

Annex A: Green Paper Summary

Pillar 1 - Investing in Science, Research and Innovation:

- 1) This focuses on promoting more Research and Development (R&D) and innovation to drive the success and growth of current and emerging growth sectors. This includes:
 - Increased innovation in product/services and new ways of working
 - A focus on key strengths such as robotics, clean energy and biotechnology and emerging strengths e.g. battery technology
 - Increasing the successful commercialisation of research, the number of patents registered and how university spin outs are funded
 - Funding provision (and review) of R&D (Industrial Strategy Challenge Fund) and
 - The locational clustering and collaboration replication of the “golden triangle” (Cambridge/Oxford/London) elsewhere in the UK

- 2) The Consultation sets out the following questions:

- What priority areas should there be for science, research and innovation investment?
- What should the focus of the Industrial Strategy Challenge Fund be to achieve maximum economic impact?
- What else can be done to support increased commercialisation of ideas?
- How can the next generation of research leaders and entrepreneurs be supported?
- How can local innovation strengths be supported?

Pillar 2 - Developing Skills

- 3) This focuses on:
 - Improvements to basic skills provision.
 - The creation of a simpler and more accessible system of technical education, including a £170 million capital fund to create Institutes of Technology to improve education in STEMⁱ subjects and to marry course provision to local, employer-led demand
 - Identifying and addressing sector-specific skills gaps - including taking further action to address differences in skill levels between different areas to help drive economic growth and opportunity.
 - The review and provision of a quality careers information and advice service and
 - The testing and development of new approaches to lifelong learning (reskilling and upskilling) to enable skills to adapt to meet emerging needs and sectors.

- 4) This pillar touches upon the prospective use of the Apprenticeship Levy to ensure that businesses invest in apprenticeships and are in control of provision. The Strategy also proposes to incentivise businesses to invest in skills alongside the

public sector, on the premise that poor performance in technical skills is key to low productivity and has been identified as a key contributor to regional disparity. The consultation poses the following questions:

- Are there further ideas to improve basic skills?
- Is there support for proposals to improve the technical education system and any exemplars to learn from including ways to make the application process simpler?
- Skills gaps – what are they now, what will they be and how can they best be addressed locally?
- How can people be encouraged to participate in lifelong learning?

Pillar 3 -Upgrading infrastructure

- 5) This focuses on better aligning central government infrastructure investment with local growth priorities and aims to support business growth/service resilience, higher rates of house building etc. It is looking to unlock investment and long term growth via funding certainty by exploring the need to move away from short term financial planning and bidding rounds.
- 6) It identifies the need to reduce travel times and congestion to help increase productivity (and access to jobs/skills) and to improve connections between towns and cities (Midlands Rail Hub) in order to pool labour market and economic strengths.
- 7) The Green Paper invites views on the following questions (as a complement to the National Infrastructure Call for Evidence):

- What other ways exist to increase private investment in infrastructure?
- How can government effectively marry up local infrastructure needs to national infrastructure policy?
- How can UK infrastructure meet international benchmarks in performance and ensure that the skills and supply chain can deliver strategic infrastructure needs in the UK?

Pillar 4 Supporting business to start and grow

- 8) The UK is the 3rd most successful country for start-ups but only 13th for scale ups (high growth). This pillar identifies the key barriers to business growth as being access to finance (fixed capital investment is low in comparison to the UK's competitors), availability of leadership and management skills and the creation of conditions to support long term investment. Furthermore, the UK has experienced lower investment in new and emerging assets that drive productivity resulting in lower take up in robotics/automation technology than competitors.
- 9) The Green Paper looks at raising productivity by marrying an effective start up culture and the right support and investment to facilitate growth underpinned by local growth strategies. It also recognises the need to respect the growth plans of the individual business, noting that not all are high growth scale ups and that

there is also a need to accommodate moderate ambitions (potentially through existing Growth Hub provision)

10) To deliver these ambitions the government is consulting on the following four questions:

- Ways to address fixed capital investment and long term investment decisions
- How to increase equity capital take up outside of London and the South East
- How to increase access/take up of other business funding e.g. crowd funding
- What are the barriers to growth and the role and experience of successful business networks?

Pillar 5 Improving Procurement

11) Strategic government procurement is viewed as a way to drive innovation, competition, investment in skills and to help the development of UK supply chains. The public sector spends around £269bn per annum (14% of the Gross Domestic Product) and by using sector specific strategies (e.g. defence, NHS), improving transparency (visibility of contract opportunities), reducing bureaucracy, improving payment terms and adopting a balanced score card approach to procurement, the government is aiming to open up public contracts to SMEsⁱⁱ (individually or collaboratively) as part of its commitment to spend one third of its budget with SMEs by 2020.

12) The consultation is seeking views on the following questions:

- Further ways to support innovation through public sector procurement and
- Further use of sector specific procurement to drive growth

Pillar 6 Encouraging Trade and Investment

13) This pillar is viewed as a key driver to boost productivity and growth – including increased competition and new ways of doing things - and is clearly linked to the government's ambitions to secure post Brexit trade deals with EU and international countries.

14) There is a focus on growing UK exports and the role of the Department for Investment and Trade (DIT) in supporting both inward investment and exporters. Market targets include: Canada, China, India, Mexico, Singapore, and South Korea.

