development. As such, the Government should ensure that, for developments in industrial zones:

- The Environmental Impact Assessment regime is wholly replaced with a strict, exhaustive list of factors that need to be assessed as a condition of securing permission for development. This would be far more limited than the enormous list of considerations in the current EIA process, and could be limited to factors such as the impact of the development on air pollution, listed or otherwise protected heritage assets, and the light and noise impact on immediately adjoining properties.
- The elements of the Habitats Regulations 2017 and Wildlife and Countryside Act 1981 which provide general protection to animal species (including Section 1 and Schedule 5 of the 1981 Act and Schedule 2 of the Habitats Regulations) should be disapplied from development in industrial zones. Development would only be required to do specific ecological impact assessments if it were taking place near a protected site, rather than being required to assess the impact on wildlife through numerous and time consuming surveys prior to development.
- Biodiversity Net Gain (via Schedule 14 of the Environment Act 2021) should be disapplied for developments in industrial sites. To prevent local authorities from being under a legal duty to recreate Biodiversity Net Gain under the general biodiversity objective, this should also be disapplied for public authorities in decision-making related to sites in industrial zones.

#### **International Case Study - Building Chips in America Act, USA**

In October 2024, President Joe Biden signed the Building Chips in America Act into law.<sup>110</sup> The legislation is a follow-up to the CHIPS Act, which created enormous subsidies for semiconductor manufacturing in the United States, and exempts projects receiving CHIPS Act funding from the National Environmental Policy Act 1969 (NEPA), which contains the United States’ provisions on environmental review.

In the words of the legislation's sponsor, the US environmental review regime's requirements "threaten to delay semiconductor manufacturing projects already under construction and discourage further investments in domestic semiconductor manufacturing"<sup>111</sup>. A US government report found that NEPA reviews took on average 4.5 years to complete.<sup>112</sup>

### Why existing powers won't work

Although the Levelling Up Act 2023 creates the power for ministers to replace<sup>113</sup> certain environmental and habitat requirements - including the Environmental Impact Assessment and Habitats Regulations regimes - with Environmental Outcomes Reports<sup>114</sup> (EOR) with specific outcomes set by ministers, these are limited in their use.

This is for two reasons. The first and most critical is the "non-regression" clause in section 156, which requires that ministers are satisfied that:

*"...making the regulations will not result in environmental law providing an overall level of environmental protection that is less than that provided by environmental law at the time this Act is passed."*<sup>115</sup>

The precise meaning of this phrase is undefined in the legislation, and would likely require lengthy litigation and a court judgment to assess whether a particular EOR was lawfully made, limiting the timeframes over which the EOR mechanism could be used. Moreover, the fact that the legislative test is whether the "overall level of environmental protection is less" than the level provided by law in 2023 raises the prospect that this clause represents an absolute barrier to making trade-offs between environmental protection and economically vital infrastructure.

This provision stems from the Trade and Cooperation Agreement between the UK and EU, which commits that:

*"A Party shall not weaken or reduce, in a manner affecting trade or investment between the Parties, its environmental levels of protection or its climate level of protection below the levels that are in place at the end of the transition period."*<sup>116</sup>

However, as seen above in the Building Chips in America Act and the Building Canada Act, the trade-off between environmental protection and industrialisation is often real, and one that policymakers should be entitled to make and be held accountable for.

The second constraint is that the list of environmental regulations that EORs may disapply<sup>117</sup> is incomplete. While the list does cover the EIA regulations for local and infrastructure development, it doesn't cover key pieces of legislation such as the Wildlife and Countryside Act 1981, which makes it an offence to injure any wild bird without a license. As such, it cannot remove the requirement for bird or bat surveys prior to development.

Subsequently, there are not sufficient powers under existing law to relax the national environmental and habitat rules that consume months of developers time and huge amounts of their resources. New primary legislation would be needed instead.

#### **Recommendation 4: Limit possible judicial review of decisions for applications in these sites**

While the poor design of the UK's environmental and habitats rules is a major barrier to development, the mechanism through which that poor design is expressed is often judicial review.

Evidence clearly shows that the fear of losing a judicial review is the driving force behind why developers compile reams of paperwork. Even where permission is granted, consents can – and are frequently over-turned due to what are determined by courts to be procedural errors in filling out paperwork. In the words of a review of the EIA regulations by what is now MHCLG:

*“Fear of legal challenge is the predominant force driving assessment practice at all levels. Fear of legal challenge was suggested as the reason for the voluminous, cumbersome and overly-technical reports – these being an attempt not to omit any matter that could be the subject of challenge at a later date. This risk averse approach is likely to be contributing to the high costs and administrative burden associated with EIAs in the town and country planning system.”<sup>118</sup>*

The right to challenge planning decisions on environmental grounds is protected under the UK's international legal obligations, including the Aarhus Convention, which requires that the UK “shall guarantee... access to justice in environmental matters”<sup>119</sup> and “ensure that any person who considers that [the environmental review process]... has been... inadequately answered or otherwise not properly dealt with... has access to a review procedure before a court of law”.

