

Turner & Townsend's response to the

Invest 2035: the UK's modern industrial strategy



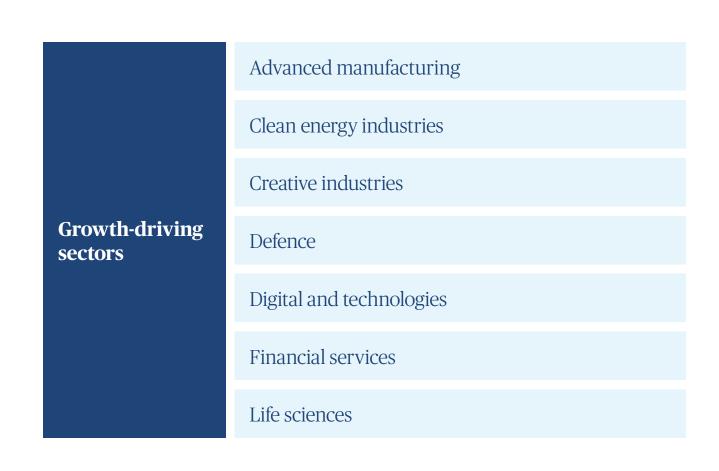
Executive summary

About our business

Turner & Townsend is a global professional services company. We provide programme management, project management and cost and commercial management for the planning, building and management of real estate, infrastructure and energy and natural resources. We support over 15,800 inspirational and impactful projects across the world's built environment.

We support clients in all of the eight growth-driving sectors outlined in the UK Government's industrial strategy green paper: Invest 2035.

We are also a major employer and exporter in the service sector. This gives us a deep understanding of the opportunities for the UK as we look to shape future industrial policy.



The role of construction to support industrial strategy

The main focus for our response to the green paper is to highlight the essential role of the construction sector. We propose that construction should be considered a foundational sector within the UK's industrial strategy.

The critical importance of the construction sector is often overlooked within UK policymaking. The industry contributes six percent of UK GDP, not insignificant in itself. Yet the true economic value is much wider. It is the engine through which wider industry is powered and delivered, and its impact is far-reaching and long-lasting. The £18.7bn spent on Crossrail, for example, has already delivered results beyond the investment in its construction: through greater connectivity an estimated £42bn has been generated in UK economy since it opened two years ago. This impact is set to continue for years and years to come.

It falls to the construction industry to build our future: to deliver clean energy infrastructure, provide the state-of-the-art lab and manufacturing spaces for life sciences, to deliver data centres that will power an AI revolution, and to create the facilities that will help bolster our national defences and security.

However, the industry is not set on firm foundations and presents a key risk to industrial strategy. Without confidence in construction, the industry cannot be confident about our ability to deliver these assets and drive growth. Many of the challenges facing the sector are well-documented and common to other industries, as set out in the government's Invest 2035 green paper.

Market fragmentation, low margins, low investment and an uncertain pipeline of work continue to suppress the opportunity for innovation.

This fragility brings significant risk and widespread repercussions, from cost overruns on major infrastructure programmes, to supply chain crises - as we have seen most recently with the highprofile collapse of ISG, a major UK construction contractor.

As construction's biggest client, the government is uniquely placed to provide a clear pipeline of

work which will help to put the sector on more stable footing.

The intrinsic relationship between construction and the growth-driving sectors must be recognised in the industrial strategy. The strategy must think programmatically about construction and its role in driving growth within both the private and public sectors, ensuring that the UK's future ambitions are set on solid ground.

The opportunity

If we as an industry and as a nation can get this right, we can establish construction as a catalyst for growth. We identify four objectives for construction, which can be achieved through a coordinated approach to the sector through industrial strategy:

To drive consistency and higher standards in the industry reversing a narrative where construction is seen as inefficient and low-value

To build confidence over the sector's ability to deliver helping to unlock private investment and public support

To establish a platform for future innovation and investment especially in high value areas including carbon management and digitalisation

To position the industry positively as an exportable proposition for the UK economy showcasing the best of the industry to wider markets.

We have set out six principal areas of focus for construction in the response that follows, with recommendations for how these priorities can be delivered through the policy framework of industrial strategy.

