

POLICY REVIEW:
INDUSTRIAL STRATEGY
WHITE PAPER
Building a Britain Fit for the Future



Policy review: Industrial Strategy White Paper – Building a Britain fit for the future

Summary

The Department for Business, Energy and Industrial Strategy (BEIS) launched its new Industrial Strategy White Paper ('the Strategy') on 27th November 2017. It sets out the Government's planned approach to driving productivity and growth and identifies areas of strength where Britain can 'lead the global technological revolution'.



Energy & Utility Skills produced a sector response to the Industrial Strategy Green Paper earlier this year, emphasising the vital role of skills as a strategic enabler of improved productivity and growth, and the importance of energy and utilities companies to the UK Government's planned infrastructure investment pipeline. Our response also demonstrated the relevance of our sector's [Workforce Renewal and Skills Strategy](#) to the development of the new Industrial Strategy.

We have examined this policy publication to understand how it supports the Skills Partnership's aims and objectives and whether it recognises energy and utilities as a strategically important sector in infrastructure delivery and the wider economy. We also noted important indications of the direction of Government policy which may impact our members and the skills that we, as a sector, must focus on for the future.

About the Strategy

The UK Government has reduced its original ten 'pillars' to five 'foundations of productivity' and alongside these foundations, the strategy sets out four 'Grand Challenges'.

Five Foundations	Four Grand Challenges
<ol style="list-style-type: none"> 1. Ideas 2. People 3. Infrastructure 4. Business environment 5. Places 	<ol style="list-style-type: none"> 1. Artificial Intelligence (AI) and Data Economy 2. Clean Growth 3. Ageing Society 4. Future of Mobility

Our priorities have been to ensure that labour market resilience and skills are properly recognised as a strategic enabler of productivity and growth; and that Government and wider stakeholders appreciate the significant contribution of energy and utilities to the infrastructure pipeline.

This has been achieved in this Strategy, at a high level. The 'People' and 'Infrastructure' foundations are most relevant to workforce renewal and skills in the energy and utilities sector. An outline of the policy and relevance to the sector is [presented in 'A Closer Look' sections of the paper](#).

The Grand Challenges of 'AI & the Data Economy', 'Clean Growth' and 'Ageing Society' resonate with the energy and utilities sector, given its increasing focus on the growing importance of big data, low carbon technologies, energy efficiency and the need to expand our talent pool across all groups and communities.

Areas to watch

Skills and Technical Education:

As part of the Westminster Government's recently published **T levels** Action Plan, the Strategy highlights that Government will be hosting a major Skills Summit with leading employers and will publish a public consultation on the detailed design and delivery of T levels for England before the end of 2017.



The changes in Technical Education centre on the introduction of **15 professional sector routes**, however, these do not map across to one of the UK economy's most important sectors. Of the 15 proposed routes, energy and utilities sits in the 'engineering and manufacturing' and possibly 'construction' route. The indications so far are that the sector is underrepresented, considering the contribution it makes to the economy. Both in the scope of the route and employer representation.

The National Retraining Partnership is an opportunity to join up the UK's skills system and help people retrain in priority sectors. The UK government will launch an historic partnership between themselves, the CBI and the TUC to set strategic direction and implementation for a National Retraining Scheme. Although, its first priority will be to boost digital and construction skills, there are plans to widen the scope to other sectors with critical skills shortages. **There is an opportunity for our sector to work collaboratively to ensure we are prioritised for the next phase.**

The UK government, earlier this year, passed the Higher Education and Research Act. This will put in place a modern regulatory framework through the creation of a new regulator, the Office for Students (OfS). The OfS, which will be established in January 2018, will address employer and student needs and expectations in the short, medium and long term – considering the skills gaps that exist today, and anticipating the demands of the future economy. This will **increase the number of work-ready graduates, including STEM graduates**, and promote innovative ways of learning, such as that being delivered by New Model in Technology and Engineering (NMiTE) in Herefordshire and the Dyson Institute of Engineering and Technology in Wiltshire.

Finally, the UK government is conducting a major review of funding across tertiary education to ensure a joined-up system, and therefore the funding model is likely to be refined.

Local Industrial Strategies (Places) for England:

The aim of the English Local Industrial Strategies is to help ensure that the necessary connections and capacity are in place at a local level to link skills provision with economic need. With skills policy already devolved to nations, and the four governments currently pursuing four differing approaches, the introduction of the Local Industrial Strategies will lead to further devolution and will need to be managed carefully.



Our immediate concern is that this lack of a coordinated approach between local and national strategies will adversely impact employers, who may potentially find themselves taking on multiple new commitments to partnerships, across large operating or even multi-national operating territories.

Local Skills Advisory Panels are due to be rolled out next year and integrated with Mayoral Combined Authorities and Local Enterprise Partnerships. They will feed into the Local Industrial Strategies. These seek to require employers to engage with Skills Panels across their operating territories, to work on an increasingly localised approach to policy making. With the UK labour market not recognising these defined territories, close governance will be needed to ensure the panels bring real benefits to workforce resilience and skills. Since the introduction of the Apprenticeship Levy, employers with a workforce in more than one UK nation have experienced uncertainty in terms of the differing national government approaches to managing the Levy and use of funds. Many employers have found that this inconsistent approach to Levy implementation across the UK has generated additional work and has even created perverse incentives in terms of recruitment and access to training. This could be exacerbated at a regional level unless managed carefully.