The UK's mechanism of adherence to the Aarhus convention increases the scope of judicial review considerably. One way is through cost awards that may be made against losing litigants in environmental review cases. These are set at £5,000 for individuals, and £10,000 in all other cases.<sup>120</sup>

An independent review of judicial reviews in planning decisions recently concluded that “There is little doubt that the cost caps available for judicial reviews within the scope of the Aarhus Convention... have contributed towards the proliferation of challenges to.. planning decisions”<sup>121</sup>

#### **Who gets to ask for judicial review?**

Another question is the issue of standing, or eligibility for bringing a judicial review in the first place. Many environmental judicial reviews are brought by groups that are opposed to the development in principle, yet often bring challenges on procedural, rather than substantive, grounds. In the words of Lord Banner KC: “often challenges to the planning decisions and merits have been dressed up as rationality challenges”. The Government is reported to be considering “raising the bar for those bringing a judicial review to show they have the right to bring a review”<sup>122</sup>.



To increase legal certainty, remove a key driver of onerous paperwork requirements and speed up decision-making, the Government should limit judicial review for developments in industrial zones in the following ways:

- The Aarhus cost caps should be removed entirely, meaning that litigants should be liable for wasted costs in the event of an unsuccessful judicial review on environmental grounds.
- The bar for standing for judicial reviews in industrial zones should be significantly raised. As preconditions for making an application for judicial review, applicants should be required to demonstrate that they:
  - Have participated substantially in the planning process prior to their application for judicial review;
  - Are sincerely interested (either as individuals or as an organisation) interested in procedural propriety,
  - Have not engaged in activity indicating an opposition to the development in principle (such as campaigning or fundraising on those grounds, or organising with groups that are opposed to the development in principle).

#### Case Study: I-95 Highway Reconstruction, USA

As described above, the emergency declaration signed by the Governor to speed up the reconstruction of I-95 waived local rules on procurement and impact assessments. However, it went further, and also removed procedural requirements for government and business conduct.

Specifically, the declaration said:

*I hereby suspend the provisions of any other regulatory statute prescribing the procedures for conduct of Commonwealth business, or the orders, rules or regulations of any Commonwealth agency, if strict compliance with the provisions of any statute, order, rule or regulation would in any way prevent, hinder, or delay necessary action in coping with this emergency event.*<sup>123</sup>

In effect, this removed the procedural requirements, enforced by judicial review of decision-making, from the “ordinary obstacle course of permits, procedures and regulations and to simply execute the most effective response available”.<sup>124</sup>

#### Recommendation 5: Increase the speed of development in Industrial Zones by expanding construction time through limiting noise complaints and expanding construction hours

During preparation of this paper, developers frequently raised the risk of noise complaints as a brake on the speed of development. Noise complaints are a result of the Environmental



Protection Act 1990<sup>125</sup>, which requires local authorities to issue abatement notices for “statutory nuisances”, which includes “noise emitted from premises so as to be... a nuisance”.<sup>126</sup>

As a result, councils frequently limit the hours within which construction may be carried out, slowing development. For instance, London boroughs often restrict construction to 8am to 6pm<sup>127</sup>, less than the 7.30am to 8pm permitted in Vancouver<sup>128</sup>. The difference between a ten and a twelve and a half hour working day is a 25% difference in the rate of construction.

The Environmental Protection Act 1990 should be amended so that noise emanating from construction in industrial zones is not considered a statutory nuisance under the Act. Moreover, local authority discretion under the Control of Pollution Act 1974, which grants a general power to set construction hours<sup>129</sup>, should be passed to local mayors, and guidance set on less restriction construction in these areas.

### **Recommendation 6: Reform and removal of statutory consultees such as Natural England and the Environment Agency**

There are further barriers to planning approval arising from the range of consultees required by statute. In addition to rules around environmental or habitat protection, local authorities considering planning applications in England are also required by law to consult particular government bodies, depending on the characteristics of the proposed development. For a laboratory or manufacturing development, this can include (among others) the Environment Agency, Historic England<sup>130</sup> and, since 2023, Active Travel England.<sup>131</sup>

The list of statutory consultees is set by ministers, exercising powers under the Town and Country Planning Act 1990.<sup>132</sup>

In practice, this often results in significant pre- and post-application processes handled by developers, to ensure that potential concerns of statutory consultees are met and don't derail the planning process. Even where developments meet the requirements of local rules or policies, consultation with statutory consultees can and often does cause months of delays and add hundreds of thousands of pounds to a project's cost. Conversations with developers have raised numerous examples of various government bodies delaying development by months with minor complaints or protracted negotiations about small details, such as the placement of a bicycle shed. For instance:

- **The Ellison Institute of Transformative Medicine, Oxford:** In December 2022, the Ellison Institute submitted a planning application for redevelopment of their Littlemore House site. In April 2023, the Environment Agency submitted a consultation response, recommending that the permission be refused on the grounds of the impact on a small patch of freshwater in one corner of the development<sup>133</sup>. After four months of correspondence, the developers decided to resubmit their entire application, except with the relevant area removed from the proposal in September 2023<sup>134</sup>, ten months after the initial application was submitted. In the applicant's words: “*The applicant continues to try and resolve [the Environment Agency's] concerns, but in order to mitigate against any further unnecessary delays and to allow a meaningful start on site, the applicant has decided to submit this standalone application*”.

