

## The Chartered Institute of Building

submission to the

## Department for Business, Energy and Industrial Strategy (BEIS)

on the Green Paper

## **Building our Industrial Strategy**

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#### Introduction

The Chartered Institute of Building (CIOB) is at the heart of a management career in construction.

We are the world's largest and most influential professional body for construction management and leadership. We have a Royal Charter to promote the science and practice of building and construction for the benefit of society, which we have been doing since 1834. Our members work worldwide in the development, conservation and improvement of the built environment.

We accredit university degrees, educational courses and training. Our professional and vocational qualifications are a mark of the highest levels of competence and professionalism, providing assurance to clients and authorities who procure built assets.

Professionalism at all levels and stages within the construction industry is at the core of our work. We play a leading role in the development and continued improvement of standards in the industry at a national and international level. We recognise the challenges facing the built environment, such as skills shortage in the professions, the ageing workforce and the complexity of developing policy that improves coordination, design and the overall decision-making process, and we work with government and industry to outline and implement solutions.

We welcome the opportunity to respond to this inquiry and are happy to be involved in the debate as it develops.

#### Questions

#### 1. Does this document identity the right areas of focus: extending our strengths; closing the gaps; and making the UK one of the most competitive places to start or grow a business?

We agree with the broad objective set out in the strategy to improve living standards and economic growth by increasing productivity and driving growth across the whole of the country. We also agree with the interventionist approach from Government set out in the consultation which states: *'Government will respond positively to compelling propositions from a wide range of sectors and industries that can demonstrate that they can take action to improve the competitiveness of their sector'.* 

We understand the approach that the strategy takes, building on existing strengths in areas such as the aerospace and the automotive industries. Construction is a huge and diverse sector, albeit a fragmented one, and simply being able to compete on the same playing field for government support as those specialised sectors is not possible. However, we would urge government to better recognise the wider socioeconomic impact of the sector, including benefits to health, safety and happiness which are often overlooked.

It is also worth stating that professional services in the built environment are a UK success story in the international market. Encouragingly, this is a market that is expanding at a rapid rate. Comparing the five year periods 2004 to 2008 with 2009 to 2013, the positive trade balance for services related to the built environment has grown hugely. Construction services rose from £125 million per annum to £367 million, architectural services up from £202 million to £367 million, and engineering services (which include a large slice of work within the built environment) rose from £3,675 million to £5,246 million.<sup>1</sup> Importantly, jobs in services in the built environment are more likely to be higher earning than jobs in materials or product production and so be more sustainable in the UK's high wage economy.

In a sector directly worth over £100 billion to the UK economy, the construction industry and wider-built environment professions must clearly develop a compelling and joined-up approach to support the industrial strategy. We believe that the Construction Leadership Council (CLC), a partnership between Government and industry, should lead on this, filtering down to relevant industry and professional bodies to supplement activities across the ten pillars outlined in the consultation, and to promote the wider socioeconomic value of the construction sector.

# 2. Are the ten pillars suggested the right ones to tackle low productivity and unbalanced growth? If not, which areas are missing?

We agree that the ten pillars suggested are broadly the correct ones to help tackle low productivity and unbalanced growth. However, we believe that the Government should focus on priority areas, in particular on developing skills, upgrading infrastructure and cultivating world-leading sectors that will spur on productivity gains and help balance growth across the nation.

<sup>&</sup>lt;sup>1</sup> Calculations based on ONS, The Pink Book 2014, Part 1, Chapter 3: Trade in services, 31 July 2013

Although all ten pillars are intrinsically linked together we believe that focus should be given to areas that can help drive wider-improvements in society as a whole. Attempting to cover all ten pillars at once may mean that some are carried out in a piecemeal approach and, as a result, some sectors may not receive the focus they should.

As the consultation document makes clear, tackling low productivity should be at the forefront of the industrial strategy. The reasons are simple. Raising productivity enables us to pay people more, or allow them more leisure time or other benefits, which is key to attracting and retaining talented people. For construction, it can help improve the image of the sector and thereby attract the entrants it needs. It also lowers the price of the work that's carried out and, in turn, leads to a more competitive market. Finally, raising productivity reduces waste and uses resources more efficiently, which is important both to meet commitments on sustainability and lower costs.

