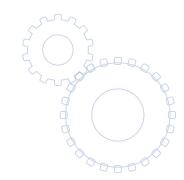


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Introduction

When Government published its Industrial Strategy¹ in 2017, with three waves of Local Industrial Strategies to follow, it felt like we were turning a corner in recognising the value of industry and the need to plan properly for it, as it undergoes a period of transformational change. But recent policy announcements have thrown all that into doubt.

Those Local Industrial Strategies initially focussed on Greater Manchester, the West Midlands and the CaMKOx corridor, with the ultimate aim of covering all Local Enterprise Partnership (LEP) areas.

However, with a change of Government direction in 2019 including a clear mandate to deliver Brexit, and then the economic shock brought about by the COVID-19 pandemic in 2020, the political focus has shifted and we emerge in 2021 to a different take on what it means to 'build back better'.

Back in May 2020, the Government published its **Plan to Rebuild** which acknowledged:

The world will not return to 'normal' after COVID-19; much of the global economy is likely to change significantly. The UK will need to be agile in adapting to and shaping this new world if the Government is to improve living standards across the nation as it recovers...

Its **Plan for Jobs**, published in July 2020, included measures to protect employment and support people through the pandemic. Many city regions produced Economic Recovery Plans over the summer and autumn, identifying key projects that could help pivot into new areas of activity.

A few months later, in November 2020, the Prime Minister announced his **Ten Point Plan for a Green Industrial Revolution**, a year out from COP26² which the UK will host in Glasgow. This set out plans for 'building back better', supporting green jobs and accelerating our path to net zero carbon.

And then in March 2021, after the conclusion of Brexit negotiations and the start of the vaccine rollout, the Budget led to the unexpected abandoning of the Industrial Strategy and publication of a new **Plan for Growth – Build Back Better**, with a shift of responsibility to the Treasury.

This has a focus around Infrastructure, Skills and Innovation, with three additional guiding principles of levelling up, delivering the green industrial revolution, and supporting a vision for global Britain following departure from the EU.

Does this represent a watering down of policy towards industry? It would appear so when seen alongside the planning reforms which were launched in the **Planning for the Future**³ White Paper in August 2020. These have a very strong emphasis on increasing housing delivery and, whilst modest policy changes have been made – for instance to the NPPF to give greater consideration to logistics – the overwhelming sense is of imbalance. Industry hardly gets a mention.

The question is - why aren't we playing to our industrial strengths?



^{2 26}th UN Climate Change Conference of the Parties

³ White Paper: Planning for the Future, MHCLG, August 2020

This paper looks at how we are planning for economic recovery and the particular role industry and logistics can play.

It begins with a look at the **immediate challenges** facing the sector – the crisis in strategic land supply, which has been a decade in the making, the surge in online retailing that has driven growth in logistics, and the inevitable link between new housing and the need for warehousing space, dealing in the process with some of the misconceptions about logistics and the competition for land. These need an immediate response from the planning system.

The next section looks at **industry of the future**, which we will need to plan for, and covers the revival of Freeports, urban and last mile logistics, the emergence of Gigafactories, the future of manufacturing, and the role of life sciences and innovation hubs.

Next, we ask what a **green industrial revolution** will look like, exploring net zero warehousing and industrial clusters, and low carbon last mile logistics.

And finally, we consider the economic and social **value generated by industry and logistics** and how, as well as contributing to economic recovery, we must change perceptions so that broader popular support can be won both to smooth the path for development proposals and shift the dial politically so that we can play to our industrial strengths.



We conclude with eight **recommendations** for how planning can play to our industrial strengths:

- In light of the demise of the Industrial Strategy, urge Government to adopt a **joined-up approach** to planning for industrial and logistics development
- 2 Strengthen national planning policy to support industrial and logistics growth and provide explicit guidance on how the spatial needs (e.g. for clustering) and land requirements for key sectors should be determined and delivered
- In replacing the Duty to Co-operate, give equal status to strategic employment land as the distribution of housing needs across local authority boundaries
- Encourage greater co-ordination of infrastructure planning with spatial frameworks for delivering local industrial strategies or their successors
- Ensure that **local plans maintain an adequate future supply of land** in the right locations for all key sectors, including consideration of a Delivery Test similar to that for housing
- Consider the wider use of the Nationally Significant Infrastructure Project
 (NSIP) regime for large scale industrial and logistics development, particularly a new wave of Gigafactories, and how Local Development Orders (LDOs) might give greater flexibility for industrial development not just in Freeports
- 7 The sector must **build a stronger narrative** around the economic, social and environmental contribution (particularly to net zero) it makes towards Government objectives and global challenges
- The sector must also **develop its dialogue** with strategic economic bodies, combined and local authorities, and local communities to win policy backing and popular support for well-considered proposals



We are at a tipping point with the very real prospect of no readily available land for large scale users by as soon as 2022 in some areas

2020 witnessed record breaking take-up of industrial and logistics space following a surge in online retailing during the pandemic and a shift from 'just-in-time' to 'just-in-case' supply chain inventories due to both fears of a no-deal Brexit and then the risk of shortages arising from COVID-19.

This follows nearly a decade of year-on-year growth in demand for industrial space with land supply struggling to keep up. We are at a tipping point with the very real prospect of no readily available land for large scale users by as soon as 2022 in some areas. This is an immediate crisis which will constrain the 'green industrial revolution'.

This has happened at a time when there have been significant advances in development and construction, with greater automation of manufacturing and logistics, progress in building design and sustainability, and a new focus on employee amenities and wellbeing. The industrial park is evolving.

Innovation in logistics in particular is fast-paced, developing complex multi-modal supply chains to ensure resilience at ports and railfreight interchanges, from multi-level "mega sheds" to mixed-use units in urban areas (aka 'beds on sheds') to last mile hubs in cities and towns for autonomous electric vehicles and e-cargo cycle deliveries.

There is an urgent need to plan for the consequences of these changes and not simply rely on trend-based projections.



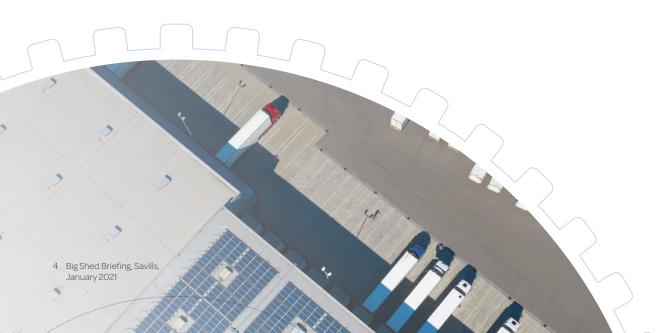
The biggest constraint facing the sector is a chronic shortage of readily-available land, especially for 'big box' logistics (units larger than 100,000 sq ft), where there has been a surge in take-up following the pandemic and limited new supply entering the market. In planning terms, this is often referred to as 'strategic employment land'.