The delays caused by statutory bodies needing to issue consents are being reformed in other jurisdictions. The best example is the Building Canada Act.

#### International Case Study: Building Canada Act, Canada

The Building Canada Act was passed in June 2025 by Prime Minister Mark Carney's government in Canada, as part of the One Canadian Economy Act<sup>135</sup>. It smooths the regulatory process for projects designated as being in the 'national interest' if they strengthen Canada's autonomy, resilience and security and provide economic benefits.<sup>136</sup>

Once a development is determined to be in the national interest, it is deemed to have all the authorisations it needs for development to go ahead. Specifically, section 6(1) of the Act states that, for 'national interest' projects, *"every determination and finding that has to be made and every opinion that has to be formed in order for an authorization to be granted... is deemed to be made or formed... in favour of permitting the project to be carried out"*.<sup>137</sup> Moreover, other pieces of procedural legislation are streamlined or disapplied, such as the Impact Assessment Act. In effect, the legislation *"provides for streamlined regulatory processes through... advance certainty of approval... for national interest projects"*.<sup>138</sup>

To resolve this the Government should sharply reduce the role of statutory consultees in planning decisions in industrial zones in the following ways:

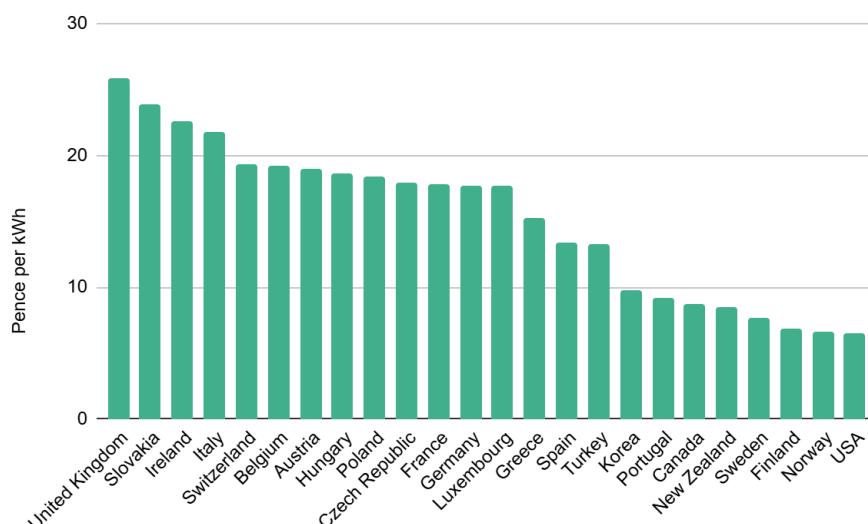
- The list of statutory consultees in industrial zones should be sharply reduced and limited in scope. This should include:
  - Removing Active Travel England and Natural England as statutory consultees for these sites.
  - Objections from the Environment Agency should be limited to damage to specific, protected sites, rather than habitat loss in general.
- Statutory timescales for consultation responses should be strengthened, and if a consultee does not respond within the timeframe, then their consent should be assumed.

## 4. Supplying Energy to Industrial Zones

The problem to the UK economy of high industrial energy prices is well-known. In 2023, the UK had the highest industrial energy prices of any country that was a member of the International Energy Association.

**Figure 5: Industrial Energy Prices in the UK and other International Energy Association countries (2023 prices incl. taxes in pence/kWh)**

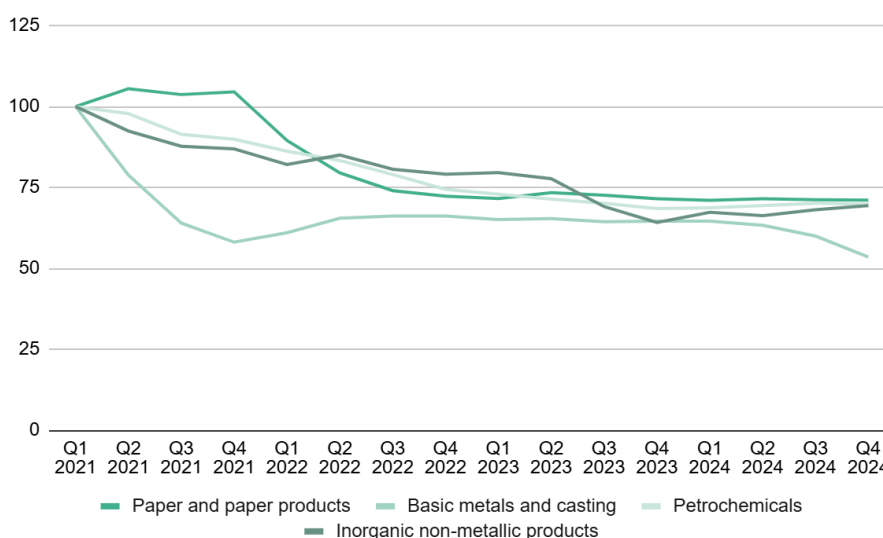
Source: ONS<sup>139</sup>



These high prices have been a catastrophe for the UK's industry. In the past four years alone, energy-intensive industries such as metal casting and chemicals have contracted by more than 30%. Recent surveys show that more than 60% of UK businesses say that high and unstable energy prices are damaging their competitiveness.<sup>140</sup>