Following the recession, productivity failed to improve, as was the case following previous recessions. The break in productivity growth meant that each hour worked is now producing approximately 15% less than what might have been expected if productivity improvement followed its pre-recessionary path. This has also placed the UK at a disadvantage internationally and output per worker is some 18% below the average for the G7 countries. To compensate, UK workers are working longer hours to produce equivalent output.

For the construction industry, productivity has been a thorn in the side for decades. Official statistics indicates that over the last 20 years productivity in UK construction has only increased by 7%. But this performance in an international context is not unusual. UK construction is actually outperforming the likes of Spain, Italy and, perhaps surprisingly, Germany on gross value added per hour worked in construction.

It is therefore no surprise that the industry is perceived to be little more productive now than it was many years ago. For example there has been a tranche of reports about off-site manufacturing as the primary way to boost productivity. It certainly can. However, productivity is about adding value and if work moves from the site to the factory the value added is likely to be classed as manufacturing, not construction, in the statistics. The work remaining on site may well end up being the less-skilled and, in economic terms, less-productive.

Our 2016 report, <u>Productivity in Construction: Creating a Framework for the</u> <u>Industry to Thrive</u>, examines the so called 'productivity puzzle' in greater detail and suggests that to raise UK productivity as a whole, we must look beyond the productivity of each sector. In an interconnected economy it is critical to examine the effectiveness of a sector and not just its efficiency. So for construction this means looking not just at how efficient and productive it is, but how effective it is at assisting other parts of the economy to function more productively.

The report also suggests that current statistical data which measures construction's productivity can be misleading. When the value of design, the materials and components, and much of the plant and machinery used on site are not counted. It also questions how well the measures we see account for the improvement in quality or, for that matter, fewer site deaths.

One of the key recommendations from the report, and something we have been in contact with the Office for National Statistics about is **Better measures of construction to support better measures of construction productivity.** The report highlights deficiencies in how both construction and its productivity are measured. Construction, as defined statistically, covers just part of the process of delivering the built environment. This can lead to misunderstanding and consequently poor policy. Furthermore, if we cannot robustly measure progress, it is difficult to measure the impact of policy.

A more complete and consistent set of data measuring the entire delivery and maintenance of the built environment would provide significantly better understanding of how construction in its entirety delivers value. It would better capture the impact of the industry as a whole and enable more informed and holistic policy making.

The CIOB recommends that satellite accounts, similar to those that have been produced for tourism, are compiled by the ONS for the delivery and maintenance of the built environment. These would capture inputs from the construction-related professions, materials suppliers, plant and machinery suppliers, as well as other related sectors.

This will not be an easy task and support would be needed from Government, the industry, its information providers, academia and the ONS itself. But if carried out correctly it would lead to a clearer view about construction's productivity and its influence on other sectors of the economy. We would recommend that the Government's National Productivity Investment Fund is looked at as a potential vehicle for delivering this better data, as it will provide a much better picture as to the productivity of the construction industry.

# 3. Are the right central government and local institutions in place to deliver an effective industrial strategy? If not. How should they be reformed? Are the types of measures to strengthen local institutions set out here and below the right ones?

We believe that most of the right central government and local institutions are in place to deliver an effective industrial strategy. We do have concerns that the number of institutions and government funding initiatives can sometimes lead to uncoordinated efforts but if they are brought together under a clear industrial strategy then they should be effective mechanisms do deliver.

We are also supportive of the devolution agenda and the advent of elected mayors that will have a strategic oversight of their regions.

Please see our answer to question 9 in terms of expert local construction hubs for information, which can be a vehicle to ensure an effective industrial strategy can be delivered.

# 4. Are there important lessons we can learn from the industrial policies of other countries which are not reflected in these ten pillars?

N/A

#### 5. What should be the priority areas for science, research and innovation investment?

For the purpose of this answer we have focused on priority areas for research and innovation investment in construction and the built environment.