Savills⁴ reported record take-up in this sector during 2020 with 50.1 million sq ft of floorspace being snapped up. This represents a 34% increase on the previous record set in 2016 (37.4 million sq ft) and an extraordinary record during otherwise recessionary conditions.

To put this in context, take-up following the 2008 'great' recession stuck at around 25 million sq ft between 2010 and 2013.

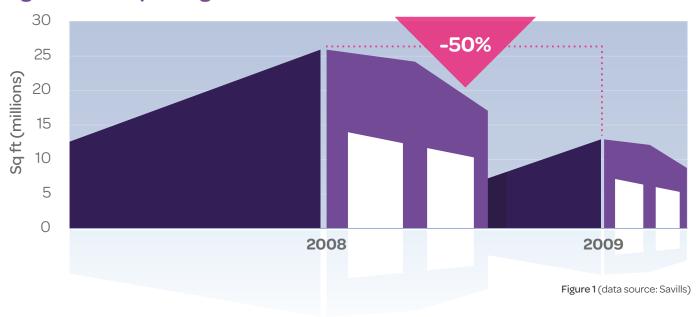
See figures 1 to 2 overleaf.



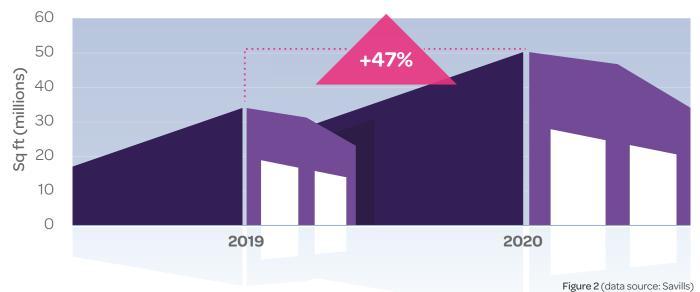


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Big shed take up; mid great recession



Big shed take up; mid COVID downturn







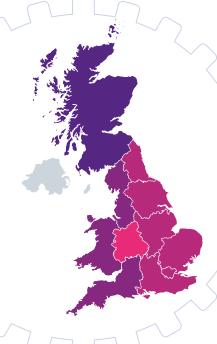


Figure 3. Years' supply based on 5 year average take-up

Up to 6 months
6 to 12 months
12 to 18 months
18 to 24 months

Demand is also far out-stripping supply. There was a pipeline of 32 million sq ft available at the start of 2021, with only 12.9 million sq ft comprising Grade A floorspace which equates to less than a years' supply. And this picture varies across the country (see table 1).

Region	2020 Take-up (sqft)	2021 Supply (sqft)	Years' supply (based on 5 year average take-up)
West Midlands	6.61m	6.54m	0.5
London and South East	8.26m	4.19m	0.6
East Midlands	12.03m	5.75m	0.7
Yorkshire and North East	10.35m	4.6m	0.7
East of England	2.78m	1.47m	0.8
North West	5.16m	4.07m	1.0
South West and Wales	3.86m	3.79m	1.2
Scotland	1.02m	1.6m	1.8

Table 1 (Savills "Big Shed Briefing" January 2021)

The majority of UK regions fall well short of a one year supply and there are significant shortfalls in the "Golden Triangle" where logistics demand is focused – the West Midlands for instance has only six months' supply. This situation is not new, and prompted the West Midlands Land Commission, set up by the new Combined Authority in 2016, to observe:

'the shortfall of land for employment space is at least as pressing as the shortage of land for new homes, and possibly more so'

This led the Local Industrial Strategy for the West Midlands, published in 2019, to comment:

This is most strongly the case in relation to those large scale, strategic sites that can have the greatest net additional impact on growth and jobs."



A further study was commissioned in 2019 to identify a pipeline of sites but this has yet to report.

The link between housing and warehousing

Research we carried out in 2019 on behalf of the British Property Federation (BPF)⁵ highlights the inextricable link between housing and warehousing. It estimated that an additional 21 million sq ft of warehouse floorspace would be required each year based on the Government's housing target of 300,000 homes per annum. This is based on a ratio of 69 sq ft of warehouse space for each new home delivered.

This highlights one of the key contrasts between the Government's approach to housing, where a clear national target has been set and district-level requirements are now enshrined in the standard method, combined with a well-established five-year supply requirement and the relatively new Housing Delivery Test. There is no comparable way of determining the need for employment land and no equivalent sanction for not meeting that need.

We have revisited the warehousing to new homes ratio from 'What Warehousing Where': In 2020 the ratio had increased to **73 sq ft of warehousing per new home**, suggesting that almost 22 million sq ft of warehousing could be required throughout England each year in order to maintain the current ratio.



We have also applied 2020 regional ratios to the standard method to provide an indication of the scale of regional warehousing required each year. Importantly, the standard method is a minimum housing need so any increase would require an increase in warehousing.

Only London's ratio has reduced since 2019 but the capital still requires the largest quantum of warehousing, followed by the South East and the Midlands. The scale of warehousing required every year to maintain the existing relationship with housing is significant and will present a major challenge for the planning system (table 2).

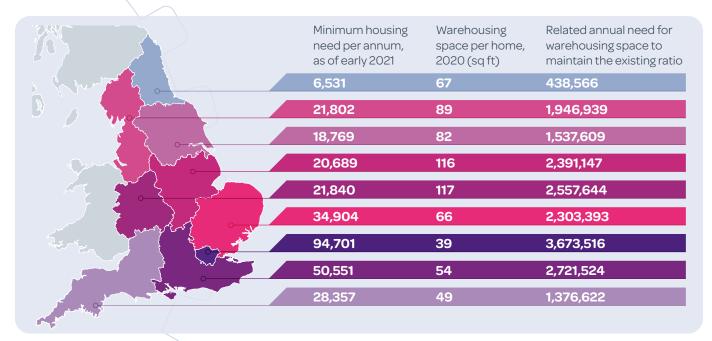


Table 2 (data source: Turley standard method calculations, March 2021)

2020 has significantly heightened this sense of crisis.

COVID-19 has supercharged demand. In the retail sector, online sales grew from 20% of all sales in February 2020 to 28% by the end of the year with a peak of 32% in Q4 2020. In February 2021 online sales accounted for $34.5\%^6$. Market consensus suggests that 30% of all retail sales will be online throughout 2021 suggesting current demand for logistics space will continue in the short- to medium-term.

Approximately three quarters of households now do their grocery shopping online⁷ and it is estimated that 17.2m British consumers – a quarter of the population – will make permanent changes to the way they shop, including those who have in the past been slow to adopt online banking and shopping⁸. This will continue to drive the demand for logistics space at the same time that it creates further challenges for our High Streets.