Ensuring that UK construction is fit to deliver industrial strategy



Coordinating construction across government

Establish a cross-Government construction strategy board which can coordinate and connect both investment and policy around the construction industry, as an enabler for wider industrial strategy.

The importance of considering construction not simply as one industrial sector, but an enabler for others should be recognised, as well as how it is represented within government.

Government has a pivotal role to play in creating a consistent pipeline of work and reshaping the industry, both in its position as the sector's largest client, and through its regulatory functions. However, it must be joined up. We propose that the Industry Strategy Council is given a remit to oversee the creation of a construction strategy board, with representation from across Government departments.

This will help to unpick the fragmentation within the industry that holds back investment and productivity gains - and which threatens to undermine industrial strategy.

The best possible engine to drive investment into construction is confidence in the industry's order books. Political and economic uncertainty in recent years has hampered longer-term and otherwise largely successful efforts to establish a clear pipeline of opportunity through the work of the National Infrastructure Commission (NIC) and the Infrastructure Projects Authority (IPA).

Combining the bodies' functions into the National Infrastructure Systems and Transformation Authority (NISTA) can re-galvanise this work - and NISTA's involvement in the wider construction strategy board is essential. To be successful, NISTA should recognise lessons from across departmental programmes, including defence and the world-leading expertise demonstrated through the Covid Vaccine Taskforce.

NISTA should also be granted more powers to set longterm infrastructure strategy beyond political cycles to provide greater consistency for the sector. Long-term policy will be important in helping the UK construction sector attract global capability and investment.

NISTA's remit must emphasise the opportunity not only to practically oversee the delivery of a pipeline of programmes, but to build capability more widely within the construction sector - driving standards and optimising efficiency.

This is critical to ensure that public spending and oversight can support private investment across the growth-driving sectors identified within the industrial strategy. In this respect we see a continued role for the Construction Leadership Council (CLC) as an expert body.

The new construction strategy board would also maintain visibility on the importance and impact of regulation and standards which shape construction practices and wider industrial strategy – including building safety and environmental standards such as Planning (Building Regulations Part L) and Minimum Energy Efficiency Standards (MEES).



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Modernising construction skills

Establish a construction skills taskforce under Skills England to identify, attract and develop pipelines of talent that support construction as an engine for wider industrial strategy.

Create a brokerage platform through existing or new careers networks, to match ambition and talent in early careers professionals with constructionrelated roles.

Capacity challenges across the construction sector are well known. A significant proportion of industry workers nearing retirement and limited numbers of young people entering the sector is set to place acute pressure on capacity with a net loss of around 50,000 workers per year, according to the Construction Products Association.

The Construction Industry Training Board estimates that over 250,000 extra workers will be required to meet UK construction output by the end of 2028. However, this broad figure masks the real challenge which is not just to attract more people into construction, but to bring in different skillsets.

A modern industrial strategy needs to be supported by modern construction skills.

The establishment of Skills England provides a fresh opportunity to revisit the problem. We propose that the body is given a mandate to establish a cross-industry taskforce which will map skills and experience that is already available while forecasting requirements for the future. The Nuclear Skills Taskforce provides a good example of how government can work with industry to create an overarching strategy for investment and targeted skills initiatives to set the sector up for the future.

Most significantly, this includes attracting digital talent that are needed to accelerate the modernisation of the sector and improve productivity. It also should encompass green jobs and skills, recognising the

essential role that construction has in supporting low carbon industry and future proofing assets against the impacts of climate change.

The taskforce should be charged with raising the profile of the industry in these areas, showcasing the diversity of career pathways on offer, and the opportunity to be part of a sector that will underpin social and economic change in our country.

As the diversity of skillsets required within construction has increased, employers' ability to identify and attract these talents has become more complex. The taskforce should consider the opportunity for government agencies to help act as a broker for early career professionals, developing a UCAS-style careers platform to match ambition and talent with opportunities in our sector.

The ambition in developing construction skills should not be limited to domestic markets. Our global research, within our International Construction Market Survey, highlights the extent to which specialist skills that support growth-driving markets such as data centres, life sciences and clean energy are in high demand throughout the world. This creates a strong export opportunity.