Levels of investment in research and innovation have historically been low in UK construction. When examining investment in 'formal' R&D, construction tends to place near the bottom, particularly in comparison to high R&D spend industries such as pharmaceuticals and aerospace. To a certain degree this is to be expected given a significant proportion of the construction industry is SME-based. Much of the innovation tends to happen 'on-site' in a case-by-case basis and is therefore not recorded as formal R&D. This formal R&D spend, which is recorded by ONS data, tends to be carried out by larger firms, e.g. tier one contractors.

There is a growing body of evidence that research and innovation is taking place in construction. These modern methods of construction (MMC) include Building Information Modelling (BIM), off-site, modular construction, smart buildings and robotics. However, as mentioned in the former coalition Government's Construction 2025 strategy,<sup>2</sup> around two-thirds of construction contracting companies are not innovating at all. The strategy highlights five main barriers that prevent innovation in the sector and many are still true today:

- 1. The nature of construction procurement frequently restricts collaboration between client and supply chain, particularly at an early enough stage to fully explore options for innovation;
- Companies are not confident that innovation will be commercially rewarding, with particular concerns about levels of demand for innovative products and services;
- 3. Companies that do want to innovate find that the necessary finance is too expensive and/or difficult to access, that the approach to risk and insurance of works deters innovation and that some of the Government support available to the industry is not sufficiently visible;
- 4. There is a failure to capture learning from successful innovations and take this forward to future projects; and
- 5. Collaboration between industry, academia and research organisations is patchy, which limits effective knowledge transfer.

The business case for MMCs is clear. When looking at the housebuilding market for example, evidence from UKCES suggests that MMCs could potentially contribute an extra 60,000 homes per annum. But it will require new entrants to the market as existing house builders' business models, based on the ability to phase production with sales, rather than with the manufacturing process associated with MMC, means adoption of new technology is likely to be low.

A vibrant home-grown MMC sector would have the opportunity to compete on the global market. The sector is currently dominated by companies from Austria and Germany. Japan, China and the USA are ramping up activity. High quality examples of prefabricated products being imported into the UK include SvenskaHomes and Huf Haus from Sweden and Germany respectively.

<sup>&</sup>lt;sup>2</sup> HM Government, <u>Construction 2025</u>, July 2013

Recommendation 4 of the Farmer Review, <u>Modernise or Die</u>, which calls for a coordinated programme of R&D and innovation that delivers productivity improvements throughout the construction sector. It states '*Industry*, government and clients, supported by academic expertise and leveraging CLC's current Innovation workstream activity, should organise to deliver a comprehensive innovation programme. This should be fully aligned to market, benefits case led and generate a new shape of demand across industry (with a priority on residential construction). It should quickly define key measures of progress and report regularly against these as a check on the possible need for more radical measures..'.<sup>3</sup>

There is evidence that large contractors are beginning to work together with their supply chains to share ideas as well as funding for innovation, without the need for government support. On the Crossrail contract, various Tier 1 contractors in the supply chain agreed to commit funds for an £800,000 pool to develop and test new concepts, many of which were used on the Liverpool Street redevelopment and will be adopted by these organisations in the future.

This initiative has continued and a number of leading contractors have signed up to a new venture known as the *Infrastructure Industry Innovation Platform*, or i3P, including Balfour Beatty, Laing O'Rourke, Costain, BAM, Kier and Skanska.

Another priority area for research could be through better behavioural understanding. Much emphasis in construction thinking and policy making focuses on the processes. Very little work is undertaken into the behavioural aspects of construction. The transformation of the UK car industry in the 1980s owes as much, if not more, of its success to improved understanding of and changes to behaviours ('soft side') as it does to changes to process ('hard side') within the workplace. By comparison with the car industry, construction is more stressed, less certain, more complex and has more interfaces between firms and people.

Huge improvement may be possible through an improved understanding of soft skills. This was recognised in the Supply Chain Analysis into the Construction Industry research which was conducted in support of the Construction 2025 Industrial Strategy.

The Government should seek to support and/or prompt more research in conjunction with the industry into behavioural issues within construction. This would not only help to inform the introduction of better practices, but also help immediately to better inform management decisions and site leadership.