The full economic effects of both Brexit and COVID-19 remain to be seen but the planning system will need to be sufficiently agile to ensure the industrial and logistics sector can make its fullest contribution to economic recovery.

Larger warehouses

Occupiers are demanding even larger buildings. Both Savills⁹ and CBRE¹⁰ have observed growth in requirements for buildings of at least 500,000 sq ft with CBRE reporting the average deal size in 2020 was 321,000 sq ft.

The growth in 'e-tailing' has meant flexibility in warehouse design is becoming increasingly important. Buildings must be able to cope with demand volatility as well as quick-changing trends driven by social media. The difficulty for online retailers is the absence of physical constraints on the number of customers an online store might generate. Customers have come to expect access to extensive item ranges without any consideration for its location in the national supply chain, free returns and "next day" delivery.

- 6 https://www.ons.gov.uk/ businessindustryandtrade/ retailindustry/timeseries/j4mc/drsi
- 7 BBC News (20/08/2020) 'Three Quarters of UK does Grocery Shopping online'.
- 8 https://www.alvarezandmarsal.com/ insights/172-million1-uk-consumersexpected-make-permanentchanges-their-shopping-habits
- 9 Big Shed Briefing, Savills, January 2021
- 10 UK Logistics Q42020, CBRE Research

Changing requirements for internal operations are also impacting building specifications. The increasing use of data, technology and automation means that warehousing needs to be highly tailored to occupiers. As a consequence, warehousing which offers scope for expansion or contraction, perhaps in a multi-tenanted building which can be quickly and easily reconfigured, will be best placed to meet emerging market requirements.

Operators are increasingly attracted to warehouses with a minimum of 21m clear internal height to allow for internal stacking and installation of automated machinery. It is worth noting the maximum heights of recent strategic-scale distribution schemes in the East and West Midlands (see figure 4):



Figure 4, Recent Strategic Scale Schemes

These trends are resulting in buildings with bigger footprints and increased heights, including multi-level warehouses with mezzanine floors. In turn, this trend demands more extensive areas of land. Regional-scale distribution facilities command sites of at least 25 ha and it is now common to see overall sites exceeding 100 ha (with strategic rail freight interchanges requiring c.250 ha).



How the planning system has responded

The planning system and particularly the local plan process has been slow to respond, obsessing about Use Classes B2 and B8, job numbers, relying on past trends and holding onto longstanding sites that are no longer big enough or well-located to meet current needs. We need greater urgency and flexibility to identify and bring forward the next generation of strategic employment sites.

Despite strong representations to the 2020 Planning White Paper by the development industry, there is little to indicate that Government is responding to their concerns. Whilst the recent proposals to amend the National Planning Policy Framework¹¹ are an interim update they fail to strengthen policies for industrial development and the latest decision to abandon the Industrial Strategy altogether in favour of "building back better" and "levelling up" does not bode well for a more rigorous approach with a strong spatial dimension.

There is one step in the right direction, however, in the Government's recent announcement on a spatial framework for the Oxford-Cambridge Arc (February 2021). At paragraph 1.24, the document says:

...planning at the local level for homes, business space, infrastructure and the environment is not integrated, and is unable to take an Arc-wide view. If we want a better future, we need to plan for growth by thinking about the provision of infrastructure, housing, the environment and the needs of businesses and universities at the same time. We cannot continue to plan for transport, the environment and housing separately, or to think of economic development as separate from housing provision and commercial development."

This not only applies in the Arc but to other parts of the country where a more strategic spatial approach to sub-regional economies is essential.

So what is wrong with the planning system and how it addresses the needs of the economy?

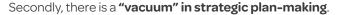
Firstly, we have ineffective national policy.

The NPPF provides only five paragraphs on "building a strong, competitive economy" of which two relate to rural areas and tourism. This compares to the chapter on housing delivery which extends to 21 paragraphs.

In terms of logistics, the fastest growing and most land hungry industrial use, there is a single sentence in the NPPF (paragraph 82) requiring local plans to recognise the specific locational requirements "...for storage and distribution operations...".



 National Planning Policy Framework
 Draft text for consultation, MHCLG, February 2021



Government dismantled the "unaccountable regional apparatus" from the planning system and replaced it with a Duty to Co-operate (DTC) through the Localism Act 2011. This legal test requires local and combined authorities to engage "constructively, actively and on an ongoing basis" to effectively deal with strategic, cross-boundary matters.

The focus for DTC agreements has been on the distribution of housing between urban authorities with a shortfall and adjoining authorities within their Housing Market Area. There are very few examples (Coventry and Warwickshire being one) of similar arrangements for employment land, particularly looking on a sub-regional or functional economic market area basis.

There is also limited evidence of Strategic Economic Plans or Local Industrial Strategies being translated into local plans and giving them a spatial dimension. Too often, the local plan evidence base is on a parallel track calculating the number of jobs needed to support the population rather than the amount and type of land needed to support the local economy.



Case study: North West

The North West faces an emerging logistics crisis. There is less than one years' supply of land available and limited prospects of this position materially improving in the short term, certainly not to the extent that is required to address historic under provision let alone adequately provide for the accelerated demand and take-up that the industry is seeing nationally.

The reasons for the shortfall are complex but are largely due to delays in bringing forward local plans. The vast majority of the regions' strategic transport network runs through the Green Belt. Some Local Planning Authorities have been willing to grapple with Green Belt release required and allocate sites for logistics development. However, these authorities are also required to release Green Belt to meet development needs for housing and have witnessed public and political resistance which has resulted in plans being delayed. Plans have included those for St Helens, Warrington, West Lancashire and the Greater Manchester Strategic Framework which cover nine of the ten Greater Manchester authorities. The effect of this local policy vacuum set against huge demand, a lack of supply and investor appetite has been the submission of planning applications on five large logistics Green Belt sites allocated in emerging plans. Despite the vast majority of these applications being recommended for approval by their constituent authorities, all have been called in by the Secretary of State for determination. In total some 7m sq ft of floorspace is sitting on the Minister's desk rather than being in construction. Decisions are hotly anticipated in the coming months. However, even if all were approved, it would merely address pent-up demand caused by historic failures to provide sufficient supply, and would therefore not remove the need to plan positively and make further sufficient provision in Local Plans across the North West.

Given the lead-in times for plans in preparation to reach adoption, the supply issues facing the industry seem set to remain for the foreseeable future, and are likely to see developers or land promoters weighing up whether to pursue further Green Belt planning applications at substantial cost and risk.

Some 7m sq ft of floorspace is sitting on the Minister's desk





Case study: West Midlands

Following the end of regional planning in 2010, the West Midlands Strategic Employment Sites Study¹² was commissioned to plan for strategic-scale employment sites in a region considered to be a global centre for manufacturing, R&D and logistics. This study concluded that there was a shortage of land and recommended a follow-on study to identify the requirement and a policy mechanism to deliver a land pipeline given the "larger than local" issues that needed to be assessed beyond local authority boundaries.

