Oxford-Cambridge
SUPERCLUSTER

Policies to kickstart knowledge intensive economic growth

Our strategy to support Britain's internationally competitive, knowledge-intensive sectors and turbocharge economic growth – unlocking our true potential and building a global scientific Supercluster.

A strategy to unlock UK R&D

As a nation, we have a renowned history of developing and deploying innovation to spur growth. And, today, the UK is home to several internationally-recognised engines of growth focussed on excellence in science, finance, professional services, and higher education.

But we face a problem. Failure to maximise this potential to its fullest continues to suppress investment and prevents making even 'easy' growth wins by limiting opportunities for our most talented entrepreneurs to translate their ideas into commercial success and by blunting our ability to create and scale leading industrial and technological centres.

We can see this borne out in the data – the Oxford-Cambridge region has a higher per capita share of graduates than San Francisco, higher VC investment per capita than Boston, and the highest share of citations in scientific publications than any other global science cluster. But OxCam's scale is constrained – its population density is far lower than its comparators, average rents are higher than other clusters outside the US, and its total number of start-ups is well behind places like Munich, Paris, and Tokyo.

To remedy this situation, we must look again at the resources we provide industries that are, and have the potential to be, world-leading. Too many high-growth, homegrown scale-ups that coalesce around, and emerge from, our world-class universities and research institutions are lost to the allure of other technology clusters, despite wanting to stay. Similarly, where higher education is concerned, we allow a competitive advantage out of our grasp through a lack of stability and a cultural aversion to capitalising on research innovation. International companies and partnerships expanding their operations overseas overlook the UK for several reasons – a lack of infrastructure, particularly transport links between major centres of innovation, a diminishing perception of openness, burdensome regulatory processes, insufficient depth of talent and skills in critical areas, and a rigid planning system. As a result, we lose valuable brainpower and let the capital necessary to broaden our knowledge-intensive industries leak out.

With the right reforms, the UK can cultivate the champions of advanced industry and benefit from their scientific expertise on the world stage, all-the-while accelerating economic growth in every part of the country. We can catch-up, starting with the easy wins where the UK has itself placed obstacles in the way of its own productivity growth.

OxCam – the home of world-leading innovation

The UK is home to several research and technological clusters – none so large or globally renowned as the Oxford-Cambridge region. Combined, this area contributes c.7% of UK GDP thanks to its unmatched mass of highly skilled human capital, especially given it is considerably less populated than its counterparts in the US, Asia, and Europe.

Its status as a world-leading scientific and technology community – based on a history that cannot be quickly replicated – makes the Oxford-Cambridge region integral to the Government's growth mission. Investing in its success solves fundamental problems that the UK faces today: the need for 'quick wins', but also the desire to support UK businesses that offer genuine additionality to national living standards while sustaining economic transformation as the UK moves to become a highly diversified wealth creator.

However, the constrained scale of the Oxford-Cambridge cluster presents a significant hurdle to greater productivity gains. Start-ups, scale-ups and established R&D companies with national supply chains are stuck in an anti-growth trap: expressed in high living costs due to the undersupply of housing; high transport costs due to lack of regional connectivity; lower wages; lower talent retention; and comparatively high office and laboratory rents – now close to parity with San Francisco. Critically, there is also too much uncertainty around key growth levers such as power, water, digital connectivity, transport, and the planning system, which all combine to reduce the attractiveness of investing in the region despite its many world-leading attributes.

With the right strategy, the Oxford-Cambridge region can go from being a remarkable 'per-capita' growth success story, to become a supercluster on a globally significant scale. It is first essential to join Oxford, Cambridge, and the places in between with East West Rail (EWR), as that is the only way to create the critical mass necessary for the region and the UK to compete globally. Our research indicates that the region has the potential to add an additional £50bn per year to the economy by 2030, according to the findings of a report titled 'Radical Capital'[1] written by over 60 leading thinkers across the region. This is a benchmark, with further growth possible if the benefits of EWR are fully realised. Unlocking growth in this region will bring extensive direct and spillover effects across the whole country and provide a model to drive cluster growth within other regions.

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[1] Radical Capital Report https://radical.bidwells.co.uk/

Policies to turbocharge growth

We believe there are six critical policy areas, designed to attract, retain, grow, and cultivate the UK's industrial champions of science and technology, which could deliver this prize.

1. Make the OxCam region the 'crown jewel' of European science and innovation

For the Oxford-Cambridge region specifically, we would ask the Government to consider:

- Launching the concept of a supervisory taskforce in the Oxford-Cambridge region to support the delivery of East West Rail and maximising its growth potential through the legacy funding mechanism;
- Introducing a regional 'place-based' spatial plan for the Oxford-Cambridge region to solve cross-boundary issues, in particular infrastructure and utilities provision;
- Recommending to local authorities within the Oxford-Cambridge region that a spatial plan includes a needs assessment and permission in principle designation for lab space;
- Creating a new taskforce to review the future needs for regional skills, with a focus on modelling demand for knowledge-intensive sectors;
- Auditing the highly skilled visa system together with a 'cabinet' of industrial champions from the science and technology, engineering, and manufacturing sectors, to benchmark UK performance against competitors; and
- Enabling the retention of Business Rates uplift, over an agreed baseline, for 15+ years for local authorities and organisations representing regional interests.