#### 6. Which challenge areas should the Industrial Challenge Strategy Fund focus on to drive maximum economic impact?

The areas suggested in question 5 would all have economic benefits, particularly the upscaling of off-site manufacturing in the construction sector. Additionally, we would recommend the Fund is used to support the development of a construction 'satellite account' as outlined in question 2. A more complete and consistent set of data measuring the entire delivery and maintenance of the built environment would provide significantly better understanding of how construction in its entirety delivers value. It would better capture the impact of the industry as a whole (e.g.

<sup>&</sup>lt;sup>3</sup> Mark Farmer, <u>Modernise or Die</u>, October 2016

including professional services, manufacturing of materials, etc.) and enable more informed and holistic policy making.

### 7. What else can the UK do to create an environment that supports the commercialization of ideas?

See answer to question 9.

### 8. How can we best support the next generation of research leaders and entrepreneurs?

N/A

#### 9. How can we best support research and innovation strengths in local areas?

In key regions, the Government should seek to promote 'clusters' of constructionrelated businesses, each to act as a hub for excellence. LEPs could be the fundamental vehicle to achieve this.

These hubs would be strategically located near universities with a strong tradition in construction and engineering. They would operate in a similar way to existing science parks, helping to cluster a range of construction-related businesses, including architects, engineers, contractors, builders, building materials firms, surveyors and other specialists. Close physical proximity through this would mean that training and support could be delivered more efficiently and effectively.

The aim would be to stimulate innovation, create greater opportunities for networking and sharing of ideas, provide a beacon for budding construction managers, engineers and builders, support new construction related businesses, and open up greater scope for collaboration. This would make regional firms far more effective in their local market and far more attractive in the wider UK and overseas economies. They would also attract regional offices of major national and international firms.

Incentives would need to be provided, perhaps in the form of lower rents, lower rates or enhanced services. The quid pro quo would be a willingness to provide stronger connections with universities, be that student placements, specialist lectures, or site visits.

In terms of actual existing innovation centres, the industry and government should look to use and capitalise on existing innovation & catapult centres such as the MTC at Coventry rather than looking create new physical construction centres.

10. What more can we do to improve basic skills? How can we make a success of the new transition year? Should we change the way that those resitting basic qualifications study, to focus more on basic skills excellence?

## 11.Do you agree with the different elements of the vision for the new technical education system set out here? Are there further lessons from other countries' systems?

We agree with the need to improve the quality of technical education and the elements set out in the consultation document. Construction is a sector that is reliant on trainees with vocational skills but we are aware that university is still the preferred option for young people.

As the Government mentioned in its Spring Budget, the new technical qualifications – or T-levels – will help simplify the process of vocational training and ensure that there is a clear, high quality route to progress. Construction particularly benefits from entrants that have engaged in sandwich style courses, adopting a mixture of on-site experience and classroom learning. Placing underqualified entrants without the necessary experience on-site can be a risk to the workforce.

Technical education needs to be given the same prestige as academic education if it is to be a success. For example, currently schools are only viewed as successful in league tables if they move school leavers into A Level provision and this must be a similar proposition for technical qualifications. Additionally the government, industry and educational bodies must work together to try and change the perceptions of technical and vocational qualifications so they are held in the same esteem as academic qualifications.

We also see Professional Bodies as potential deliverers of these new technical and vocational qualifications that can provide assurance in terms of quality to both employers and standard setters.

# 12. How can we make the application process for further education colleges and apprenticeships clearer and simpler, drawing lessons from the higher education sector?

We believe a central application system for all post-16 learning, similar to that of UCAS, would be beneficial to making the application process clearer and simpler, as well as raise awareness of vocational courses.

# 13. What skills shortages do we have or expect to have, in particular sectors or local areas, and how can we link the skills needs of industry to skills provision by educational institutions in local areas?

Construction has a well-documented skills crisis. The main reason for consistent skills shortages is the cyclical boom and bust nature of the sector. Workloads and staffing requirements are heavily-dictated by the general condition of the economy. The last recession had a devastating effect on the construction industry. It was estimated that there were some 400,000 job losses and one of the highest redundancy rates of any sector. Factor in the rising age profile of workers in the sector with some 19% of the workforce (equivalent to 406,000 at the time) were set to retire over the next decade.