Five years on, the results of the further study are still awaited, meaning local plans have been reviewed, examined and adopted in the absence of any robust evidence on strategic employment land requirements and supply.

In the meantime, the West Midlands Combined Authority has published a Strategic Economic Plan¹³ (2017), a Local Industrial Strategy¹⁴ (2019) and an economic recovery plan¹⁵, all of which provide aspirational proposals/requests to deliver industrial growth but without any up-to-date evidence on sub-regional land requirements or policy to deliver them.

With over a decade of no strategic or sub-regional planning it is little surprise that the West Midlands can only demonstrate six months' supply of strategic employment land.

Misconceptions of logistics

The vital role played by logistics during the pandemic has offered an opportunity to correct some of the misconceptions that exist as it has been described as the "Cinderella" of UK industry, being largely overlooked, ignored and opposed¹⁶.

Local authorities and communities often only view logistics development through one lens – as large-scale, unattractive warehousing causing visual impact, swallowing up extensive areas of greenfield land, generating high volumes of traffic, congestion and noise and only capable of providing low numbers of low-skilled jobs.

Our 2020 research for the BPF and Tritax Symmetry 17 reveals that the logistics sector has actually gone from strength to strength since 2015, making an enormous contribution to the economy and society, providing increasing numbers of full-time good quality jobs (over one million employees with average annual salary of £31,600), contributing to productivity gains (£130 billion in Gross Value Added annually) and community benefits.

We talk later in this report about the social value of industrial and logistics development but it remains a challenge for developers to overcome every time, particularly where politicians distinguish as black-and-white between manufacturing (good) and logistics (bad).

- 12 West Midlands Strategic Employment Sites Study, Peter Brett Associates and JLL, September 2015
- 13 "Making our Mark", WMCA Strategic Economic Plan, 2017
- 14 West Midlands Local Industrial Strategy, May 2019
- 15 "Recharge the West Midlands", WMCA, June 2020
- 16 https://prologis.co.uk/why-its-time-to-prioritise-uk-logistics/
- 17 "Delivering the Goods in 2020; The Economic Impact of the UK Logistics Sector", BPF and Tritax Symmetry and "The increased importance of logistics during Covid-19 and beyond", Tritax Symmetry, December 2020





Throughout the past decade, London lost around 100 ha of industrial land annually

Competition for land

'Industrial' land has historically been protected from change or redevelopment to 'higher value' uses (e.g. residential and retail) through national and local planning policy. Despite this, much industrial land in urban areas has been sacrificed to housing over the past 20 years to feed the 'brownfield first' mantra. What this has done is force industry and particularly land-hungry logistics out to peripheral greenfield sites.

Given the structural market changes happening in 2020, there is now evidence of a reverse in fortunes, with Amazon recently acquiring a site benefitting from a residential-led planning permission in Barnet¹⁸. Whilst this has largely been a London phenomenon to date, the demand for urban and last mile logistics is likely to have an effect on land values throughout other UK cities.

Throughout the past decade, London lost around 100 ha of industrial land annually, compared to a release benchmark of just 37 ha per annum in the now superseded London Plan (2016)¹⁹. Following the "Intend to Publish" version of the emerging London Plan (December 2019), the Secretary of State directed the removal of the policy seeking "no net loss" of industrial land in order to provide flexibility for its managed release 'to other planning priorities' (i.e. housing, schools and other infrastructure) and this has been carried through to the adopted version²⁰. This sends another message that Government is prioritising housing over industry and suggests that the erosion of available industrial land in the capital could continue.







The Plan for Growth highlights life sciences, digital and creative, fintech, clean energy and defence as particular areas which will help shape the UK's future, and identifies sectors which need to transition to net zero including automotive, aerospace, agriculture, oil and gas.

A wide range of new strategies are listed including one for industrial decarbonisation, but little that immediately replaces the Industrial Strategy.

Looking to the future of the industrial and logistics sector, what new challenges will we face?

Already, the Government has announced a new wave of Freeports in response to exiting the EU. The transition to electric vehicles may see the development of Gigafactories (eight of which were recommended by the Faraday Institute to be built by 2040). The future of manufacturing, both its decarbonisation and the enormous potential in new areas such as electech and clean energy, will generate new requirements. Life sciences will gravitate around our universities and hospitals with opportunities for innovation clusters. And logistics will continue to feed and clothe us, requiring more hubs in urban areas, as well as regional distribution facilities to supply our industries and store what we might need.



Figure 5, Announced Freeport locations

- 1 Teeside
- 2 Humber Region
- 3 Liverpool City Region
- 4 East Midlands Airport
- 5 Felixstowe and Harwich
- 6 Thames
- Solent
- 8 Plymouth

Freeports

Seaports and airports are our gateways to the world and international trade with many developing into significant port-centric logistics hubs enabling onward distribution by road or rail. The introduction of Freeports is set to have a significant impact on the logistics and industry sector in the coming years; 18 Freeport bids were submitted to Government in 2020 and the eight successful locations were announced in the 2021 spring budget, covering every region save for London and the West Midlands (see figure 5).

The eight locations are based around coastal cargo ports, with the exception of the zone around East Midlands Airport, and are expected to begin operating from late 2021.

A Freeport is a secure customs zone, located at a port (whether sea, air, or even inland interchange), which benefits from different customs rules, tax duties and administrative burdens, despite being located within a country's land border. The overarching objective is to boost trade, jobs, regeneration, innovation and investment across the UK.

The suggested Freeport model in the UK layers a wide range of potential benefits on top of the basic concept of a tariff free zone to encourage Foreign Direct Investment, development and the creation of high-paid high-value jobs. They will come with a more flexible planning regime with Government encouraging the use of Local Development Orders (LDO) and permitted development rights. These proposals present challenges and need to be carefully considered to ensure that they work alongside the existing planning regime at a local and national level, and further changes may be required to marine licensing to simplify any consents in the marine environment.

The Freeport initiative could unlock significant opportunities for further industrial space to be provided around ports including on "satellite" sites given each zone can stretch as far as 45km and link specific areas in designated "tax sites". These locations may be particularly attractive for many occupiers who have strong international supply chains. The overarching objective is to boost trade, jobs, regeneration, innovation and investment across the UK with a focus on incentivising domestic manufacturing, processing and assembly alongside logistics.



Gigafactories

Whilst demand for industrial and logistics property remains strong, a new factor in the equation is the emerging need for capacity in the UK for battery production, which is considered to be essential to ensure the successful electrification of the automotive sector and, ultimately, retain viable car production capabilities in the UK. The Faraday Institute, a Government sponsored organisation which is assisting the sector in facilitating the transition, identified in a recent report²¹ that there is need to deliver up to eight "Gigafactories" in the UK by 2040.