It will be vital to ensure that employers operating at a national and transnational level do not face additional bureaucratic barriers or challenges in accessing the skills funding they need. A coherent, consistent approach to skills and training across all nations and regions will be required.

Sector Deals:

Under the 'Business Environment' heading, the Strategy refers to partnerships between central government and industry which aim to increase sector productivity. The first Sector Deals are in life sciences, construction, artificial intelligence and the automotive sector.



Sector Deals are one of the major policy levers referred to in the Strategy and will be used to help achieve a range of objectives, from cleaner growth through to better working practices and improved productivity.

The energy and utilities sector could be an ideal candidate for a future Sector Deal to leverage the cross-sector collaboration opportunities outlined in the Workforce and Renewal Skills Strategy. This

could provide access to further support for skills and workforce renewal initiatives. **Energy & Utility Skills will seek to initiate conversations on behalf of its members to explore the form that a potential Sector Deal for our sector could take.**

Interaction with the Devolved Nations

The Strategy still feels very centred in England, but UK government points out that, in many instances, **policy areas are devolved but emphasises that the UK Government will work with the devolved national governments as required.** The strategy states *“This partnership must be UK-wide, embracing our four nations. The UK government needs to work in collaboration with the governments and businesses of Scotland, Wales and Northern Ireland. Just as we committed in the Green Paper to holding ministerial forums with each devolved administration, we will work together to rise to each of the Grand Challenges.”*

“.....This joint working has proven valuable, and as we implement our long-term strategy we will recommit to that partnership, seeking to tackle our shared opportunities with a focus on: addressing our shared Grand Challenges; making Sector Deals work for businesses across the UK; ensuring that our institutions collaborate for maximum impact; and working together on priorities for places.”

Key themes

The overarching aim of the strategy is to drive business productivity *“It is rooted in the conviction that a successful free market economy must be built on firm foundations: the skills of its workers, the quality of the infrastructure, and a fair and predictable business environment.”*

The UK Government has reduced its original ten ‘pillars’ to five ‘foundations of productivity’ that underpin the planned transformation of the British economy. Crucially, two of their original 10 pillars that were significant for the sector, ‘Developing skills’ and ‘Upgrading infrastructure’, have been diluted in the Strategy White Paper. The five foundations are:

1. Ideas - becoming the world's most innovative economy

2. People - promoting good jobs and greater earning power for all

3. Infrastructure - delivering a major upgrade to the UK's infrastructure

4. Business environment - making Britain the best place to start and grow a business

5. Places - ensuring prosperous communities across the UK

The Prime Minister advises in her introduction that the Industrial Strategy *“identifies the industries that are of strategic value to our economy and works to create a partnership between government and industry to nurture them. In doing so, it will help propel Britain to global leadership of the industries of the future - from artificial intelligence and big data to clean energy and self-driving vehicles.”*

Our priorities have been to ensure that labour market resilience and skills are properly recognised as a strategic enabler of productivity and growth, and that UK Government and wider stakeholders appreciate the significant contribution of energy and utilities to the infrastructure pipeline. This has been achieved in this Strategy, at a high level, with references to the labour market occurring throughout, and the original ‘Developing Skills’ pillar now incorporated into the ‘People’ category. The content of this ‘People’ category remains centred on ensuring a skilled and productive workforce and states *“We recognise that people, and the skills they have, are a key driver of productivity.”*

Infrastructure remains as a core ‘foundation’ of the Strategy. However, while the energy sector is frequently mentioned throughout, the wider utility sector does not yet secure recognition within the new policies as a sector of strategic importance, alongside ‘Construction’, ‘Digital’ and others. We are

advised by the BEIS Industrial Strategy team that such recognition will follow, but continued engagement with policy makers and senior stakeholders is required to ensure that explicit recognition is secured.

‘Grand Challenges’

Alongside the five foundations, the UK Government sets out four ‘Grand Challenges’. These are technological developments that the Government believes will deliver a global industrial and social transformation and where the UK has the opportunity to play a leading role.

- **Artificial Intelligence (AI) and Data Economy:** putting the UK at the forefront of the artificial intelligence and data revolution
- **Clean Growth:** maximising the advantages for UK industry from the global shift to clean growth
- **Ageing Society:** harnessing the power of innovation to help meet the needs of an ageing society
- **Future of Mobility:** Becoming a world leader in the way that people, goods and services move

The Grand Challenges of ‘AI & the Data Economy’, ‘Clean Growth’ and ‘Ageing Society’ resonate with the energy and utilities sector, given its increasing focus on the growing importance of big data, low carbon technologies, energy efficiency and the need to expand our talent pool across all groups and communities. For example, the Energy & Utilities Skills Partnership’s Workforce Renewal and Skills Strategy recognises that our sector’s need for STEM-linked specialists extends beyond traditional engineering to encompass IT, including cyber security and ‘big data’ professionals. Therefore the ‘AI & the Data Economy’ theme will be helpful in this respect.