Despite the improvement in the conditions of the economy, skills shortages are still prevalent. The Construction Industry Training Board (CITB) in their annual

<u>Industry Insights</u> forecast that the construction sector will need 179,000 new recruits over the next five years to meet surging demand.<sup>4</sup> Page 7 of the report outlines the annual recruitment requirement (ARR) by occupation and there is a clear need for trade based recruits and construction process and project managers. The report also makes recommendations in regards to the ARR on a regional basis.

We note caution with using these figures. We are still unsure how Brexit will impact the workforce. For example if EU migrants are no longer permitted freedom of movement then we would expect a growth in the requirement of trade skills. This, in turn, would likely lead to skills shortages in labour intensive sector's such as repair and maintenance. Importantly the CITB research does not focus on the changing nature and roles in the construction industry which is becoming increasingly digitally and technologically focused.

Management capabilities for one are critical to ensure increased levels of productivity and improved quality control. The UK Commission for Employment and Skills (UKCES) in its *Future of Work: Jobs and skills in 2030* report projects that the construction industry in 2022 will employ more people than at any time since 1990, with the biggest growth rates in management and technical occupations rather than in more 'traditional' site skills.<sup>5</sup> However, if the industry is to make this shift in job roles, it must seek to attract young people from higher education backgrounds as well as upskill and progress those from trade backgrounds.

One solution to alleviating skills shortages would be to tie public investment to training and job creating. By investing in skills developed in the UK, the nation will work to both reduce unemployment at home and reduce the need to rely as heavily on talent from abroad. Any public investment should be geared to the long-term aim of developing skilled young people who will be retained by the industry. This means not just training, but proper apprenticeship schemes (e.g. like Degree Apprenticeships), developed and/or accredited by professional bodies, which retain newly-trained construction personnel. Monitoring of any arrangements could be well structured and funded through LEPs.

#### 14. How can we enable and encourage people to retrain and upskill throughout their working lives, particularly in places where industries are changing or declining? Are there particular sectors where this could be appropriate?

Distance learning and sandwich style courses are important for providing flexibility for people to re-train and upskill.

We are also acutely aware that the construction industry needs to do more to attract entrants from a diverse array of backgrounds. Industry initiatives like <u>BuildForce</u>, which CIOB are members of, are helping service leavers and veterans find careers in construction upon leaving the Armed Forces. These service leavers and veterans often have the skills that are desirable to construction employers. This initiative is helping alleviate skills gaps in construction as well as opening routes to careers for an industry that has been in decline.

<sup>&</sup>lt;sup>4</sup> CITB, <u>Industry Insights: Construction Skills Network Forecasts 2017 – 2021</u>, February 2017

<sup>&</sup>lt;sup>5</sup> UKCES, <u>The Future of Work: Jobs and skills in 2030</u>, February 2014

We also advocate the upscaling of mentoring in the workplace. There is a significant opportunity for employers to utilise the skills of older workers by encouraging them to work with new recruits; sharing their knowledge and expertise. Repurposing and changing older workers' job roles in this way could enable businesses to retain much of the existing skills-base and share knowledge with the next wave of recruits.

#### 15. Are there further actions we could take to support private investment in infrastructure?

<u>CIOB's productivity report from May 2016</u> showed strong support from industry and a majority of MPs for the public sector to invest in construction during a recession. The volatility and boom-and-bust nature of construction is a major inhibitor to innovation and capital investment. Deep recessions lead to heavy losses of talent, skills and knowledge which are not easily replaced. It constrains productivity growth and makes construction firms far more cautious over investment.

The idea of counter-cyclical public investment in construction is popular and came across as so in the surveys. But it presents issues, not least that when recession hits, public sector borrowing rises. In the face of rapidly rising government spending and debt, the temptation is therefore to cut capital spending.

CIOB encourages the public sector to be institutionally inclined towards direct commissioning of built environment assets when slumps occur in the private sector, with an eye more to the net assets of the nation than to the overall debt, especially as well-chosen built assets are likely to increase in value over time and provide wider socioeconomic benefits. Such a policy would also preserve human capital and reduce the costs of training thrust upon the industry as it seeks to recover from recession.