Certain regions such as the West Midlands have been at the forefront of advancing the case for delivery of a Gigafactory within its administrative boundaries. However, the first one that could emerge is in Northumberland with British Volt recently purchasing the former Blyth Power Station site for a Gigafactory. This would create up to 8,000 jobs and make enough lithium-ion batteries to power between 300,000 and 500,000 electric vehicles a year.

As the name suggests, Gigafactories will require sites of scale. The emerging Britishvolt Gigafactory is estimated to be a single building of some 2.7 million sq ft and would be the 16th biggest building in the world once completed. Gigafactories will need to be proximate to the automotive markets they service and, at least in the short term, require government financial assistance.

Because of their scale, the success of Gigafactories across the UK will be determined by how many appropriate sites can be found and developed on. In addition, their scale will significantly impact the amount of available industrial space which is available for other sectors.



...employs 2.7 million people and contributes 11% of GVA

The future of manufacturing

Despite a decline in manufacturing employment in the UK over the last 40 years, the manufacturing sector, and in particular hi-tech industries, remains a critical component of the UK economy. It employs 2.7 million people and contributes 11% of GVA²².

Building on the ambitions set out in the UK Industrial Strategy, the Prime Minister announced a Ten Point Plan for a Green Industrial Revolution at the end of 2020, which places manufacturing at the heart of the Government's levelling up agenda and response to climate change.

As we look to the future of manufacturing in the UK, there are a number of challenges which the planning system will need to respond to in order to support growth.



The availability and allocation of land in the right areas. This is a critical issue and requires a strategic approach considering infrastructure requirements including power, road and rail connectivity, access to labour supply (increasingly skilled workers), alongside amenity and environmental impacts.



Innovation clusters will be crucial but, where these might span a number of local authority areas, the lack of any meaningful regional or sub-regional strategic planning in most areas presents a significant barrier.



A lack of understanding from local authorities and elected members as to the requirements of modern industries, the relationship with logistics and what this means for strategic planning. A much greater appreciation of the evolving manufacturing sector will be required to ensure the planning system can facilitate these opportunities.



Life science and innovation

The life sciences sector and high-tech innovation investment will continue to grow and create opportunities in industry, following £19.9 billion capital being raised by UK-based life science companies in 2020^{23} .

Future industry will be underpinned by the drive for co-location and collaborative working between industry partners and educational estates to support life sciences, innovation and R&D. This is already evident across the Oxford, Cambridge and London 'Golden Triangle' where the core universities support a clustered life science industry. Throughout 2019 and 2020, we have seen other key regions promoting the potential of life science and innovation.

The pressures of 2020 on many industrial sectors could bring opportunities for large-scale industrial players to review their real estate assets and locate related high-tech and R&D facilities close to associated manufacturing and logistic processes. South Wales, for example, is looking at opportunities for large-scale hydrogen production sites alongside hydrogen innovation centres and R&D in the coming years²⁴. Strategic sites including the region's ports and steelworks, alongside educational research capabilities, will play a fundamental role²⁵. Early specialist planning involvement will be critical in site finding and assessment and mediating the requirements of a variety of stakeholders through the planning process.

- 22 Made UK
- 23 https://www.savills.co.uk/research_ articles/229130/309997-0
- 24 https://gov.wales/developinghydrogen-energy-sector-wales
- 25 https://www.swic.cymru/





Urban and last mile logistics

The rapid growth in online retailing has generated a demand for urban logistics facilities, including hubs to serve the so-called "last mile".

Quick-fix solutions to provide essential last-mile hubs, often in the form of a "meanwhile", time-limited use which can be reviewed, adjusted and/or relocated as demand or the long-term objectives of individual sites/premises change over time, are becoming increasingly attractive for occupiers.

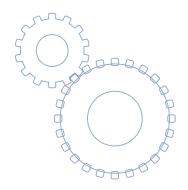
The development potential of low density and struggling out-of-centre retail parks present attractive locations for investors and developers as urban logistics hubs. With equal demand for high-density residential schemes and land availability at a premium there have been proposals in London for "co-location" schemes with residential sitting above logistics ("beds above sheds"). This trend is likely to emerge in other UK cities.

Making best possible use of designated and non-designated employment land will always be central to accommodating our last-mile distribution needs, local authorities will need to plan positively for the inclusion of distribution hubs in strategic locations to ensure their policies and site allocations truly meet the fast-changing needs of businesses and communities.









Innovation in the industrial market is a vital contribution to the Green Recovery. Efforts in net-zero development, through to strategic use of land to minimise carbon emissions in logistics could ensure that the UK retains its status as a global leader in sustainability. To do this, the planning system needs to account for the ability for developers and occupiers alike to contribute to a green economy.



A new generation of green facilities are now emerging in the UK...

Net zero warehousing

The UK Warehousing Association (UKWA) estimates that warehousing in the UK accounts for 428 million sq ft of property – made up of 1,500 individual units. It is a significant part of the UK's building stock and therefore has a considerable carbon footprint 26 .

One result of the logistics sector's rising ESG commitments and alignment with international policy is that the sector is paying more attention to sustainability.

This shift is being driven by a number of factors which include a strong ESG requirement from institutional investors, occupier demand for net zero buildings and increasingly sophisticated ESG commitments from developers.

A new generation of green facilities are now emerging in the UK including industrial developer PLP's first net zero carbon-ready developments at its Crewe and Smithywood Commercial Parks. Similarly, another PLP project in Milton Keynes is applying carbon net zero aspirations from the outset.

Investors with an increased focus on ESG, sustainability and a need to consider the requirements of occupiers of the future are building charging points in to car parks and increasing electrical capacity to prepare for future electric vehicle use.

In Europe, greater strides have arguably been made already and a number of carbon-neutral warehouses are already appearing. In 2019, L'Oreal opened its largest logistics centre in Germany. The site, developed by Prologis, is completely carbon neutral. It has around 7,400 solar panels to supply electricity, while rainwater is used in green areas for irrigation, cleaning and sanitation. There are also Habitats for reptiles and birds as part of the extensive site²⁷. It's one of a series of major, innovative net zero schemes coming forward across the continent.

It is clear that both investor and occupiers have an ever increasing awareness of the importance of planning for a sustainable future.

And a move to universal net zero warehousing, sooner rather than later, is inevitable."



²⁷ https://www.jll.co.uk/en/trendsand-insights/cities/how-europewarehouses-are-helping-to-deliver -a-low-carbon-future







...blue and green hydrogen could create upwards of 900,000 jobs in Europe by 2050



...the Humber area is responsible for emitting over 12 million tonnes of CO₂ each year

Net zero industrial clusters

In common with warehousing and logistics, the industrial sector is also making moves to become carbon neutral. The Government has an ambition to create a net-zero carbon industrial cluster by 2040. They hope to attract "innovators, investors and problem solvers to create a low-carbon exemplar that others in the UK and internationally can learn from and replicate"²⁸.