15) The Strategy commits to a “Team UK” approach to winning overseas contracts with the government seeking to facilitate collaborative and consortia bids and providing political support for major contracting opportunities. Further there will be a more strategic focus on Inward investment – with a review of international best in class inward investment promotion agencies and application of the findings through a

2017 review. This noted, DIT will also work to join up trade and inward investment promotion with local areas (for example Midlands Engine).

16) The Consultation asks the following questions:

- What else the government can do to support firms wanting to export/wanting to increase exporting?
- How government can measure the success of Inward Investment – should the focus be on the impact of Foreign Direct Investment (FDI) on growth?
- What can be learnt from other countries in how they approach Inward Investment?

Pillar 7 Delivering affordable energy and clean growth

17) The overriding objective of this Pillar is to keep energy costs down for businesses and to secure the economic benefits of the transition to a low carbon economy. For the last 10 years, the UK energy policy has focused on meeting climate change targets, guaranteeing security of supply and minimising costs.

18) The Industrial Strategy represents an opportunity to update the approach focusing on:

- Affordability – including a “long term road map” to reduced business costs, to be published in 2017
- Energy innovation and new energy technologies to secure industrial opportunities. Including the consideration of a new research institution
- Effective strategic decision making for example Hinkley Point investment and commitment to strengthen the UK supply chain including investment in skills
- Effective management of the energy networks to support change.eg the Smart Grid and
- Coordinated changes to energy infrastructure triggered by new technology e.g. Electric Cars

19) The Consultation therefore poses the following four questions:

- What more should the government do in the long term to limit energy costs to businesses?
- How can the UK move to energy being supplied through competitive, unsubsidised markets?
- How business/government/researchers can capitalise on energy innovation?
- How the government can support business savings from greater resource and energy efficiency

Pillar 8 Cultivating world-leading sectors:

20) The Strategy is seeking to build on areas of competitive advantage and help grow new sectors and increase support where appropriate to existing sectors. The emphasis will continue to be on innovative business – with the expansion of the current Challenger Business Programme.

- 21) Industry is invited to approach the government through its “open door challenge for Sector Deals”. The aim is to help deliver increased productivity driven by businesses with strong leadership and potential for collaboration (including universities and local leaders) promoting competition and innovation, and facilitating long term investment and co-ordinated development through Sector Plans.
- 22) It is envisaged that the plans will accelerate growth across the value chain, develop clusters, increase exports, commercialise research and develop skills and the numbers of high value/high productivity jobs
- 23) Artificial Intelligence and satellite technology are referenced as areas of note for future deals and early deals are expected around Life Sciences, industrial digitisation, ultra-low emission vehicles and the creative industries.
- 24) The consultation asks the following three questions:

- How can the government facilitate sectors to come together to identify opportunities for sector deals?
- How can competition be promoted through the deals and incorporate the interests of new entrants?
- How can there be public/private collaboration to support growth in sectors that emerge from new technologies/new business models?

Pillar 9 - Driving growth across the whole country

- 25) This Pillar seeks to develop a framework to build on the strengths of areas and to address barriers that hold a place back – this could be infrastructure, skills, support for local innovation etc.
- 26) The strategy recognises the over centralisation of the UK – but suggests that the current approach to the Northern Powerhouse/Midlands Engine, City Deals, Local Growth Deals, Devolution etc. remain the best way of improving economic decision making and in this way spurring innovation and increased productivity.
- 27) The Consultation cites the following as vital to rebalance the economy:
- Infrastructure investment e.g. new Housing Infrastructure Fund
 - Infrastructure decisions matched to local economic plans.
 - Tackling of historic underinvestment – e.g. Midlands Rail Hub
 - Creation of decision making structures for infrastructure planning – e.g. Midlands Connect
 - A strong and accountable place-based governance with a clear business voice
 - Skills reform which addresses local skills disparities in areas such as graduate retention, apprenticeships etc.
 - Increased local innovation and productivity through for example, the Innovation Strategy Challenge Fund or future funding streams and
 - The identification of local economic clusters and specialisms

28) The Consultation asks the following questions:

- Are these the right principles to drive growth across the country?
- What are the most important ways to increase skills in areas where they are low?
- Where could connectivity investment or innovation do most to drive equitable growth?

Pillar 10 - Creating the right institutions to bring together sectors and places

29) The challenge remains that different sectors, economic clusters and places need different types of support to ensure that businesses are able to employ people with the right skills, can market their goods and develop their products and services and innovate.

30) The government proposes to develop local specialisms by giving the right powers, developing the right institutions (educational, trade associations, financial networks etc.) and recognising the importance of innovation ecosystems and locally tailored sector deals.

31) To support this the Strategy outlines:

- A commitment to DIT reviewing how it identifies priority investments
- A review of the location of government agencies and arms-length bodies
- Creation of support networks of universities to improve commercialisation.
- Work with local government to review how to bring more business expertise into local governance, and improve links between councils and the private sector - including the potential creation of a modern “Alderman” role.
- Exploration of further devolution deals for the largest cities and
- Review of the Local Enterprise Partnership’s role in delivering growth (sharing best practice and strengthening delivery)

32) The Consultation asks the final questions:

- How can central government best work with local areas to create and strengthen key local institutions?
- What are the key institutions to focus on to drive growth in specific areas?
- Are there institutions missing in areas that are needed to support local growth?

ⁱ STEM – Science, Technology, Engineering and Maths

ⁱⁱ SMEs – Small to Medium Sized Enterprises