#### 16. How can local infrastructure needs be incorporated within national UK infrastructure policy most effectively?

The CIOB believes that regional investment is needed to:

- a) Improve infrastructure to increase intertrading between urban areas outside London and to increase business efficiency.
- b) Regenerate regional cities to make them more attractive to inward investment, so they retain and increase their economic dynamism and talent, as well as enhance the wellbeing of their communities.
- c) Boost construction employment and encourage new blood into the industry in areas harder hit by the recession.

The CIOB is instigating a piece of research this year to explore local investment needs in the construction. The work, in collaboration with the Royal Institution of Chartered Surveyors (RICS), the Royal Institute of British Architects (RIBA) and the Construction Products Association (CPA), aims to improve the initial construction-related investment judgements made by politicians and policy makers. We believe it would be appropriate for trusted professional bodies and others in the construction industry to provide useful tools to aid better decision making. The industry itself inevitably inherits any problems that arise from poor investment judgements by policy makers, something which has knock on effects on the opinions of the sector by the general public.

The research will involve polling different regions of the UK to understand construction priorities, e.g. what type of infrastructure would they like to see, whether they wish to see construction that will offer up job creation or housing, investment in transport infrastructure etc. It would help to illustrate how direct investment by government or a policy intervention prompting investment in a particular form of construction might feed through to wider benefits. It would provide a simple guide to how the context and timescales might influence choices between various interventions.

The research would seek to look at the challenges in the sectors of the built environment – housing, retail, education, health, transport, public realm, commercial, energy efficiency etc. – and how the industry with support and suitable investment might deal with them. This would take account of social as well as economic challenges.

We would be happy to update BEIS on this as appropriate.

17. What further actions can we take to improve the performance of infrastructure towards international benchmarks? How can government work with industry to ensure we have the skills and supply chain needed to deliver strategic infrastructure in the UK?

We should focus on the need to build bigger, stronger, deeper supply chains within the UK, based on trust and repeat business and not lowest costs. This can involve the sharing of ideas, innovation, collaborative training etc.

18. What are the most important causes of lower rates of fixed capital investment in the UK compared to other countries, and how can they be addressed?

N/A

19. What are the most important factors which constrain quoted companies and fund managers from making longer term investment decisions, and how can we best address these factors?

N/A

20. Given public sector investment already accounts for a large share of equity deals in some regions, how can we best catalyse uptake of equity capital outside the South East?

N/A

21. How can we drive the adoption of new funding opportunities like crowdfunding across the country?

N/A

22. What are the barriers faced by those businesses that have the potential to scale-up and achieve greater growth, and how can we address these barriers? Where are the outstanding examples of business networks for fast growing firms which we could learn from or spread?

N/A

#### 23. Are there further steps that the Government can take to support innovation through public procurement?

As the largest construction client by far in the UK, Government (both central and local) has a vital role to play in supporting innovation through public procurement, particularly as the construction sector has been historically poor at R&D. We know Government works alongside the likes of Constructing Excellence, who pilot innovation procurement, and we would encourage this relationship to continue to be supported. The CLC itself can also lead on encouraging Government and industry to be more innovative through procurement.

24. What further steps can be taken to use public procurement to drive the industrial strategy in areas where government is the main client, such as healthcare and defence? Do we have the right institutions and policies in place in these sectors to exploit government's purchasing power to drive economic growth?

N/A

# 25. What can the Government do to improve our support for firms wanting to start exporting? What can the Government do to improve support for firms in increasing their exports?

As mentioned in our response to Q1, the exporting of professional construction services should be seen as a UK success story. Utilising the UK's soft power is essential, but should sit alongside innovation and productivity improvements from UK firms. The role of professional bodies can be highly significant in determining the success in the global market of individuals and businesses in their home market, and Government should look to utilise these professional bodies' expertise.

#### 26. What can we learn from other countries to improve our support for inward investment and how we measure its success? Should we put more emphasis on measuring the impact of Foreign Direct Investment (FDI) on growth?