**Figure. 6: Shrinkage in energy-intensive UK industries since 2021 (Q1 2021 = 100)**

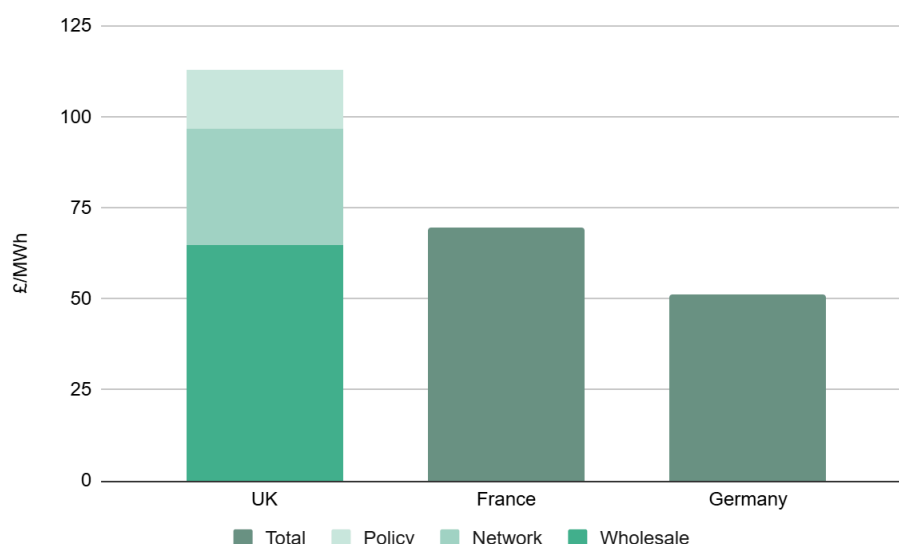
Source: ONS<sup>141</sup>



However, these extraordinary prices are a deliberate policy choice – some 61% of the price faced for energy by industrial users is a combination of tax, policy levies and network and operating costs.<sup>142</sup> For sectors such as steel, the UK's total amount of additional levies placed on industrial energy bills is almost the entire difference between UK energy prices and that in other countries.

**Figure 7: Energy price for steel industries in UK, Germany and France 2023/4**

Source: UK Steel<sup>143</sup>



These costs are astronomical. The Renewables Obligation and Feed in Tariff – legacy government energy schemes that both charged suppliers for not using renewable sources and guaranteed above-market prices for renewables – added £4.9bn alone to the bills of non-domestic energy users in 2024/5.<sup>144</sup> Network costs, funding grid maintenance and upgrades, are expected to add more than £9bn to bills just in 2025/6.<sup>145</sup>

Removing these costs from industrial energy users under the current grid system is complex, because many of these costs are applied to suppliers, who then pass it on to those purchasing energy. As a result, previous Government discount schemes have often relied on exempting some users from costs by raising prices on others. For instance, the Network Charging Compensation scheme – which partially reimburses energy-intensive industries in the UK – is funded by the EII Support Levy, which is charged on other energy users.<sup>146</sup>

The high cost of energy is a particular concern for industries in emerging technology sectors. Demand for energy from data centres alone is projected to increase by up to seven times by 2050,<sup>147</sup> and could amount to more than ten percent of the UK's entire industrial energy demands.<sup>148</sup> High energy costs for data centres will be passed directly onto their customers, which will include the UK's most promising AI and technology firms.

The solution is for smaller, industrial energy generation networks that make far greater use of energy drawn not from the national grid, but instead delivered directly to industrial users. Energy from these networks would therefore be largely exempted from both the policy costs

driven by legacy renewables schemes, and from the network costs associated with being required to fund national energy infrastructure.

**Recommendation 7: Support energy generation co-located with industry in industrial zones, with private networks supplying energy without grid or policy costs.**

To ensure access to power, developments in industrial zones should be able to be connected to nearby energy generation via off grid, private connections, as well as the national grid. As these would be private connections, energy users would largely not be required to pay the policy or network costs associated with connecting energy via the grid (although some limited network levy would be necessary to pay for the cost of a national grid connection as a contingency – see Recommendation 8 below). This could reduce the cost of energy for users in industrial zones by approximately 40%.

These energy generators would be connected to the national grid, as well as to developments in industrial zones. To make sure that energy generators are incentivised to supply to these sites, rather than the grid, users should be required to pay a small levy (for instance, 10%) on top of the wholesale price.