A closer look at ‘People’

The ‘People’ element of the Industrial Strategy is most relevant to workforce renewal and skills in the energy and utilities sector. While many of the **points made in relation to skills and technical education echo those made as part of last week’s budget announcement**, it is still helpful to review them briefly.



In this section, Government acknowledges that Britain still faces challenges in meeting business needs for talent, skills and labour, in STEM subjects in particular. Furthermore, it concedes that technical education may have been neglected in the past and acknowledges the need for a renewed focus on adult skills through the New National Retraining Scheme. It also notes the need to ensure greater equality of opportunity across different communities and outlines its ambition to remove the barriers faced by those in the workforce belonging to underrepresented groups. Finally, this Strategy sets an objective to tackle regional disparities in skill levels and recognises skill disparities as the most influential drivers of regional variations in productivity.

These are all issues that correspond very closely to the priorities set out in the Workforce Renewal and Skills Strategy. The resulting policies offer the energy and utilities sector an opportunity to make progress at scale in terms of supply of STEM skills, tackling skill shortages and expansion of the sector's talent pool.

Key policies

The following are 'flagship' policies linked to the aims set out in the 'People' element of the Strategy:

Reformed technical education system

- To complement our world-class HE system
- New T levels to be backed by £500m annually

Additional £406m for maths, digital and technical education

- To address shortage of STEM skills
- Includes investing £84m over the next five years in computing

New National Retraining Scheme

- Support to re-skill
- Initial investment of £64m for Digital and Construction

In some areas within the 'People' category and elsewhere in the document, the Strategy identifies priority sectors to focus on initially. **The energy and utilities sector has not been explicitly mentioned in relation to these, yet delivers more than half of the projected UK national infrastructure investment pipeline.** The BEIS Industrial Strategy and Energy teams are aware of this shortcoming. Therefore we will continue to engage with policy makers and wider stakeholders to highlight the vital role of our sector and set out clearly why energy and utilities is deserving of, and well placed for, inclusion in subsequent phases.

A closer look at 'Infrastructure' and business

The 'Infrastructure' element is key in terms of the broader direction of Government policy, for energy infrastructure in particular. Employers will need to incorporate these shifts in emphasis into their own recruitment, skills and workforce renewal planning.

Infrastructure Policy:

The Strategy notes that public **infrastructure investment will have doubled** in a decade by 2022/23. The energy and utility sector is responsible for delivering more than half of the investment foreseen by Government which means that it is vital for us to work closely together to ensure that our sector receives the support it needs. In particular, the Strategy states that there will be an investment of £400 million in changing infrastructure to support electric vehicles. Specific sector skills and expertise will be required to enable this.

The Strategy reports that feedback received in response to the Green Paper consultation earlier this year called for a 'whole systems approach' to the decarbonisation of energy infrastructure systems. In response, the Government is positioning the UK as a leader in clean and efficient power, transport and heat through an integrated approach to decarbonising these increasingly interconnected systems. Also, a fresh commitment is made to smart metering "*Our world-leading Smart Systems and Flexibility Plan will build on the rollout of smart meters to grow the markets for these systems and technologies*"

in the UK". The Strategy sets out an aim to implement the **Smart Systems and Flexibility Plan** in full by 2022.

In addition to further support for industrial energy efficiency measures, the Government will also be introducing a wider suite of measures to support businesses to improve their energy productivity and increase energy efficiency by at least 20 per cent by 2030. The UK Government will be consulting on these plans in 2018. This sits within the broader context of the Government's commitment to reducing energy costs for homes and businesses, as part of the Clean Growth Strategy and Smart Systems and Flexibility Plan, mentioned above.

The increased **National Productivity Investment Fund** will support investments in transport, housing and digital infrastructure initially. However, the Government has also announced **three new Industrial Strategy programmes in Clean Growth** across energy, construction and agriculture.

Finally, the Strategy signals a concerted shift towards a more regenerative, circular economy. New measures include an approach to infrastructure investment that aims to regenerate natural capital, further promoting recycling and the secondary materials market and **a new Bioeconomy Strategy**.

Our sector must plan ahead to ensure that it has the necessary pipeline of skills and expertise to embrace these new approaches.

Business environment policy:

At the heart of the strategy is the commitment to a stable business environment as Brexit is approached. The Government states "*The first foundation of our Industrial Strategy is to maintain and enhance the business environment that is so essential to the UK's success*". Achieving this through the launch and roll-out of sector deals, an investment of £20bn of investment in innovative and high potential businesses and a review of the most effective action in improving the productivity of SMEs, including how to address the 'long tail' of less productive businesses.

Energy & Utility Skills is keenly aware of the need for consistent skills policy across all four UK nations and will continue to monitor the situation and engage with UK and national governments where necessary.

If you have any questions or comments regarding this briefing, please contact grace.storey@euskills.co.uk.

The full Industrial Strategy document can be viewed [here](#).



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