

Business, Innovation and Skills Committee inquiry into Government's Industrial Strategy

Energy & Utility Skills Group submission

- 1 Our recommendations
- 1.1 Any future Industrial Strategy must prioritise support and effort into those sectors best placed to deliver the Government's economic and societal ambitions. The economic importance of the infrastructure sectors has already been explicitly recognised by all four UK nations, by Cabinet Office, HM Treasury, the Infrastructure Commission and The Infrastructure and Projects Authority. This will become even more critical to ensuring a high-performing UK post BREXIT.
- 1.2 The energy and utility sector (comprising the water, power, gas and waste management industries) fits these criteria. It is the single largest contributor to the National Infrastructure Plan, already accountable for 57% of the existing delivery (pre-Hinkley point) whilst at the same time delivering water, heat, light and extensive waste management and recycling for 65 million people, each day, every day.
- 1.3 Despite this responsibility, no strategy or plan yet exists to ensure a sustainable workforce for this UK-wide critical sector. The National Infrastructure Plan for Skills has no focus on achieving results in this area and the new Government Apprenticeship Levy is totally agnostic as to where or how the talent is deployed in terms of broader economic objectives. The National Audit Office recently confirmed this point by stating in its Apprenticeship Inquiry Report, "It is (...) important to provide a clear strategic rationale for how increasing the number of Apprenticeships fits into the wider plan for improved productivity and growth".
- 1.4 The sector is taking action itself to fill the void but, given the critical role it plays for UK plc, new strategies and policies from Government, across all relevant and sponsoring departments and regulators, should be optimised to achieve the common goals. For this reason, looking at either industrial or workforce renewal strategy by region will only address part of the story. While we do acknowledge clear regional differences in workforce deployment needs, sectoral focus is vital to create a stable and efficient business



environment for those utility companies, and their critical delivery partners, that are openly recognised as driving economic growth through infrastructure and serving the public health and business needs of society.

1.5 Finally, a successful Industrial Strategy must bring together the energy and utility sector, its delivery partners, regulators and policy makers to take collective action to secure a sustainable future.

2 Our role

- 2.1 Energy & Utility Skills is the sectors skills body, with a membership comprising of the major infrastructure companies within water, power, gas and waste management and their top tiers of delivery partners. We have a membership of over 80 of the most significant employers. Our membership brings companies together to collectively identify and address the unique skills challenges the sector faces, whilst engaging Government, Regulators and other senior stakeholders to help them develop a supportive policy and regulatory environment.
- 2.2 The energy and utility sector is pivotal to the delivery of the UK Government National Infrastructure Plan and also those for each of the devolved nations. Around two thirds of the plans to deliver the economic and social outcomes of governments, rely on the energy and utility sector having the right people in the right roles, with the right skills at the right time for a sustainable cost.
- 2.3 As highlighted in the National Infrastructure Plan for Skills (2015), however, the sector is struggling in terms of workforce recruitment. The 2015 UKCES Employer Skills Survey reported that the proportion of skilled vacancies unable to be filled in the UK energy and utility sector is 36%, well above the 23% average and notably higher than any other sector. Energy and utility employers continue to find it difficult to attract new entrants to the sector and currently a fifth of employees are aged over 55, higher than the one sixth across the whole of the UK workforce.
- 2.4 We are working with employers to address these issues in order to maximise the contribution we can make to UK plc and ensure the ongoing wellbeing and economic health of all four nations.



Executive summary

- With 66% of the value of all the planned projects included in the Infrastructure Pipeline falling within the energy and utility sector, these industries must sit at the heart of Government's industrial strategy.
- Infrastructure UK has found that "for infrastructure projects, skills issues present the most pressing challenge".
- Government support and intervention via the Industrial Strategy will be key to addressing these skills issues which risk impacting on energy and utility companies' ability to deliver vital services safely and economically.
- Government has a responsibility to ensure that skills, infrastructure and regulatory policy and strategy are 'pulling in the same direction' to meet the UK productivity challenge.
- In terms of skills, the focus of the industrial strategy (and associated policies) should be on a wider workforce renewal strategy, designed to meet the specific needs of industry and UK plc.
- For transnational employers, it is essential that they see an explicit synergy between the work of BEIS, HMT and the individual national Governments and a more 'connected' approach towards achieving common goals.
- A sectoral focus is vital in order to create a stable and efficient business environment for energy and utility companies, and their critical delivery partners.
- Our industries would like to see a UK-wide Government employment and skills strategy, resting on a fundamentally sector-based approach.



