What's London's place in the Place agenda?

This roundtable discussion with participants from across London's diverse research and innovation community, including industry and academia as well as central government was convened to explore the distinctive role London can play in meeting the government's target of increasing combined public and private research and development (R&D) investment to 2.4% of GDP by 2027. The strengths of London in meeting this target and the enablers and barriers on the path to meeting this goal were discussed.

This summary is not CaSE policy but will form part of our ongoing programme of work on reaching the 2.4% target, with the aim of creating a thriving science and engineering environment in the UK. As part of this, CaSE are leading discussions in the regions to collect an evidence base on place-based R&D interventions and how different sectors collaborate to facilitate local economic growth. This roundtable is part of a series focusing on the Place agenda.

Agenda

This roundtable was chaired by Sarah Main, Executive Director of CaSE. Opening statements were made by Celia Caulcott, Vice-Provost (Enterprise), UCL, Joann Rhodes, Director of Science, Strategy and Operations, MSD and Bairbre Kelly, Assistant Director, Science, Research and Innovation Place Policy, BEIS.

Topics that were considered included the role of London in serving the region, how the city forms partnerships with other places in the UK, and London's role as a global magnet. The discussion also explored the barriers faced by London in helping to make the UK a more research-intensive nation and the potential solutions to this.

Summary of enablers and barriers of London in the Place agenda

ENABLERS	BARRIERS
• Strong academic skills base	• Limited physical capacity to take on growing R&D activity
• Close physical proximity of academic institutions with industry, hospitals etc	• Widely diverse economic productivity across London
• Leadership and strengths across many R&D disciplines	• Difficult for SMEs to form collaborations
• London's role as a hub for R&D	• Lack of soft skills
• Unique in having several world-leading universities, enabling many choices for business-university collaborations	• Complex civic and governance structure
• Successfully attracts national and overseas talent and investment	• Dominance of service sector – capacity for R&D adoption and re-examination of classification
	• Incomplete R&D supply chain

Proposed solutions

- Develop more space for 'wet' companies i.e. businesses that require laboratories, to base themselves in London.
- Define London's unique R&D strength and area of leadership, potentially in medical sciences, to make a strong pitch for UK and global investment in the city.
- Drive innovation in sectors which haven't traditionally leveraged R&D.
- Reclassify R&D in the services industry.
- Increase public and private investment in London.
- Invest to join up the incomplete R&D supply chain to gain maximum benefits across the R&D ecosystem.
- Support SMEs in the process of forming collaborations and securing R&D investment from large businesses.

1. Introduction to the session

London is one of the most successful city economies in the world and is a net contributor to the UK's economy. The city employs six million people and delivers 23 per cent of the country's Gross Value Added. Central London contributes greatly towards the city's economic output, with the services sector concentrated in the area. However, outside the centre, London's economy is diverse in terms of business size, sector and productivity. As such, inclusive growth across the whole of London must be considered when understanding the role of London in the Place agenda.

The city has distinctive local and global strengths which attract R&D investment and national and international talent. This is because of its strong connectivity, financial economy and skills base. London also offers many amenities and a unique lifestyle. These assets mean that London will play an important role in reaching the government's 2.4% target and enabling these benefits to be spread across the UK. However, three challenges emerge:

1. Small businesses and their role in contributing to London's economy must be better understood to enable more collaborations.
2. R&D in the services sector should be leveraged to diversify R&D investment in London.
3. Planning for the workforce of the future is essential to meet the demands of the evolving skills base that will be required.

2. The role of London in the Place Agenda
The distinctive strengths, enablers and barriers of London in this effort

Defining London's R&D strengths

Attendees explored how to improve the attractiveness of London to achieve better and more targeted investment in R&D. A distinctive feature of London is that it offers strengths in many areas across various disciplines, owing in part to the concentration of several excellent universities. Most notably, these strengths lie in the life sciences, technology and digital, and decarbonisation. This diversity and number of strengths across academia and industry makes London unique and an attractive place to invest. However, it was suggested that the city's unique area of leadership should be more clearly defined to enable government departments, i.e. BEIS, to make informed decisions on where to provide support to balance R&D funding across the UK. For example, medical sciences was emphasised as an area where London is demonstrating leadership.

The role of Universities in London

London is unique compared to other UK cities as it is not dominated by a single major university but is home to several world-leading academic institutions. This provides surplus opportunities and choices for businesses to interface and interact with academia.

It was noted that London offers a rich choice of partners within close physical proximity which enables meaningful partnerships across different sectors to be formed. London plays a role in acting as a hub for R&D, with businesses basing their headquarters in the city to broker stronger relationships with industry and the academic research base. A strength of the city is that it allows for collaborations which would not be possible elsewhere in the country. For example, the closeness of hospitals to pharmaceutical companies like GSK and MSD enable close-working between clinicians and scientists. However, this raised a question on the extent to which universities are working collaboratively towards a whole-city focus and looking to improve

London's overall 'offer' as an attractive place for R&D investment. Contrasts were made between other UK towns and cities where one major university operates with a whole-city focus. However London is different as there are areas where universities are collaborating well, and areas where silo-working is common. This may be hindering companies that invest in London from easily working across different universities on various aspects of a project. It was felt that there are fundamental issues with soft skills in the workforce which are preventing joint-working towards common goals for the city. It was proposed that different methodologies could be assessed to understand how to improve these soft skills, which will ultimately help to deliver the desired outputs of investment.