**Case study - Localised energy supply in practice**

Using an indicative price of £100/MWh for industrial energy on the grid, with £39 of that being the wholesale price of energy, £20 being VAT, and £41 being policy and network costs.

Under the proposed mechanism, an industrial user could pay as little as £39 for the wholesale price, £20 in VAT, and a further £4 as a levy to the generator, for a total cost of £63/MWh. This would be £37/MWh less than the indicative grid price.

The generator would receive £39 for the wholesale price, as well as a £4 levy. This would mean they earn more than by selling the energy to the national grid.

Implementing this system – where both energy suppliers and users would have private connections in addition to flexible grid connections – would require changes to Ofgem’s regulatory practices. It would also require the construction of new, private substations that connect to the UK’s transmission network. This would require a change to or carve-out from section 4(1) of the Electricity Act 1989<sup>149</sup>, as currently the National Grid is the only licensed operator and developer of substations that connect to the UK’s transmission network.

This mechanism should be agnostic as to the source of energy used. The speed of deployment, and consistency of supply, needed for industrial users, means that gas is among the most suitable sources of energy. However, the deployment of renewables under this mechanism should not be prevented. Where industrial energy users are guaranteed stable, lower energy prices, they have demonstrated significant willingness to invest in energy generation assets. As a result, this would further increase investment activity in and around industrial zones.

### International Case Study: Three Mile Island Refurbishment, USA

In September 2024, Microsoft and Constellation Energy announced a \$1.6bn investment in the Three Mile Island nuclear power plant<sup>150</sup>, the site of one of the United States' worst ever nuclear disasters.

In return, the plant's entire energy output will be purchased by Microsoft for the next 20 years.<sup>151</sup> Constellation said that the site is expected to start generating electricity again in 2028.

However, developments in industrial zones as well as the generators supplying them, would still require connections to the national grid. This means that reform to the UK's grid connection system, which is riddled with delays and inefficiencies, is also required.

### Recommendation 8: Ministers should prioritise demand side grid connections in industrial zones using powers in the Planning and Infrastructure Bill

During the interviews held for this paper, businesses explained that they had been told by power companies that they would have to wait more than a decade for grid connections. This has been acknowledged by the ministers<sup>152</sup>, and reducing this queue was the major motivation behind the decision to reform the grid connection queue process from "first come, first served" to "first ready, first connected".<sup>153</sup>

In this new grid prioritisation procedure, projects would pass through two "gates" before being connected to the national grid.

- Gate 1 will be an annual window in which projects can apply to enter the connection queue based on the project's "readiness".<sup>154</sup>
- Gate 2 will determine the final prioritisation for grid connections, on the basis of criteria such as alignment with strategic plans and government policy documents.<sup>155</sup>

As part of these reforms, the Government is taking powers in the Planning and Infrastructure Bill (currently before Parliament) for ministers to set what kinds of projects should be prioritised for a grid connection in Gate 2.<sup>156</sup> While the Government has said that it will use this power to prioritise connections on the supply-side for renewables<sup>157</sup>, it has not yet said how it will prioritise demand-side connections.

To ensure that developments in industrial zones have timely access to the grid, and that this is not a barrier to investment, the Government should use the powers in the Planning and Infrastructure Bill to prioritise such developments. In practice, this would mean that any developments located in industrial zones that have passed Gate 1 would be prioritised at Gate 2. As described above, the primary source of energy for developments in industrial zones would be co-located private generators. However, they would not be exempt from the full policy and network levies when drawing energy from the national grid.

## Conclusion

Supporting the revitalisation of industry in the UK is vital for economic growth and for ensuring that there is opportunity in every corner of the country. As this paper has shown, this will require reform to the key supply-side constraints on industrial expansion: the rules and regulations governing the ability to build, and boosting the supply of cheap, plentiful energy.

The prize is significant. The UK's world-leading R&D could be translated into jobs at British companies, located in a new generation of industrial clusters around the country. New centres of innovation and growth could be developed all across the country. Businesses wouldn't have to look over their shoulders, wondering if American or European competitors will get ahead because they have more space, faster build times and lower costs.

The reforms outlined above would go some way to undoing the historic failures of British Governments, who have over decades repeatedly loaded costs on businesses and prevented investment. The question for policymakers is whether they will be brave enough to do so.