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Driving construction behaviours through private investment models are as set out below

Recognise the significance of construction performance to attracting private investment, ensuring performance management is embedded within partnership models.

The importance of private finance to support industrial strategy and wider economic growth has been widely recognised by the Labour Government, including through the Treasury's recent pension reform. With public spending constrained, the need and opportunity to attract investment is greater than ever.

However, both public and private sectors remain cautious about partnership. Historic cases have tainted the legacy of private finance initiatives (PFI). Managing construction performance and costs is essential to reassure both sides and to derisk programmes.

While the industry must avoid errors from the past, there are also strong case studies which can inform a new approach that will help to unleash the 'wall of capital'.

Decisions over where and how private capital is brought in must be highly targeted. Industries where there is a robust regulated asset base regime, including water and energy are strong candidates for new private finance models.

Government underwriting of initial investments can reduce risk and encourage private sector participation. This can include loan quarantees and risk-sharing mechanisms. The Thames Tideway programme is one example of a model which has worked well, with Government acting principally as broker, and to underwrite the severity of the risk.

As we have already identified, leveraging skills and expertise, and bringing more of it into construction sectors both from within the UK and abroad, is imperative to making a success of alternative finance models. This includes experience in establishing successful delivery models and contracting regimes. The UK has strong case studies of alliancing and joint-venture contracting that incentivises outperformance, including in the water sector and on road-building programmes.

Establishing a clear performance management regime must be at the heart of any privately financed programme, ensuring that a plan is in place to baseline costs and timescales, provide visibility on progress and, where necessary, reevaluate outcomes in line with market conditions.



Ensuring that UK construction is fit to deliver industrial strategy



Digitalising construction and adopting new technologies

Pool Government resources to establish consistency in datagathering that can benchmark investment in construction programmes.

Prioritise industrialisation in scalable markets, which can then create capacity for export.

We have already identified the importance of attracting digital skills to construction, which is critical to deliver the technological change needed. This can create a virtuous circle, whereby tech-driven outcomes will inspire techminded talent to join our industry.

The fragmented and low-margin nature of many aspects of construction continues to hold back investment. Establishing a clear pipeline of opportunity through government-sponsored programmes can build confidence. It is equally important to maintain a supportive tax regime for research and development (R&D) which can benefit construction businesses.

Again, the benefit of a joined-up government programme can create consistency in digital standards. There is an opportunity for government departments to co-invest in the collection and use of data that can be used to manage construction performance. This is equivalent to forums that we support in private industries, including our Life Sciences Benchmarking Club and energy Performance Forum. These forums enable competitors to anonymously provide data which can be used to establish industry benchmarks, for the benefit of all parties.

Digitalisation is the first step to the acceleration of new ways of working and the elusive opportunity to industrialise construction activity. Digital tools such as Building Information Modelling (BIM) and digital twins have the potential to drive significant productivity and efficiency gains. Government should mandate the use of these within public projects and ensure compliance.

The industrial strategy should emphasise the presumption in favour of offsite construction where viable, which we have already seen embedded in areas such as the prisons programme and emerging New Hospitals Programme. This should take advantage of the latest thinking within the industry when it comes to platform-design for manufacture (P-DfMA).

Efforts to develop manufacturing capacity within UK construction have faltered in the past in part due to a lack of visibility over pipeline. The focus for industrialisation should be on areas where there is a near-term prospect of scalability and a secure pipeline of demand and investment. Within public programmes this includes schools, prisons and hospital buildings. Industrial strategy should also support similar moves in areas such as clean energy and advanced manufacturing where consistency and pace of delivery are seen as critical.

Across the globe, we are seeing similar opportunities emerging with comparable efforts to industrialise in markets including Australia and Asia. Establishing UK expertise in P-DfMA therefore should be seen as an export opportunity.



Ensuring that UK construction is fit to deliver industrial strategy



Embedding sustainability within construction practices

Strong regulation of sustainability within construction practices is needed to achieve the UK's emissions targets, prioritising Government-backed investments initially.

