

Manifesto for Science and Engineering

2024



**Actions for
improving lives and
livelihoods in the UK**

CaSE 
Campaign for Science and Engineering

Campaign for Science and Engineering (CaSE)
Registered charity number: 1147492

1 Naoroji Street, London, WC1X 0GB
www.sciencecampaign.org.uk

CaSE's Manifesto for Science and Engineering 2024

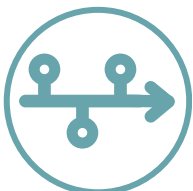


The next Government must commit to using research and innovation as the route to improving people's lives and livelihoods in the UK

Investing in research and innovation helps us solve the problems facing people in the UK, and across the world. This investment improves people's lives and livelihoods, creating new jobs and future industries, new educational opportunities, and the economic growth that will pay for our local and public services and strengthen our communities.

It supports people working in universities and businesses across the country, helping them tackle climate change, develop new medical treatments, and come up with energy-saving inventions.

CaSE calls on the next Government to commit to invest in Research and Development (R&D) for the long-term, support the skills the UK needs, maximise the local economic impact of that investment and support the environment for business R&D.



Commit to long term and sustainable R&D investment



Unlock skills for a more research-intensive economy



Build on and leverage regional strengths in R&D



Drive business investment in R&D

Commit to long term and sustainable R&D investment



Commit to a long-term plan for R&D investment and set a target to be a leading country globally

There should be continued, long-term government commitment to increase R&D investment. A stable and predictable plan, supported by sustained investment, is vital to help research and innovation thrive in a way that drives economic growth and prosperity across the UK. In a globally competitive research landscape, the UK must look to secure its place among leading science nations.

Continue to implement the Science and Technology Framework:

Continue to implement the Science and Technology Framework and to monitor progress on recommendations. This will give the research community and the private sector the stability and predictability they need to invest in research and innovation.

Implement science capability across government:

Continue to drive forward the recommendations within the Science Capability Review to ensure that R&D can be better utilised across government to improve policy outcomes and public services.

Set long-term budgets for UKRI:

Provide long term funding settlements for UKRI. A multi-year spending review budget for all parts of UKRI gives it the ability to plan strategically.

Utilise Public Sector Research Establishments (PSREs):

Continue to make progress towards better utilisation of PSREs to meet the policy and research needs of Government departments.

Improve the financial sustainability of the research system

The long-term financial sustainability of the research system is vital to ensure it continues to contribute to economic growth and improving the lives and livelihoods of people across the UK. In particular, it is critical to ensure that university finances are sustainable across their teaching and research activities. Universities play a pivotal role in the research landscape through their teaching, research and knowledge exchange.

Address the financial sustainability of the university sector:

Introduce measures to support universities to achieve a sustainable financial model across both their teaching and research activities. There must be a strategy behind the chosen fixed economic costing (FEC) level that takes the research deficit seriously.

Public Opinion Insights

CaSE's Discovery Decade programme's research into public attitudes to R&D demonstrates that the public think R&D investment is important and that it should be a priority for politicians of all parties:

70%

A majority (70%) think it is important for the Government to invest in R&D

58%

More than half (58%) think funding research generally should be a high or top priority for UK political parties

65%

A majority (65%) said it was clear how investing in R&D would grow the economy

57-64%

The majority thought investing in R&D was a better strategy to grow the economy than increasing the minimum wage, cutting income taxes or building new transport links

Unlock skills for a more research-intensive economy



Support and coordinate a more integrated skills system

The UK government and devolved administrations must support and coordinate a more integrated skills system to build a long-term and sustainable supply of skilled R&D talent. This should include a focus on attracting more young people to consider a career in science and engineering, increasing flexibility and widening routes into R&D careers, and supporting a more diverse R&D workforce across all roles and stages.

Attract and retain the best international R&D talent

The UK must attract and retain the best international talent and support international collaboration through participating in international schemes such as Horizon Europe and future EU Framework Programmes. It is critical that the immigration and visa system, and associated costs, do not act as a barrier to attracting skilled scientists and researchers. There also needs to be a concerted government effort to change its rhetoric to create and promote a more welcoming environment.

Reduce the upfront cost of UK visas:

Reduce the upfront cost of UK visas in line with international competitors. This includes reversing or mitigating the increases in visa applications costs and Immigration Health Surcharge.

Clarify and communicate eligibility for visa route:

This should include clarifying eligibility for the Global Talent and Skilled Worker Visas and ensuring the visa system has diverse routes to allow recruitment into all research roles.

Increase visa flexibility:

Introduce a short-term mobility route to enable overseas STEM researchers to collaborate with UK scientists on a range of timescales.

Support businesses to navigate the visa system:

Improve support for smaller businesses navigating the visa system. The Home Office should develop guidance packs for the visa process, including a step-by-step guide designed specifically for SMEs.

De-risk visa sponsorship for businesses:

Provide mechanisms to de-risk visa costs for businesses, such as a process to secure refunds for potential losses, or a payment scheme only activated upon an employee starting.

Mitigate the impact of visa changes on students and universities:

Promote the UK as an attractive destination to overseas students and mitigate the impact of changes to visa fees and the eligibility of dependents for students.