# Endnotes

1. Report (page 193) - Royal Commission on the Distribution of the Industrial Population, January 1940 ([link](#))
2. Nvidia chief says UK lacks digital infrastructure as Keir Starmer pledges £1bn for AI - FT 9 June 2025 ([link](#))
3. Q.529, Oral Evidence: Industrial Strategy - Business and Trade Select Committee April 2025 ([link](#))
4. Fig. 3, Fifty years of the preliminary estimate of UK GDP - ONS 18 August, 2022 ([link](#))
5. Ibid.
6. Venture Capital in the UK 2024 - BVCA November 2024 ([link](#))
7. Small Business Equity Tracker 2024 - British Business Bank July 2024 ([link](#))
8. Ibid.
9. Artificial Intelligence - Business.gov.uk ([link](#))
10. Small Business Equity Tracker 2024 - British Business Bank July 2024 ([link](#))
11. State of UK Deep Tech 2024 - Royal Academy of Engineering ([link](#))
12. This figure was reached from the UK being 26m sqft behind the US in laboratory space that is completed and under construction, and 10.7GW behind in data centre stock and under construction. [Sources: UK labs under construction of 5.6m sqft- CBRE April 2025 ([link](#)); US labs under construction of 16.6m sqft - CBRE February 2025 ([link](#)); UK laboratory inventory of ~8m sqft CBRE April 2025 ([link](#)) US laboratory inventory of 181.7m sqft - CBRE April 2023 ([link](#)); taking an average cost/sqft of £443 - Gardiner ([link](#)), giving £11.5bn in missing lab space stock and pipeline. UK data centre capacity of 1.6GW in 2024 - DSIT May 2025 ([link](#)); US data centre capacity of 20GW in H2 2024 and under construction or planned pipeline of 52.4GW - Cushman Wakefield 2024 ([link](#)); UK data centre under construction and planned pipeline of 2.2GW - Cushman and Wakefield 2025 ([link](#)), with cost of ~£10m/MW, giving £107bn in total missing stock and pipeline]
13. Regional and subregional labour productivity, UK: 2023 - ONS, June 2025 ([link](#))
14. Birmingham History and Heritage - Visit Birmingham ([link](#))
15. The world's first industrial city - Science and Industry Museum ([link](#))
16. Venture Capital in the UK Report 2025 - BVCA ([link](#))
17. Climbing the Summit: Big Cities in the UK and the G7 - Centre for Cities 12 June 2024 ([link](#))
18. The UK's Modern Industrial Strategy - HMG, June 2025 ([link](#))
19. Huge boost for UK industry as Government powers ahead with cuts to electricity costs - DBT, July 2025 ([link](#))
20. Planning and Infrastructure Bill ([link](#))
21. A review of environmental assessment regimes in England - Office for Environmental Protection, October 2023 ([link](#))
22. Importance of Advanced Planning of Manufacturing for Nuclear Industry - Shykinov et al, 2016 ([link](#))
23. The shortage of lab space in the UK's "Golden Triangle" - Knight Frank, 7 August 2023 ([link](#))
24. Power and planning constraints threaten UK data centre growth - Data Centre Review, 10 January 2025 ([link](#))
25. Long-term shortage of logistics space could restrict economic growth - Savills, 23 February 2022 ([link](#))
26. The Housebuilding Crisis: The UK's 4 million missing homes - Centre for Cities, 22 February, 2023 ([link](#))
27. Percentage of overall turnout for local elections in England - LGA (data recovered 30 July 2025, [link](#))
28. Population estimates by output areas - ONS, 25 October 2018 ([link](#))
29. HS2 was doomed to be a mess, say insiders - because of a 'problem in this country' - BBC, 21 July 2025 ([link](#))
30. Report (page 1) - Royal Commission on the Distribution of the Industrial Population, January 1940 ([link](#))
31. Ibid (Paragraph 418, page 197)
32. Town and Country Planning Bill (Second Reading Debate) - Hansard, 29 January 1947 ([link](#))
33. Section 14(4) - Town and Country Planning Act 1947 ([link](#))
34. Town and Country Planning Bill (Second Reading Debate) - Hansard, 29 January 1947 ([link](#))
35. Schedule 1 - Distribution of Industry Act, 1945 ([link](#))
36. Local Employment Act (Development Districts) - Hansard, 31 March 1960
37. Section 16(1) - Local Employment Act 1960 ([link](#))
38. Industrial Development Certificates - Hansard, 27 July, 1961 ([link](#))
39. Industrial Development Certificates - Hansard, 1 December 1965 ([link](#))
40. Town and Country Planning (Industrial Development Certificates) (Prescribed Classes of Building) Regulations 1981 ([link](#))
41. West Midlands - Hansard, 4 December 1981 ([link](#))
42. The impact of Government policies on UK manufacturing since 1945 (page 36) - Broadberry and Leunig, Government Office for Science, October 2013 ([link](#))