The UK has made firm commitments to decarbonisation in line with its international obligations. The new climate goal announced by the Prime Minister to reduce emissions by at least 81 percent from 1990 levels by 2035 has again increased pressure on UK industry to respond.

Globally, the construction and operation of the built environment is estimated to contribute approximately 26 percent of all green house gas emissions and 37 percent of combustion emissions. ¹Achieving the UK's long-term emissions targets is not possible without addressing this challenge.

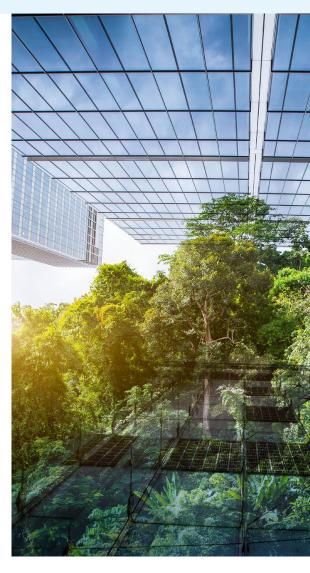
While many construction businesses and asset owners have set targets, methodologies to evaluate and reduce emissions remain fragmented.

This is a challenge when we consider embodied carbon. We propose that a consistent standard is developed for the evaluation of emissions in construction. This would be developed initially through the construction strategy board that we have already proposed, with advice from UK bodies that are leading the way globally on this issue, such as the UK Green Building Council and the Royal Institute of Chartered Surveyors (RICS). The methodology would be embedded within programmes where the Government is acting as the industry's client.

From there, we see the opportunity to roll out the requirement for embodied carbon assessment into the private sector. Our carbon calculation tool, which

evaluates embodied carbon against construction cost and material specifications, has seen strong demand from investors in privately held assets. This is particularly due to establishing credentials that support green finance investment, to avoid the risk of an asset becoming 'stranded' due to poor environmental performance.

More widely, the government could move to accelerate the adoption of sustainability reporting standards to ensure UK industry measures and reports the right information, accelerating progress toward a more sustainable future. This should be aligned with EU sustainability reporting frameworks such as Sustainable Finance Disclosure Regulation (SFDR) and Corporate Sustainability Reporting Directive (CSRD) which will further standardise reporting practices and improve reliability of ESG data.



https://www.mckinsey.com/industries/engineering-construction-and-building materials/our-insights/building-value-by-decarbonizing-the-built-environment

Ensuring that UK construction is fit to deliver industrial strategy



Construction as a national and devolved endeavour

Align national industrial strategy with regional growth plans to maximise construction capacity.

Adopt best-practice enterprise models for Mayoralty-led programmes while these are established.

We welcome the emphasis on regional growth within the industrial strategy green paper, especially the recognition over the agglomeration effects of clustering and the importance of connecting regional economies through infrastructure.

The connection between industrial strategy for construction and the forthcoming whitepaper on English Devolution is critical.