Industrial clusters are areas with a number of industrial sites. They are often industries which are energy intensive. However, industry accounts for around a quarter of all UK greenhouse gas emissions and the UK's six largest industrial clusters, home to energy-intensive industries, emit around 40 million tonnes ${\rm CO}_2$ a year²⁹.

In order to meet the ambitions of the Paris Climate Change Agreement, industry needs to reduce its emissions. The proximity of the businesses in each cluster are key to developing a successful net zero strategy. This size and aggregation of energy demand across industries creates opportunities for huge efficiencies, electrification, demand optimisation, and carbon capture, utilisation and storage (CCUS). This would also create an internal market for hydrogen – the most promising technology for decarbonising carbon intensive sectors of the economy.

Humber, in the North of England, is home to one of many ongoing projects to decarbonise clusters across Europe. Currently, the Humber area is responsible for emitting over 12 million tonnes of CO₂ each year.

The Zero Carbon Humber project's ambition is to transform the Humber region into the UK's first net-zero carbon cluster by 2040. They aim to create efficiencies and ramp up efforts on CCUS and blue hydrogen whilst electrifying where possible. This would then allow the hydrogen infrastructure that is initially developed for blue hydrogen to also be used for green hydrogen. This is made possible as Humber is close to two of the largest offshore wind farms in the UK – Dogger Bank and Hornsea. The industrial cluster is able to decarbonise by using blue/green hydrogen as a replacement for fossil fuels in industrial processes and power stations.

The project brings together a diverse range of partners; Associated British Ports, British Steel, Centrica Storage Limited, Drax, Equinor, Mitsubishi Power, National Grid Ventures and SSE Thermal. Because industrial clusters are about industry co-location, they are often found in more socially disadvantaged areas.

Decarbonisation of industrial clusters is poised to create significant jobs; blue and green hydrogen could create upwards of 900,000 jobs in Europe by 2050^{30} .

There are a number of other similar projects in development including HyNet in the North West, Net Zero Teeside and Net Zero South Wales.

It is evident that embracing new technologies in the move to net zero carbon emissions is fundamental to the longevity of the logistics and industrial sectors.

- 28 https://assets.publishing.service. gov.uk/government/uploads/ system/uploads/attachment_data/ file/803086/industrial-clustersmission-infographic-2019.pdf
- 29 https://www.ukri.org/our-work/ our-main-funds/industrial-strategychallenge-fund/clean-growth/ industrial-decarbonisationchallenge/
- 30 http://www3.weforum.org/docs/ WEF_System_Value_Europe_Market_ Analysis_2020.pdf





... demand for urban last-mile delivery will grow 78% by 2030

Low carbon last mile logistics

Last mile logistics is concentrated in urban areas where the majority of people live and is responsible for around 25% of emissions from all transportation (European Commission, 2011c).

The growing demand for the transportation of products in the forward flow of logistics is an increasing challenge. The World Economic Forum (WEF) has forecast that emissions will rise by more than 30% in 10 years to 25 million tonnes per year. This reflects the growth in urban dwellers and online shopping. WEF data predicts that last mile logistics will grow 78% by 2030. To address this demand there is an expectation that there will be a 36% rise in inner city, last mile delivery vehicles.

Browne et al. (2006) found that energy consumption in the last mile alone can be equal to the total consumed in freight transport from the product's place of origin to the retail outlet. Therefore, the last-mile transportation leg offers the greatest potential to increase energy efficiency.

Research demonstrates that the issue is also increasingly on customer radars. According to research by the International Post Corporation, nearly half (48%) of consumers are in favour of their deliveries being carbon-neutral.

There are a number of cases of retailers and their partners making significant changes to last mile that the industrial sector should take note of;³¹

In 2019 it was announced that Amazon had an ambition to be emission free on half of all shipments by 2030. It also began a large scale project to map its carbon footprint using its own 'advanced scientific model'.

There has also been a pledge by IKEA for all of its deliveries to be made by electric vehicles by 2025. It already makes 100% of its deliveries by this method in Shanghai.

DHL has also been pioneering an innovative new approach in Amsterdam. The scheme uses boats to convey goods down the canals. They then use bikes and electric vehicles for last mile delivery.

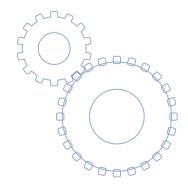
In the UK, online retailer ASOS is working with carrier DPD to ensure that half of all deliveries within the London Ultra Low Emission Zone are served by electric delivery vehicles only. DPD installed an all-electric parcel depot in Westminster last year and now has a fleet of electric vans.



31 https://www.smartcitiesworld. net/news/news/retailersrethink-last-mile-deliveries-toreduce-emissions-and-meet customer-expectations-5051







Crucial to the success of industry and logistics in the future is a more positive image for the sector. Challenges like NIMBYism have contributed to long-term supply shortages. Government and industry need to be better at celebrating the value delivered by the sector in terms of skilled job creation and the ability to meet societal demands like access to electric vehicles.

COVID-19 presented us with an unprecedented global economic and social crisis that businesses and society must navigate. The crisis has exacerbated existing inequalities, with those in low income households and BAME communities impacted most. In 2020 the UK headline GDP declined by 9.9% which is more than twice the fall in 2009³². Since March 2020, 11.4 million³³ jobs have been furloughed while the number of people in the UK claiming unemployment benefits more than doubled in 2020³⁴. Such conditions illustrate what could be one of the deepest recessions we have seen in modern history.

If recovery from this pandemic offers an opportunity to reset our ways of working, it is time to bring the essential role of the industrial sector to the forefront. Without the agility, flexibility and efficiency of essential service providers, we would be facing a radically different situation in terms of supporting those who need it most. Robust logistical networks will continue to connect countries around the world, ensuring the flow of goods and commerce as we face an uncertain economic future.

There is a strong opportunity for the industrial and logistics sector to be at the centre of economic recovery.

Although many sectors are suffering as a result of COVID-19, the logistics sector in many areas thrived. Whilst some industries saw job losses, jobs were being created in the logistics sector. In July 2020, the Guardian reported that "one of the obvious winners of the jobs shift have been home delivery and logistics businesses". With Amazon opening 15,000 new full and part time positions across its UK fulfilment centres and logistics network. In addition, the parcel delivery firm Hermes is creating more than 10,000 jobs to deal with the shift to online shopping³⁵. The number of job postings for heavy goods vehicle (HGV) drivers rose by 9.7% in the first week of July compared with the prior week, according to analysis conducted by the Recruitment and Employment Confederation.

Former Prime Minister Gordon Brown has recently called on Government to focus on logistics as a key sector in order to mitigate job losses due to COVID-19 and improve the skills and employability of young people³⁶.