By nature, universities were said to perform the dual function of being competitive, but also collaborative. This means that there needs to be a greater understanding of the civic focus of different universities to enable institutions to complement one another, and not necessarily compete. This will enable universities to continue to work beyond their local area to benefit the wider city and the UK overall. Moreover, there may be areas where it is essential to work collaboratively across London, conversely, some activities may need to be led by a particular university. Community-focused activities were said to be an area where it is easier for universities to collaborate, for example UCL and Queen Mary are working together on local projects in Newham.

Supporting SME partnerships

It was said that London presents many examples of university and business collaborations. However, securing partnerships can be particularly challenging for SMEs and start-ups. For example, SMEs often approach big businesses to review their contracts for partnerships. It was felt that government could provide further support to help SMEs interface with big businesses. Suggestions were made on simplifying and explaining the process to forming collaborations for start-ups and overseas investors to allow them to better understand and navigate the system. To this end, London must draw on examples from other countries where signposting for support for R&D from big businesses is well explained. A similar challenge raised was that internal processes and policies to minimise institutional risk hinder universities from working with small local businesses.

Research productivity

Research productivity was also raised as a topic of discussion. It was suggested that improvements could be made by defining sector strengths, galvanizing partnerships and cultivating and supporting the microbusiness landscape. The rise of artificial intelligence was also said to be an interesting opportunity for London to pioneer new ways of maximising the productivity of research.

Additionally, attendees reflected on the relationship between prosperity and productivity. Traditionally, wealth was thought to be intrinsic to prosperity, such that increasing economic growth was the sole means to improving quality of life. However, it is now being argued that long-term prosperity must take into account social, environmental, cultural and health-related factors, as well as economic considerations. It was felt that there is a need to better understand how to improve prosperity on a local level, as this greatly impacts on productivity across the city. These concepts were said to be playing out in real time around the Queen Elizabeth Olympic Park with the creation of opportunities for local people through driving innovation and growth, which drives prosperity and ultimately productivity.

Demands on physical space

A challenge was raised on the physical capacity of London and its resultant ability to take on increased research intensity. The city offers sufficient space for 'dry' companies, conversely small businesses and 'wet' companies i.e. businesses that require laboratories, face particular difficulty in basing themselves in London. Property costs were also highlighted as a significant drawback in attracting talent to the city. The demands on physical space must be addressed to effectively enable growing R&D activity. It was suggested that Cambridge has tackled this issue well, and this could present a good model that London could take lessons from. However, it must be noted that civic and governance structures in London are different and much more complex than other UK cities, therefore approaches to tackle space issues elsewhere may not be applicable in London.

People and skills

The city's excellent academic institutions and R&D-intensive industries were said to attract a strong, multidisciplinary skills pool. London's connectivity was also seen as a strength in drawing talent from surrounding areas and globally.

However, sharing of skills across different organisations was seen to be a weakness in London. Universities are focused on cutting-edge knowledge and are therefore home to skilled technicians. It was suggested that these specialists could interact further with industry and SMEs to provide support and join up the R&D ecosystem.

Although there are challenges in diversifying the ways of working in the R&D workforce, it was noted that London should propose a radically different way of thinking about its people. Soft skills were said to be lacking and any improvements would have additional benefits for young people entering work who are more likely to be mobile and will require a diverse set of skills to be able to adapt to different roles and ways of working. It was also felt that social science must be harnessed and made a core element of R&D. STEM scientists must understand and draw on social science expertise to embed these skills into their line of work.

Maximising the benefits of R&D

Attendees reflected on London's incomplete R&D supply chain and noted that there are areas where isolated activities are taking place, for example in the space technology supply chain. Therefore, it was said that there is a need to invest to join up the various parts of the ecosystem to gain maximum benefits from R&D.

It is well known that London is dominated by the service industry, however this sector has not traditionally leveraged R&D. Attendees highlighted that the 2.4% target presents an exciting opportunity to trigger more innovation in the service industry and reclassify R&D in this sector. To enable this, it was suggested that work should be done to understand what measures could support R&D investment in the services industry locally and nationally. However, it must also be noted that not all businesses will have the capacity and capability to carry out R&D, and this must be considered in the 2.4% roadmap.

3. Conclusions

London acts as the engine of the UK economy, contributing to the productivity of the country overall, thus any measures to boost London's economy will result in national benefits.

Diversity is a distinctive strength of the city, and the consequent collaborations that happen bring unique opportunities to do things differently. Joining up across the R&D ecosystem will be essential in harnessing the benefits of this rich diversity and multidisciplinary skills base. Moreover, innovation should be driven in sectors that haven't previously demonstrated this, particularly maximising the use and impact of R&D in the services industry. Tailored policy interventions will be required to navigate London's complex economy.

The capital will play a vital role in making the UK a more research-intensive country by acting as a global magnet for talent and overseas investment. More space, further public and private investment and a reclassification of R&D in the services industry will be needed to equip London for increased research intensity. Civic leadership will be particularly important in enabling the effects of R&D investment to directly benefit the city.

The city must take advantage of its unique diversity of strengths and present a strong pitch nationally and globally to support government in attracting effective investment and ensure continued overseas investment in light of Brexit.