Doing all of this will require addressing the fragmented nature of local government in the region and installing effective and competent leadership to deliver a pan-regional strategy. It is vital that this combines the strengths of the public sector in all its guises, academia, and industry, which has been a successful model for other global science clusters, including the Research Triangle Park in North Carolina.

2. Accelerate the delivery of lab space through the introduction of an 'innovation' use class

Because there is no specific use class for science and technology schemes in the National Planning Policy Framework (NPPF), space for laboratories and knowledge-intensive R&D is treated in planning in much the same way as an application for new housing is. As such, while there is a presumption in favour of sustainable development, no additional weight is given to its importance to the national economy, to national security, or to its contribution to the undersupply of wet and dry lab space for high-growth potential clusters.

Space for knowledge-intensive R&D must be treated as a national strategic asset, in policy and in planning. A new 'innovation' use class written into the NPPF is the easiest way to distinguish lab-centric schemes from other use classes, with prescribed rules dependent on complexity for lab developments, R&D-ancillary applications, and science parks. In particular, 'permission in principle' should be granted to schemes at the outline stage, to give investors a degree of confidence that long-term capital outlay will be supported at a national level.

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3. Allocate each regionally and nationally significant infrastructure project its own independently supervised taskforce

Infrastructure delivery in the UK is protracted, in part due to delays in procurement, planning, and the complicated nature of public consultation. These issues extend to energy, utilities and telecommunications, as well as to transport, schools, healthcare, and other public services. As a result, large-scale projects regularly outlive electoral cycles – as is the nature of long-term infrastructure commitments – and momentum cools over time.

To reboot investor confidence in UK infrastructure and entice international capital, nationally significant infrastructure projects (NSIPs) and a newly created regional subcategory (RSIPs), which would include East West Rail, should each be allocated an independent taskforce that is vested with supervisory powers to enforce a timeline for completion. Though still subject to due process (such as judicial review and the obligations of a Development Consent Order), an additional independent layer of accountability and oversight would minimise the likelihood of public projects becoming a 'buck to pass', while introducing efficiency to the decision-making process with stricter deadlines.

4. Improve R&D incentives and permit permanent top-up tax relief for new-to-market R&D

As countries look to 're-shore' their scientific capabilities, the UK must ensure it is offering a competitive package of fiscal incentives to entice investment in research and development. In particular, ensuring that capital expenditure on plant and machinery equipment is included within the scope of qualifying costs for R&D tax credits will bring the UK in line with countries like France and Ireland and make the UK's scheme truly globally leading. This could be particularly attractive for companies looking to invest in late-stage R&D and scale-up manufacturing research, which could be conducted anywhere across the region where other operational costs may already be lower.

The Government should also consider a top-up tax relief, in addition to the flat deduction to Corporation Tax at 10% via Patent Box, laddering up to a 15% threshold for companies that have delivered a defined number of market-available products over a number of years. As well as encouraging high-performing R&D companies to stay in the country and grow their product portfolio, such a policy would provide companies with an irretractable benefit for commercialising UK R&D, which would enhance the attractiveness of the UK as a place to invest and encourage the retention of manufacturing capabilities.

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5. Broaden training in R&D-intensive industries through the early introduction of a Growth and Skills Levy

Deep flaws in the current Apprenticeship Levy make it unfit for the type of skills development that the knowledge economy needs. To improve the Levy, and to allow businesses to make better use of it, the Government should expedite the introduction of the proposed Growth and Skills Levy to allow funds to be used for supply chain partners and the upskilling of existing staff where training forms part of a regulated qualification or accredited training course – as well as for apprenticeships.

6. Work with universities to support spinouts and with industry to ensure start-ups have access to the finance they need to grow

Capital for start-up investment in the UK is far lower than other countries, like the US or Canada. Whilst this has been at least partly ameliorated by the Mansion House Compact to provide a 5% allocation from Britain's largest pension funds to unlisted equities by 2030, this specific initiative was not aimed at the constituents of our science and technology ecosystem that face a critical gap in funding.

The Government has pledged to launch its own equivalent of the French 'Tibi' initiative to channel institutional investment into innovative companies that would otherwise look abroad to mature, which we welcome. It should also progress work on innovative DC-centric fee structures, convening DC funds with infrastructure investors, and considering the role of local public pension schemes in the development of regional infrastructure.

OxCam – delivering growth, innovation, and economic and social prosperity

The Supercluster Board is proud to celebrate Britain's world-class knowledge and intellectual curiosity, building on our historic role in transforming people's lives through invention and ingenuity. Our modern, knowledge-intensive sectors are on the cusp of a new industrial revolution in digital technology, medicine, automation, machine learning, and other areas. Our ambitions are only limited by issues we have the power to change. The Oxford-Cambridge region is world-class in spite of these limitations, and its potential is boundless. We can only hope to realise this potential if we utilise the strengths we have to best affect and address the challenges that hold us back. With the 'triple helix' of academia, Government, and British enterprise, we have all the essential ingredients to turbocharge growth, bring our innovations to the world, and create economic and social prosperity for everyone across the country.

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www.supercluster.org.uk

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