The industrial and logistics sectors are well positioned to support the Government's ambition to build back better with green, environmentally focussed solutions, and can contribute to the development of prosperous and sustainable economic centres which attract leading national and international businesses. The social value derived from the economic benefits associated with creating jobs and sitting at the heart of the community alongside good placemaking is playing an increasingly important role in the logistics and industrial sector.

"one of the obvious winners of the jobs shift have been home delivery and logistics businesses"

- 32 ONS (2021) GDP first quarterly estimate, UK: October to December 2020
- 33 House of Commons Library (2021) Briefing Paper - Coronavirus: Impact on the labour market
- 34 ONS via Nomis (2020) Claimant Count: January 2020; December 2020
- 35 https://www.theguardian.com/ world/2020/jul/31/how-covid-19has-reshaped-the-jobs-landscapein-the-uk
- 36 https://www.theguardian.com/ society/2020/oct/19/gordon-browncalls-for-100-a-week-wage-subsidyto-help-hire-under-25s



Economic benefits and social value



Economic impact modelling³⁷ indicates that the additional industrial floorspace delivered in the UK in 2020 is of a scale that could support **56,000 direct jobs** on site and a further **42,000 jobs indirectly** in the wider economy through onward and supply chain expenditure.



This equates to **1,500 direct on-site jobs** supported for every additional million sq ft of industrial floorspace, highlighting the sector's potential to contribute to local economic recovery plans moving forwards.



During COVID-19, the number of people in the UK claiming unemployment-related benefits more than doubled in 2020, increasing from **1.2 million** in January to reach **2.6 million** by December³⁸.



Industrial sectors which deliver new jobs that are accessible to communities will therefore be vital towards achieving a strong and equitable post-COVID recovery and towards enhancing locally generated social value through delivering wider economic benefits.



It is estimated that the industrial floorspace delivered in 2020 will contribute £5.33 billion Gross Value Added (GVA)³⁹ to the UK economy per annum thereafter.



This equates to £148 million GVA per million sq ft locally, highlighting the potential contribution of the sector to local economies going forwards.



Wages paid to employees will generate demand in local economies through raising levels of disposable income. It is estimated that the wages paid annually to workers employed on 2020's additional industrial floorspace sum to £1.55 billion, equating to annual wages of £43 million per million sq ft of new floorspace.



It is estimated that the total contribution to public revenues (including National Insurance, income tax and business rates) generated by the operation of 2020's additional logistics floorspace equates to £380 million per annum, supporting the operation of key state functions and services, including the NHS.



The £1.9 million per million sq ft in business rates contributed by industrial floorspace, are of particular significance, given that business rates constitute a major component of local authorities' income stream, contributing towards the delivery of a wide range of public services, such as local transport, education, housing and social care.



Social value is also measured qualitatively, in terms of positive impacts for people and communities that can be created by going beyond 'fit for purpose' built environment design and creating socially sensitive infrastructure or architecture. Designing places that people value, and want to spend time in, enhances the long-term value of the asset. Integrating people into the design process provides a sense of ownership and involvement, connecting people with places and making them feel valued.

³⁷ Conducted by Turley Economics with reference to best-practice guidance for estimating economic impacts, including the Homes and Communities Agency's Additionality Guide (4th Ed.) and Employment Density Guide (3rd Ed.).

³⁸ ONS via Nomis (2020) Claimant Count: January 2020; December 2020

³⁹ Gross Value Added (GVA) measures the value of output created (i.e. turnover) net of inputs used to produce a good or service (i.e. production of outputs). Put simply the GVA is the total of all revenue into businesses, which is used to fund wages, profits and taxes, and therefore is key towards understanding economic productivity.

Warehouses now offer more highly skilled and better paid jobs, with research 40 finding that roles in the sector have diversified significantly since 2006, with a notable increase in the proportion of office-based and managerial jobs, and a corresponding decrease in the percentage of jobs that are on the warehouse floor.

This is a trend that is set to continue, with survey research published by the CBI suggesting that almost 80% of UK logistics firms expect to increase the number of higher-skilled logistics roles over the coming years⁴¹. The industry has responded to help meet skills needs, with companies such as DHL and Unilever offering a wide range of apprenticeships – from supply chain and transport to procurement and operations – and supermarkets such as ALDI and Morrisons also running logistics and supply chain further education programmes.

The benefits to towns and cities far exceed the negative impacts and this is a key point that could be better communicated to the communities affected by new development.



Case study: Peddimore

Peddimore lies within the Royal Town of Sutton Coldfield in Birmingham and comprises one of the most significant employment opportunities in the UK. It is being delivered jointly by Birmingham City Council and IM Properties Plc and will set new standards for commercial development to attract leading national and international manufacturing and logistics businesses.

The site is fundamental to the socio-economic growth of Birmingham and the West Midlands, and a priority project in the City Council's Economic Recovery Strategy (March 2021).

Peddimore is founded on a high-quality design and landscape-led approach to masterplanning with long-term stewardship, a focus on sustainability and an extensive Social Value package to support local communities.

Sustainability measures include:

- · Increasing biodiversity
- Sustainable transport bus enhancements and 4km of pedestrian/cycle paths surrounding the site to integrate Peddimore in to a wider Green Travel District
- · Prioritising health and well-being with significant green and blue infrastructure
- Climate change resilience and sustainability management Deploying 'Smart Grid' (or similar) technologies to charge batteries during the day with solar PV; reducing carbon by 36% through the use of energy efficiency measures and renewable energy technologies; BREEAM Excellent buildings; developing a waste management strategy to recycle or reuse all recyclable waste streams; and rainwater harvesting.

Peddimore has the potential to create approximately 6,500 jobs on site and many more across the wider economy.

The social value commitments will continue to support and empower the local community and region. These include specific and extensive measures to support Local Employment, "Buy Local" (in terms of procurement), "Partners in Communities" and "Green and Sustainable Practices".

A £270,000 Peddimore Community Fund has been established to support local community projects alongside a commitment to develop a public art and cultural strategy in association with stakeholders and the local community.

Peddimore is a prime example of how modern industrial development can offer significant and positive benefits to local communities and contribute to a green economic recovery.



...it will set new standards for commercial development...

- 40 Prologis (2019) Delivering the future: the changing nature of employment in distribution warehouses
- 41 FTA (2019) FTA Logistics Skills Report: 2019



This paper has discussed some of the immediate challenges faced by the industrial and logistics sector, considered what will shape the future of the sector, how it is addressing the green industrial revolution, and how we can reframe the debate around the value it generates.

Securing economic recovery, boosting housing delivery and delivering necessary infrastructure whilst protecting the environment and ensuring high quality design must be the focus for our planning system. We support the British Property Federation's (BPF) call for firm action to ensure foundations are put in place to support a resilient future economy.

We have identified eight recommendations for the sector and policy makers.