43. Wettmann, R.W. and Nicol, W.R. (1981), Deglomeration Policies in the European Community
44. Permitted development rights (covering garden extensions, EV chargers and use conversions) prevent councils from blocking them. Greybelt classification forces councils to permit development they would otherwise deny. Changes to the NPPF to facilitate upward expansion require councils to agree to development they would otherwise refuse. Timetables for local plans force councils to issue development plans they otherwise would not prepare. The list goes on.
45. Section 149 - Local Government, Planning and Land Act 1980 ([link](#))
46. Park Bureau - Hsinchu Science Park ([link](#))
47. Statistics - Hsinchu Science Park ([link](#))
48. *Behind the economic success of Taiwan's Hsinchu Science Industrial Park* - You-Lin Tsai, April 2015 ([link](#))
49. *Reassessment of the State Role in the Development of High-Tech Industry: A Case Study of Taiwan's Hsinchu Science Park* - So, East Asia, Summer 2006
50. *Cluster policies and industry development in the Hsinchu Science Park: A retrospective review after 30 years* - Ching-Pu Chen et al, Innovation 2013
51. See ref. 49
52. Section 134 -Local Government, Planning and Land Act 1980 ([link](#))
53. *Local Government, Planning and Land (No. 2) Bill* - Hansard, 5 February 1980 ([link](#))
54. *The London Docklands Development Corporation (Area and Constitution) Order 1980* ([link](#))
55. *Reg Ward obituary* - Guardian, 22 February 2011 ([link](#))
56. *Urban Redevelopment of the London Docklands - Architecture Competitions* ([link](#))
57. *Merseyside Development Corporation (Area And Constitution) Order 1980* - Hansard, 24 March 1981 ([link](#))
58. Ibid.
59. *History - Albert Docks* ([link](#))
60. Page 11, *The operation and wind up of Teesside Development Corporation* - National Audit Office, 27 February 2002 ([link](#))
61. *Written evidence from Milton Keynes City Council* - House of Lords Build Environment New Towns Inquiry, 8 July 2025 ([link](#))
62. Ibid.
63. *Schedule 12, section 1(4)(c) - English Devolution and Community Empowerment Bill* ([link](#))
64. *Our History* - JTC ([link](#))
65. *Section 12(4) - Jurong Town Corporation Act 1968* ([link](#))
66. *Speech by JTC Chairman* - JTC, 25 May 2018 ([link](#))
67. *High-rise industrial facilities, agri-tech park feature in revamped Sungei Kadut industrial estate* - Straits Times, 6 February 2020 ([link](#))
68. *Jurong Innovation District* - JTC ([link](#))
69. *Annual Report 2023 - July 2024*, JTC ([link](#))
70. *Section 33 - Planning and Compulsory Purchase Act 2004* ([link](#))
71. *Town and Country Planning (Use Classes) Order 1987* ([link](#))
72. *Section 93(2) - Levelling Up and Regeneration Act 2023* ([link](#))
73. *Section 63(3)(a) - Town and Country Planning Act 1990* ([link](#))
74. Planning ref. P19/S2198/FUL, South Oxfordshire District Council (recovered 26/08/25)
75. Planning ref. DC/090411, Stockport Metropolitan District Council (recovered 26/08/25)
76. *Section of major I-95 highway in Philadelphia that collapsed after tanker truck caught fire underneath could take months to repair, officials say* - CNN, June 2023 ([link](#))
77. *Proclamation of Disaster Emergency* - Governor of Pennsylvania, June 2023 ([link](#))
78. *Update on I-95 Collapse* - Governor of Pennsylvania, June 2023 ([link](#))
79. *Governor Shapiro Gets Stuff Done: Reopening I-95 in just 12 days* - Governor of Pennsylvania, December 2023 ([link](#))
80. *Section 93(2) - Levelling Up and Regeneration Act 2023* ([link](#))
81. *Section 94(1) - Ibid.*
82. *Town and Country Planning (Environmental Impact Assessment) Regulations 2017* ([link](#))
83. *Post Implementation Review: Town and Country Planning (Environmental Impact Assessment) Regulations 2017* - DLUHC 2023 ([link](#))
84. *Post Implementation Review: Infrastructure Planning (Environmental Impact Assessment) Regulations 2017* - DLUHC 2023 ([link](#))
85. Planning ref. PA/21/02707/A1, LB Tower Hamlets (recovered 15/09/25)
86. Planning ref. 23/01697/OUT, LB Newham (recovered 15/09/2025)
87. Paragraph 62, *R (on the application of Finch) v Surrey County Council* - UKSC 2024 ([link](#))