Many benefits and indeed costs of investment in the built environment are not fully researched or understood. While numerous economic and social

externalities are accounted for, particularly in public investment projects, many remain unseen or ignored. Certainly much of the value generated by improvement to the built environment is not captured by the promoters. Projects often go ahead only if they make financial sense to the promoter and not on the basis of the total net value they create over their lifetime. The understanding gained from looking in more depth and more broadly at the impact of buildings and infrastructure and the value generated, or indeed the costs borne, would shine a light on potential opportunities to unlock value that otherwise would be missed.

The CIOB believes this suggests, in the first instance, greater use of postoccupancy evaluation of buildings and infrastructure. And CIOB recommends that, where possible, the assessments should examine not just the performance of the building or infrastructure itself across a wide range of measures, but the wider benefits and costs generated by its construction and occupation. This would provide a far greater understanding and a portfolio of information on what works.

### 27. What are the most important steps the Government should take to limit energy costs over the long-term?

N/A

28. How can we move towards a position in which energy is supplied by competitive markets without the requirement for on-going subsidy?

N/A

29. How can the Government, business and researchers work together to develop the competitive opportunities from innovation in energy and out existing industrial strengths?

N/A

## **30.** How can the Government support businesses in realizing cost savings through greater resource and energy efficiency?

By encouraging firms to improve their productivity, a likely consequence will be greater resource and energy efficiency.

# 31. How can the Government and industry help sectors come together to identify the opportunities for a 'sector deal' to address – especially where industries are fragmented or not well defined?

For the construction sector, we believe that the Construction Leadership Council (CLC) is an appropriate vehicle to allow this dialogue between clients, industry and Government to come together. It is well known that the construction sector is

fragmented, but recent moves to collaborate (see Build UK, which incorporates clients, main contractors, trade associations representing over 11,500 specialist contractors and others including the CIOB) at a high level show that consensus and unanimity can be achieved. By pooling capital and resources, construction will find itself in a stronger position to make progress. The CLC leading on a sector deal would show clear leadership, while allowing it to invite industry to work with it and communicate its intentions clearly.

#### 32. How can the Government ensure that 'sector deals' promote competition and incorporates the interests of new entrants?

In a construction sense, Government must recognise that the majority of current business models adopted by construction firms are not in the long-term interests of the industry and therefore the economy.

Smart thinking about what blocks progress could be as important as the measures that are used to improve productivity itself. Increasingly, the business models used are seen as inhibitors to progress on productivity, workforce development, the adoption of more productive methods of delivering construction projects and the sustainability of the firms themselves.

We believe there is a need for greater understanding of the impact of the financial and business models used to deliver construction.

This should address two linked aspects: firstly, how business and financial models influence the type of buildings that are built – consideration here needs to be given to diversifying the housing market, such as through build-to-rent. And secondly, it needs to consider how business models influence how construction is actually delivered. We believe that new entrants should be supported so that they can demonstrate a commitment to training, to R&D and to delivering construction in new and innovative ways.

# 33. How can the Government and industry collaborate to enable growth in new sectors of the future that emerge around new technologies and new business models?

See our response to Q5 re modern methods of construction.

Additionally, the BIM mandate on central government projects is an example of Government regulation actually encouraging uptake of a collaborative platform that improves processes and productivity. Government should not be adverse to smart regulation that encourages collaboration and innovation in the industry.

#### 34. Do you agree the principles set out above are the right ones? If not what is missing?

Yes.

35. What are the most important new approaches to raising skill levels in areas where they are lower? Where could investments in

#### connectivity or innovation do most to help encourage growth across the country?

We are happy to discuss our planned investment research with BEIS and how this can support the industrial strategy as appropriate in terms of skill needs and growth, in addition to our bank of knowledge on improving productivity.

# 36. Recognising the need for local initiative and leadership, how should we best work with local areas to create and strengthen key local institutions?

The increased level of devolution and city deals, alongside LEPs, means that local expertise can be utilised (alongside industry tools) to ensure that the best possible decision can be made in terms of investment in the right type of construction and infrastructure.

### 37. What are the most important institutions which we need to upgrade or support to back growth in particular areas?

As we have stated, empowering and supporting the CLC to act as the lead for developing a sector deal for construction should allow government to identify growth in particular areas, backed up by industry tools.

#### 38. Are there institutions missing in certain areas which we could help create or strengthen to support local growth?

See answer to question 9.