In light of the demise of Industrial Strategy, urge Government to adopt a joined-up approach to planning for industrial

and logistics development

The Plan for Growth is many things but it is not a replacement for the Industrial Strategy. There is a need, as expressed in the Government's introduction of a Spatial Framework for the Oxford-Cambridge Arc, for a more joined-up approach to planning for economic growth alongside infrastructure and housing.

Departments including MHCLG, DfT and BEIS must act in a more coordinated way to ensure that the planning system delivers the land needed for industry and logistics to make its best contribution to the UK economy.

Strengthen national planning policy to support industrial and logistics growth and provide explicit guidance on how the spatial needs (e.g. for clustering) and land requirements for key sectors should be determined and delivered

The NPPF and/or PPG should include more detailed policy guidance on how industrial and logistics needs should be determined and delivered in strategic and local plans. Housing growth should be in balance with employment and infrastructure growth, and the NPPF/PPG could provide greater clarity on how this could be achieved.

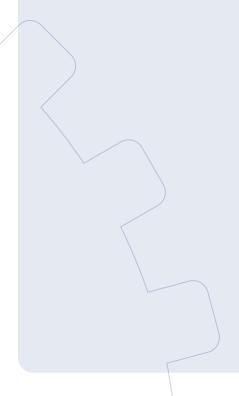
It should also require as a starting point that strategic and local plans deliver targets contained within strategic economic plans and local industrial strategies to give spatial meaning to growth aspirations. This should include guidance on locational factors such as clustering and the specific needs of certain sectors.

The BPF has advocated a "presumption in favour of logistics development" where a precise set of criteria are met, such as:

- Easy access and proximity to the strategic highway network
- Ability to provide effective access by non-private car to suit shift working patterns
- Located away from residential development/where there is no unacceptable impact on residential amenity to allow for uninterrupted 24 hour working
- Capable of accommodating large scale buildings in terms of both footprint and height
- Sites which suit the future occupier's needs

If not as national policy, the NPPF should encourage local plans to provide more flexible and criteria-based policies to allow planning applications for strategic employment development where need is proven and proposals are sustainable. Existing examples can be found in the North West Leicestershire Local Plan (EC2) and North Northamptonshire Joint Core Strategy (Policy 24).

The Government should consider a national spatial framework for logistics to quantify the need for land over a longer timeframe, for instance to 2050 and provide spatial guidance on appropriate locations for both strategic freight and national/regional distribution facilities.





In replacing the Duty to
Co-operate, ensure that
strategic employment land
is given equal status to
the distribution of housing
needs across local
authority boundaries

Strategic employment land is the poor relation in Duty to Co-operate engagement between plan-making authorities. Often local needs are determined by traditional forecasting methods without reference to wider needs across a sub-region, especially where large-scale proposals would serve a very wide catchment.

The Planning White Paper proposes to revoke the DTC without any indication of how strategic and cross-boundary matters will be planned for. The focus is all on housing. We need to ensure that strategic employment land is on this agenda.

There could be a role for Combined Authorities, where they exist, to be granted spatial planning powers that require strategic employment land to be considered. It is possible that through the Devolution White Paper, some merging of local authorities is contemplated or at least encouragement of effective joint working at county level on matters of more than local importance.

At the very least, plan making should be required to take account of Local Industrial Strategies and Strategic Economic Plans to ensure the physical manifestation of their ambitions has some spatial expression in plans.

Encourage greater
coordination of infrastructure
planning with spatial
frameworks for delivering
local industrial strategies
or their successors

The Oxford-Cambridge Arc spatial framework identifies infrastructure planning as a key component, and this should be the case across the country. This can help ensure the delivery of road, rail, port, energy and digital connectivity to support the industrial and logistics sectors. More Government support is required around the use of water and rail freight to create a cohesive network to rival road, acknowledging the National Policy Statement on National Networks (NPSNN)⁴² already supports an expanded strategic rail freight interchange network.

Ensure that local plans maintain an adequate future supply of land in the right locations for all key sectors, including consideration of a Delivery Test similar to that for housing

Local plans are the critical mechanism through which enough land is allocated for development in the right locations. This should include a requirement for employment need assessments and land reviews to consider the needs of existing and emerging industries, particularly around the challenges faced through decarbonisation, the evidence of market demand both local and strategic for space and land, the likely needs of future industries that will contribute to economic growth, and any specific locational requirements which might lead to some existing land being given over to other uses, and new sites being identified in more suitable locations.

It is evident however that local plan policies alone are not enough, as they often do little more than identify an overall supply of sites, some specify a pipeline or reservoir of immediately available land, but few prepare for dealing with the shortages we are now seeing across the country. A 'delivery test' along similar lines to the Housing Delivery Test or five year housing land supply requirement is needed, with sanctions on local authorities if they fail i.e. engaging a presumption in favour of sustainable industrial development.

- 42 National Policy Statement for National Networks, Department for Transport, 2014
- 43 National Planning Policy Framework – Draft text for consultation, MHCLG, February 2021



Consider the wider use of the NSIP regime for large scale industrial and logistics development particularly a new wave of Gigafactories, and how LDOs might give greater flexibility for industrial development

not just in Freeports

The Nationally Significant Infrastructure Project (NSIP) regime was extended to cover commercial projects including large scale industrial development, and there are also National Policy Statements which cover ports and strategic railfreight interchanges.

Development Consent Orders (DCO) involve a highly structured process although the timescales to determination are not dissimilar to standard planning applications and appeals for larger and more contentious schemes. DCOs may therefore provide a more efficient process for significant industrial developments.

Government could consider a National Policy Statement (NPS) for Logistics given its increasingly vital role in keeping the UK economy running. This would serve to establish a national need case and provide additional policy support for proposals at a sub-regional level.

Government could also consider an NPS to provide a presumption in favour for Gigafactory development and provide strong policy support to reaffirm their need and to develop a network of provision across the UK. This will ensure an adequate supply of battery production facilities to allow transition of key industries (such as automotive) to a net zero economy.

The sector must build a stronger narrative around the economic, social and environmental contribution (particularly to net zero) it makes towards
Government objectives and global challenges

Decision makers at all levels should recognise the value of industry and logistics as a contributor to sustainable development. All three legs are engaged, including the economic benefits, social value and environmental credentials of high quality industrial schemes. Many of the developers and investors in this sector are strongly committed to ESG goals, and have for many years been delivering some of the most sustainable buildings in the UK.

The sector must also develop its dialogue with strategic economic bodies, combined and local authorities, and local communities to win policy backing and popular support for well-considered proposals

Government, industry, economic agencies and combined and local authorities must all communicate openly regarding the contribution of industry to regional and local economic growth and support regeneration objectives including as part of achieving local industrial strategy aspirations and delivery of local economic recovery plans.

About Turley

We are a full service planning and development consultancy.

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