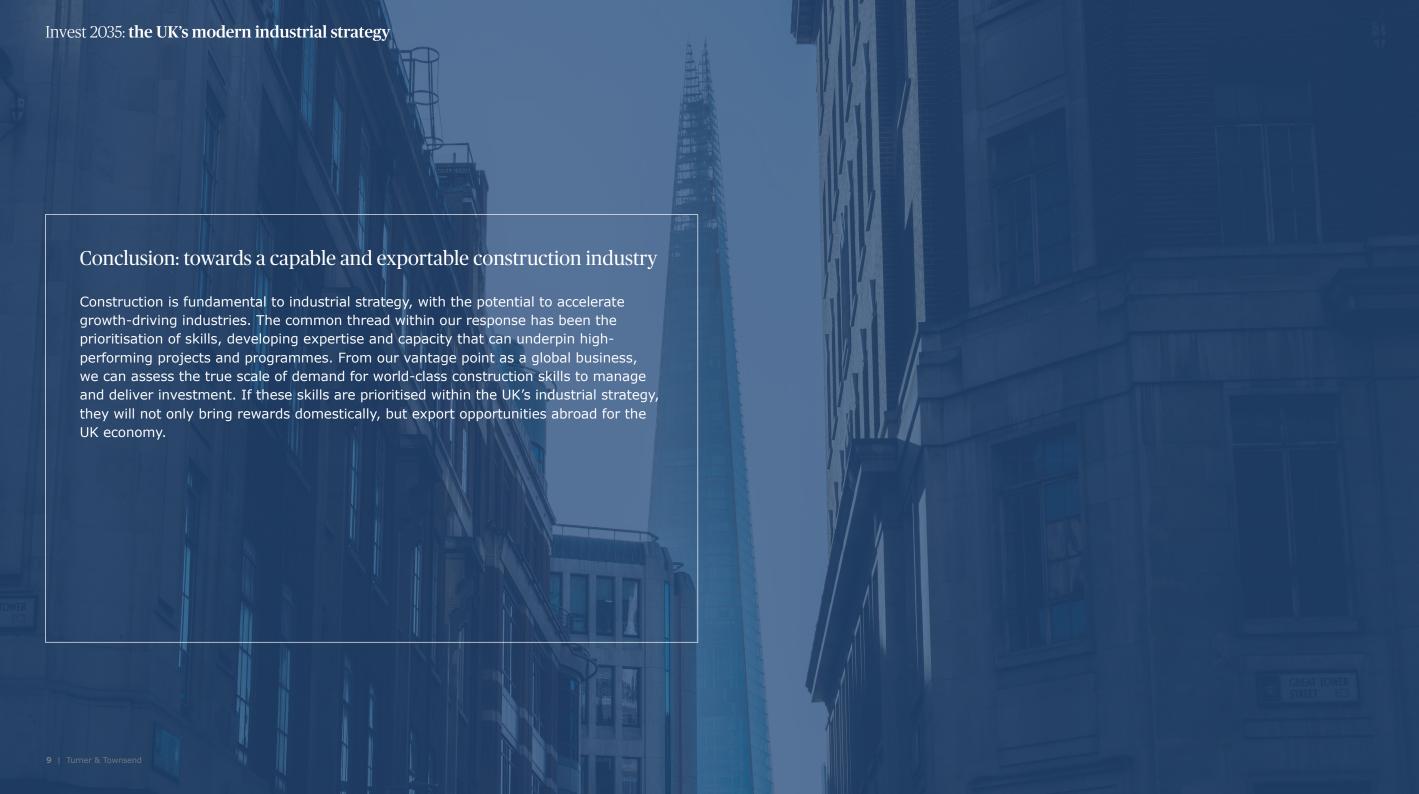
We see an important opportunity to develop regional investment vehicles which can play a role in shaping a pipeline of opportunities within regions. This can replicate the model being proposed by NISTA.

However, there must be alignment to ensure that capability and capacity in the construction supply chain is built, not cannibalised by competing programmes. There needs to be strong visibility over national strategy and local growth plans to avoid this risk.

There is merit in revisiting previous models for building distributed manufacturing and construction capability, such as that proposed by London Heathrow Airport as part of its plans for expansion. This looked forensically at national supply chain capacity to deliver the programme, and engaging regional authorities to maximise the opportunity that investment would bring.

Getting the right enterprise model in place for devolved, Mayoralty-led programmes is critical. Many of the most successful enterprises are those which can be overseen by and draw on the expertise of existing asset owners – for example Transport for London's programmes, or those initiated by Network Rail. Where this type of ownership does not readily exist, for example in a new Mayoralty, it may be appropriate to 'lend' experience from such an owner to the programme while it is established.





Turner & Townsend is a global professional services company with over 12,000 people in 49 countries. Collaborating with our clients across real estate, infrastructure and energy and natural resource sectors, we specialise in major programmes, programme management, cost and commercial management, net zero and digital solutions.

We are majority-owned by CBRE Group, Inc., the world's largest commercial real estate services and investment firm, with our partners holding a significant minority interest. Turner & Townsend and CBRE work together to provide clients with the premier programme, project and cost management offering in markets around the world.

We are passionate about making the difference, transforming performance for a green, inclusive and productive world.

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Get in touch

If you would like to talk through the challenges you are facing on your construction programmes, and some of the solutions we can help implement, we would welcome a conversation.

Contact:

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Find out more:

Turner & Townsend (turnerandtownsend.com)







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