Inquiry questions

Energy & Utility Skills welcomes the opportunity to contribute to this inquiry. In case of any queries, please contact grace.storey@euskills.co.uk in the first instance.

What does the Government mean by industrial strategy, and what does the private sector want from one?

- 3.1 An industrial strategy should focus on supporting and developing those industries that are critical to our economy and society in the long term. An effective, thriving and sustainable energy and utility sector is a critical element of the wider infrastructure sector and a vital component of any nation. Between 2010-11 and 2014-15, the average infrastructure investment was around £49bn per year and is set to remain at a similar level over the next five years.¹ With 66% of the value of all the planned projects included in the Infrastructure Pipeline falling within the energy and utility sector, the value to UK plc is also significant. Therefore, the energy and utility sector needs to sit at the heart of this industrial strategy.
- 3.2 The energy and utility sector depends upon its workforce in order to deliver on this investment programme. As a sector, we face a range of critical skills challenges, some of which we share with other STEM sectors and some of which are unique to us.
- 3.3 There are a range of complex interdependencies surrounding access to STEM skills that impact upon other priority sectors, such as transport. An immediate example is the volume of workforce needed to deliver the energy and utility company requirements in the National Infrastructure Plan and all the commitments of the Ofgem and Ofwat determinations. This comes at the same time as HS2, HS3, Crossrail and Crossrail 2 require almost exactly the same competencies. Hinkley Point will further compound these issues. Significant infrastructure delivery and affordability risks exist if excessive strain is placed on the available talent pool. Indeed, analysis from Infrastructure UK cited in Treasury's National Infrastructure Plan for Skills states that "for infrastructure projects, the skills issue presents" the most pressing challenge and is the more significant contributing factor to cost inflation"².
- 3.4 Other issues are particularly acute in the energy and utility sector. For instance, it is widely recognised that the age profile of the UK's engineering workforce needs addressing

¹ House of Commons Library (2016), 'Briefing paper Number 06594. Infrastructure Policy', 19 May, p. 18; Infrastructure and Projects Authority (2016), 'National Infrastructure Pipeline Spreadsheet: Spring 2016 Update', 15 April.

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/464354/NIP_for_skills_final_web.pdf_September 2015, p. 10



urgently, and this is certainly the case for asset owners in the energy and utility sector. For asset owners in the gas sector, 1-in-5 employees are aged over 55, as are 1-in-4 of the power and water industries' workforce; these are all higher than the 1-in-6 across the whole of the UK economy's workforce.

- 3.5 The sector is also still dominated by a white, male workforce. Just 20% of the entire sector's workforce is female, with the majority of women working in non-technical areas such as customer service or call centres and admin and secretarial roles. Females make up less than 5% of the core craft, technical and engineering workforce³. Equally, only 5% of the energy and utility sector's workforce are from a black or minority ethnic (BME) background; compared to more than 10% of the entire workforce. Unless addressed, this will severely limit potential to scale up the workforce rapidly to meet increased demand.
- 3.6 Widening the talent pool requires urgent action so that the inadequate supply of skilled workers does not limit capacity to deliver. Between April 2015 and April 2016, the number of vacancies amongst gas and power asset owners increased by 8%, and in the waste sector it increased by 16% compared to a UK all-sector average of just 2%. In April 2016, there were 3.7 vacancies per 100 workers in the power and gas industries, compared to 2.6 per 100 workers across the UK economy. This is the joint second-highest ratio of any industry, and level with the information and telecoms industry, which will impact directly on power over coming years as smart grid technologies are rolled out.
- 3.7 Also, analysis undertaken by Energy & Utility Skills suggests that if more than 1-in-10 leavers through voluntary staff turnover do not remain in the sector (e.g. move to another asset owner or contractor), we could face increased skills shortages as employers will find it difficult to source experienced, "fully-competent" workers in the external labour market.
- 3.8 This increasing demand for skilled labour is outstripping supply. The energy and utility sector contains the highest proportion of employers who are experiencing skills shortages more than one-third (36%) of employers in the sector report having experienced skills shortages over the past 12 months, compared to a UK average of 23%.
- 3.9 Government support and intervention via the Industrial Strategy will be key to addressing these skills issues which risk impacting on energy and utility companies' ability to deliver vital services safely and economically. In turn, unless explicitly recognised in industrial policy, skills concerns will impact on capacity to deliver the planned infrastructure developments.