88. Recital 16 - Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment ([link](#))
89. Paragraph 21, *R (on the application of Finch) v Surrey County Council* - UKSC 2024 ([link](#))
90. Regulation 5, Town and Country Planning (Environmental Impact Assessment) Regulations 2017 ([link](#))
91. *R (on the application of Finch) v Surrey County Council* - UKSC 2024 ([link](#))
92. NSIP - Advice Note Nine: Rochdale Envelope - Planning Inspectorate, MHCLG ([link](#))
93. Ibid.
94. Paragraph 152, *R (on the application of Finch) v Surrey County Council* - UKSC 2024 ([link](#))
95. The Conservation of Habitats and Species Regulations 2017 ([link](#))
96. Wildlife and Countryside Act 1981 ([link](#))
97. Bats: Advice for making planning decisions - Natural England, April 2025 ([link](#))
98. Why does it cost £100m for HS2 to protect bats? - BBC, November 2024 ([link](#))
99. Section 1(a) - Wildlife and Countryside Act 1981 ([link](#))
100. Schedule 2 - Conservation of Habitats Regulations 2017 ([link](#))
101. Schedule 5 - Wildlife and Countryside Act 1981 ([link](#))
102. Ibid.
103. Planning ref. 23/02092/FUL, Oxford City Council (recovered 11/08/25)
104. Planning ref. 139778/FO/2024, Manchester City Council (recovered 18/08/2025)
105. Planning ref. 21/09982/FU, Leeds City Council (recovered 17/08/25)
106. Schedule 14 - Environment Act 2021 ([link](#))
107. Section 2(2)(3) - Ibid.
108. The Statutory Biodiversity Metric User Guide - DEFRA, July 2025 ([link](#))
109. Section 102 - Environment Act 2021 ([link](#))
110. What's in the new Building Chips in America Act and what does it mean for the semiconductor industry? - World Economic Forum, October 2024 ([link](#))
111. Building Chips in America Act - Senator Mark Kelly, July 2023 ([link](#))
112. Fact Sheet: CEQ Report on Environmental Impact Statement Timelines (2010 - 2018) - Executive Office of the President & Council on Environmental Quality, June 2020 ([link](#))
113. Section 164 - Levelling Up Act 2023 ([link](#))
114. Section 152 - Ibid. ([link](#))
115. Section 156 - Ibid. ([link](#))
116. Article 391(2) - UK/EU Trade and Cooperation Agreement ([link](#))
117. Schedule 14 - Levelling Up Act 2023 ([link](#))
118. Post Implementation Review: Town and Country Planning (Environmental Impact Assessment) Regulations 2017 - DLUHC, March 2023 ([link](#))
119. Article 1 - Aarhus Convention ([link](#))
120. Rule 46.26 - Civil Procedure Rules ([link](#))
121. Independent Review into legal challenges against Nationally Significant Infrastructure Projects - MHCLG, October 2024 ([link](#))
122. Rachel Reeves orders fresh planning overhaul for 'critical' infrastructure projects - FT August 2025 ([link](#))
123. Proclamation of Disaster Emergency - Governor of Pennsylvania, June 2023 ([link](#))
124. Can I-95 repairs teach us to build faster - Institute for Progress, July 2023 ([link](#))
125. Part III - Environmental Protection Act 1990 ([link](#))
126. Section 79(1)(g) - Ibid.
127. Noise from building works - London Borough of Greenwich ([link](#))
128. Noise control By-law 6555 - City of Vancouver ([link](#))
129. Section 60(3) - Control of Pollution Act 1974 ([link](#))
130. Schedule 4 - Town and Country Planning (Development Management Procedure) (England) Order 2015 ([link](#))
131. Active Travel England to be consulted on all large planning applications - Active Travel England 1 June 2023 ([link](#))
132. Within TCPA, these powers include section 59, which is the general Development Order power ([link](#)) and section 74, which creates a power to set a method of dealing with applications ([link](#))
133. EA correspondence, Planning ref. 22/02969/FUL, Oxford City Council (recovered 11/08/25)
134. Covering Letter, Planning ref. 23/02092/FUL, Oxford City Council (recovered 11/08/25)
135. Building Canada Act - Projects of national interest - Government of Canada ([link](#))
136. How the new Building Canada Act works - Norton Rose Fulbright, 30 June 2025 ([link](#))
137. Section 6(1) - Building Canada Act 2025 ([link](#))
138. Accelerated project approvals under the Building Canada Act - Cassels, 10 June 2025 ([link](#))
139. Fig. 3, The impact of higher energy costs on UK businesses: 2021 - 2024 - ONS 19 May 2025 ([link](#))

140. *Three in five UK businesses concerned volatile energy costs are undermining growth plans* - EY, May 2025 ([link](#))
141. See ref. 139
142. *Why are UK industrial electricity prices so high - and what can be done about it?* - Sky News 19 June 2025 ([link](#))
143. *Industrial Competitiveness: Energy Prices Faced By UK Steelmakers* - UK Steel, November 2023 ([link](#))
144. *Reducing non-domestic electricity prices to drive economic growth* - EnergyUK, April 2025 ([link](#))
145. *Transmission Network Use of System in 10 minutes* - NESO, July 2025 ([link](#))
146. *Energy Security Bill factsheet* - DESNZ, September 2023 ([link](#))
147. *Figure 1, Data Centres* - National Grid ESO, March 2022 ([link](#))
148. *Future Energy Scenarios: Pathways to Net Zero* - NESO, July 2025 ([link](#)) [Using fig. 5, showing total UK industrial and commercial energy demands of ~300TWh in 2050]
149. *Section 4(1)* - Electricity Act 1989
150. *Microsoft deal propels Three Mile Island restart, with key permits still needed* - Reuters September 21 ([link](#))
151. *Why Microsoft made a deal to help restart Three Mile Island* - MIT Technology Review September 2024 ([link](#))
152. *Clean energy projects prioritised for grid connections* - DESNZ, Ofgem 15 April 2025 ([link](#))
153. *"First Ready, First Connected": Reform to GB Electricity Grid Connections* - Norton Rose Fullbright March 2025 ([link](#))
154. *Summary Decision Document: TM04 connections reforms proposals* - Ofgem, April 2025 ([link](#))
155. *Decision: Gate 2 Criteria Methodology* - Ofgem, April 2025 ([link](#))
156. *Section 17(1)* - Planning and Infrastructure Bill ([link](#))
157. See ref. 152