Public Opinion Insights

CaSE's Discovery Decade programme's major study of public attitudes to R&D demonstrates that the public think R&D investment is important and that it should be a priority for politicians of all parties:

79%

A majority (79%) want the UK to train and develop more scientists and innovators from this country

64%

A majority described R&D jobs as important (64%) and interesting (60%)

80%

More than 80% said that skills needed for jobs in R&D are important for children to learn at school

72%

A majority (72%) say they want more of the world's best scientists and innovators to work in the UK

Build on and leverage regional strengths in R&D



Maximise the local economic impact of R&D strengths across the UK

There should be action to strengthen local innovation ecosystems and improve regional absorptive capacity for research and innovation. Investing in regional R&D can play a significant role in delivering a more research-intensive UK and create opportunities for new jobs and industries across all parts of the UK.

This will require that central and local government work together to improve coordination between local and national priorities for R&D. While the UK government needs an overarching national strategy for R&D, it is also important to provide regions with the funding and freedom to enact effective policies at the local level. Local leadership is important in driving forward each region's strategy and enabling the effects of R&D investment to directly benefit the local community.

Support regions to market their strengths and capabilities:

Support regions to clarify their distinctive strengths and develop their pitch for national and overseas investment.

Facilitate national/local government coordination:

Central and local government should work together to improve national coordination between local and national R&D priorities.

Public Opinion Insights

CaSE's Discovery Decade programme's major study of public attitudes to R&D found that the public thinks R&D can bring regional and local benefits:

60%

More than 60% of people in all regions say it is important that their region carries out a lot of R&D, citing local jobs and inwards investment

66%

Two-thirds (66%) would support an R&D lab being built in their local area, citing well-paid jobs and benefits to the local economy

Drive business investment in R&D



Provide an attractive and competitive environment for businesses to invest in R&D

Create and enable an environment that incentivises businesses to invest in R&D activity in the UK. Stable and predictable policy commitments are vital to give businesses the confidence to keep on investing in research and innovation. In addition, it is important to fill gaps in support across different stages of research and innovation, and provide adequate resourcing and expertise to deliver and implement existing policy.

Clarify tax credits and incentives:

Provide a statement of intent on the purpose and focus of R&D tax credits and stick to it. This should include revising the definition of R&D within tax credits to ensure it reflects the requirements of R&D-led businesses across new and emerging sectors and clarifying the level at which they are set to provide certainty.

Improve funding and financial support across different stages of research and innovation:

Use the Mansion House reforms in close collaboration with R&D-led businesses to unlock pension funds for investment in R&D industries, increase and promote the number of funding opportunities for SME-university collaborations, and set long-term budgets for funding bodies.

Modernise and adequately resource regulation:

System-level changes are needed to support innovation and address regulatory uncertainty for new and emerging technologies. Develop standards to drive and guide new technology development and use cross-sector external experts to support regulatory resourcing.

Support R&D infrastructure:

R&D infrastructure must be part of wider discussions about regional infrastructure and other policy considerations such as planning processes, housing, transport, and utility supply.

Public Opinion Insights

CaSE's Discovery Decade programme's research into public attitudes to R&D found that the public is supportive of local, business-led R&D and connect this to economic growth:

78%

A majority (78%) would support a proposal for a business to set up a research facility in their local area, citing benefits to the local economy and providing jobs for local people.

70%

A majority (70%) would support their next elected MP campaigning for businesses to set up a research centre in the area, compared to only 3% opposing such an action.

A united R&D sector

Alongside the actions CaSE are calling for in this manifesto, we recently collaborated with other leaders of the UK R&D sector to issue a [joint statement](#) of our united position on the importance of R&D for the UK.

The UK should be a leading country in the G7 on R&D investment



The UK should be a leading country in the G7 on R&D investment

We are united in a belief in the importance of ambitious, long-term, and sustainable investment in Research and Development (R&D) for the future of the United Kingdom. R&D is the foundation upon which the UK's economic prosperity, well-being, and global competitiveness rest. A sustained increase in government R&D investment creates the stability to pursue big ideas, discoveries, and innovations that improve UK public services and make the world a better place for the next generation.

Such investment will instil confidence in the UK as a place to do business, drive growth, prosperity, and allow the UK to lead on the transition to net zero while tackling threats to health, wellbeing and quality of life across the UK. A [majority of the public](#) think that new research has a role to play in solving society's challenges; 77% say new research is an essential or important part of solving the problem of climate change and 80% for securing the UK's energy supply and lowering the cost of energy bills.

The UK should be a leading country in the G7 on R&D investment. We want to see political parties commit to investing in and nurturing a culture of research and innovation, ensuring the UK continues to attract private, philanthropic, and charity investment as well as the most talented researchers from around the world.

Authors

[CaSE](#) - [The Academy of Medical Sciences](#) - [Association of Medical Research Charities](#)
[The British Academy](#) - [CBI](#) - [Royal Academy of Engineering](#) - [The Royal Society](#) - [Russell Group](#)
[University Alliance](#) - [Universities UK](#) - [Wellcome](#)

Signatories

[AIRTO](#) - [Biochemical Society](#) - [British Ecological Society](#) - [British Heart Foundation](#)
[The British Pharmacological Society](#) - [The British Psychological Society](#) - [Cancer Research UK](#)
[Francis Crick Institute](#) - [Fraunhofer UK](#) - [GW4](#) - [The Institute of Cancer Research \(ICR\)](#)
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