³ The proportion of women is higher in non-technical roles.



How interventionist in the free market should Government be in implementing an industrial strategy, for example in preventing foreign takeovers of UK companies?

4.1 Since the skills issues faced by the sector are entrenched, effective Government intervention is required to address them. This is already in progress with the Apprenticeship Levy: support and careful management will be required to ensure that the full range of companies can benefit and that this policy acts as an effective enabler of skills development and talent pool expansion. Further to this, the whole Apprenticeship system is being overhauled. However, policy in this area is entirely agnostic as to where or how the talent is deployed in terms of broader economic objectives. Given the key role that they play in the wider economy, the infrastructure sectors must be accounted for in future Government policy. Governments across the four nations need to work together to ensure that skills policies supporting these sectors are coherent. Skills, infrastructure and regulatory policy and strategy must be aligned to meet the UK productivity challenge.

What tensions exist between the objectives of an industrial strategy and the objectives of other policies, and how should the Government address these tensions?

- 5.1 As outlined in our response to question 2 above, there is disconnect in government skills, infrastructure and regulatory policy and one of the focuses of the industrial strategy should be to better align these. In particular, it is vital to consider the explicit links between the Apprenticeship Levy and Strategy and the National Infrastructure Plan for Skills. Energy and utility organisations believe that the focus should not be on a specific number of apprentices, but on a wider workforce renewal strategy, designed to meet the specific needs of industry and UK plc.
- 5.2 A priority for Government and the sector is the National Infrastructure Plan, its accompanying Skills Strategy and the wider duties of the regulated sectors, in terms of delivery, sustainability and resilience. Industry needs to see greater levels of collaboration between BEIS, HMT and the individual national Governments. For transnational employers, it is essential that they see an explicit synergy between the work of these bodies and a more 'connected' approach towards achieving common goals.



What are the pros and cons of an industrial strategy adopting a sectoral approach (and what should be the criteria for inclusion)?

- 6.1 We acknowledge that the skills needs of sectors requiring STEM skills are interconnected and that there are clear regional differences in workforce deployment needs. However, **a** sectoral focus is vital in order to create a stable and efficient business environment for energy and utility companies, and their critical delivery partners.
- 6.2 In terms of criteria for inclusion, as outlined previously, the energy and utility sector is vital to delivering essential services and significant investment is planned across the infrastructure sector. The provision of energy and utility services is not discretionary. Priority sectors for inclusion under the Industrial Strategy should include those with longevity; significant projected investment levels and social and economic importance to the UK.

Should the industrial strategy have a geographical emphasis?

- 7.1 There are clear regional differences in workforce deployment needs. In the energy and utility sector, 83% of those questioned in a recent survey reported geographical "hotspots" where skills are particularly difficult to attract, and nearly two thirds of these think these difficulties will last for 5 years of more. The South East, and especially London, is particularly problematic for recruitment. The level of competition for engineering and contractor roles, especially in certain geographies such as the 'M4 corridor' is very high. The sector faces tough competition for technical and more generic roles (such as project management, for example) from competing sectors, such as finance, construction and ICT, and spiralling salary demands due to the rising cost of living. Other large conurbations present similar issues, to a lesser extent, and equally employers requiring resource in rural areas often struggle for particular specialisms.
- 7.2 Competition for staff from adjacent sectors varies from region to region, depending on the local employers. The industry strategy's focus should have a geographical element and it needs to take into account the wider sectoral requirements for the UK as well mapped to local, regional and devolved nations specific considerations.
- 7.3 However, this should not detract from the need for a sectoral approach in the industrial strategy. Consideration of both the geographical and sectoral dimensions is called for as part of a **coherent UK-wide strategy**. Therefore, to ensure a sustainable workforce, employers in **our industries would like to see a UK-wide Government employment and skills strategy, resting on a fundamentally sector-based approach**.