

PARLIAMENT RALLIES TO GIVE BRITAIN ITS SCIENCE SUPERPOWER BACK



Sharon Todd, CEO of SCI

SCI is a global industrial innovation hub based in London. Formed as the Society of Chemical Industry by Royal Charter in 1881, it connects industry, academia and government to accelerate science out of the laboratory for the benefit of society.

Today, the SCI community is working on the big societal challenges - from developing new forms of low carbon energy and new medicines to advancing the production of healthy and sustainable foods.

In recent months, Parliament has rallied to the calls from SCI to put in place a bold and ambitious plan to drive economic and societal growth for the UK from the strong science base that we have in place.

Recognising that a comprehensive industrial strategy is needed to achieve the Prime Minister's ambition for Britain to be a Science Superpower once more, the call has been taken up by politicians

and peers in both Houses. Many have recognised science and innovation as key to the UK's economic growth and manufacturing security.

Science and innovation-based business in the UK will help us to secure food supplies for our families, respond to new diseases and enable us to live a sustainable future. It is vital that this new emerging business develops in Britain, for both our security and our economy.

THE CALL FOR ACTION

The UK's economy has not performed well over the long term, showing a 1.5% average growth in GDP versus a global average of 3.6% over the last 20 years¹. Key metrics, such as pharmaceutical exports, inward investment and start-ups scaling up are all heading in the wrong direction.

Other countries are taking action, investing heavily in driving inward investment and putting in packages to support growth.



CASE STUDY: US Inflation Reduction Act

The US has created **\$500bn in tax breaks** and spending for clean energy to reduce healthcare costs. R&D will be boosted beyond measure, commercialising state-of-the-art technologies including carbon capture & storage and clean hydrogen.

CASE STUDY: EU Green Deal

The EU is mitigating the competitive threat with its industrial plan worth c. **\$270bn**.

Action is needed to really drive economic and societal value from the UK's incredible science base and we need this to be bold rather than incremental.

There has been a chronic shortage of investment by and for UK companies in the last 20 years. Meanwhile, the rest of the World's economies are forging ahead, developing new medicines, clean tech products and services, and food production techniques.

If we do not act by the start of the next Parliament, it will be too late for the UK to catch up. The UK will lose out on the investment in high quality jobs and regional economies which the science sector has historical brought.

PARLIAMENTARIANS TAKE ACTION

At the end of 2023 the Business and Trade Committee made a call for written evidence as it launched a programme of work to scrutinise the UK Government's approach to industrial policy. The Committee is examining how industrial policy can be used to build on the UK's strengths and competitive advantages, enhance economic security and help the UK reach net-zero by 2050.

In submitting evidence, SCI set out some of the structural weaknesses that the UK is dealing with and how SCI's

Manifesto for a Science and Innovation Strategy provides a roadmap for taking the UK back to the leadership position it deserves to be in. We highlighted the UK's great academic research, with 17 of the top 100 universities in the world located in the UK. Despite this great foundation the UK has fallen behind its international competitors in turning that great science base into value, according to research by LEK Consulting commissioned by SCI in 2023.

On the 1st February 2024 a motion brought to the House of Lords by Lord Watson of Wyre Forest debated the case for a 'comprehensive industrial strategy for the United Kingdom.'

'I do not think that we are doing enough to make a decisive difference to the UK's economic prospects, given our sluggish growth, flatlining wages, regional disparities and chronic under investment ... A lack of a proper planned industrial strategy is the UK's Achilles heel,' said Lord Watson of Wyre Forest, opening up the debate.

As a nation we are quite rightly aligned with the leading global players, but commenting on green investment, Earl Russell remarked during the debate: 'The UK is near the bottom of the table in the G7 for investment and the outlook is bleak'

WE DON'T NEED A 'COUNCIL OF PERFECTION'

The various statistics and data can be debated and argued, but the consistent call is that investment and growth in the UK is not what it should be. This Government and the next Government need to act urgently to implement a comprehensive industrial strategy - with an express focus on growing the economy, driving investment and creating jobs.

The SCI Manifesto, launched in August 2023, was endorsed by three former business secretaries: the Rt Hon the Lord Mandelson, the Rt Hon Sir Vince Cable and the Rt Hon Greg Clark MP. The three were called to give oral evidence on industrial policy at a meeting convened by the House of Commons Business and Trade Committee in February. All three former ministers from across parties were in agreement that an industrial strategy is needed if

'I would recommend to whoever is Government after the next election that there should be a serious attempt to embed a long-term approach to industrial strategy. It almost does not matter whether you have precisely the right policies,' said Clark. 'If you get eight out of ten right, that is better than a council of perfection that says we cannot have anything unless it is absolutely perfect.' Clark added.

The UK has a deserved reputation for science and for creating spin-out businesses from universities. However, once life science start-up businesses grow to the point of listing on national stock exchanges, all but a handful choose to list in the United States. We need an environment which reverses this so that the UK can reap the many benefits from our brilliant start-ups.

It is in this spirit that SCI's Manifesto sets out four key areas of policy interventions that

FTSE 100

Not one top ten FTSE100 company built new manufacturing plant in the UK between 2003 and 2023.



The UK-based pharmaceuticals giant chose to invest **\$360bn** in new manufacturing facilities in Ireland in 2023.

UNICORNS

Only 2 of the 10 life science unicorns to list between 2012-2021 listed in the UK.

the UK is to keep up with its economic partners and this should have cross party support to ensure consistency and longevity, something that is critical to underpin industrial investment.

together would ensure the UK could compete on a more level footing. Most recently, SCI has set out three targets for the UK which may not represent a perfect industrial future but provide a guide that whichever

An attractive UK for science-based business could lead to:

15x
UK start-ups scaling
to **£500m**
by 2030

5 UK
Unicorns
listing in the UK
by 2030

10x
£500m
investments in UK
manufacturing by 2030

party is leading this country can get behind. One of those targets is to see five home grown science unicorns (start-up companies valued at over \$1 billion) list on the UK Stock Exchange by 2030.

SPRING BUDGET IS STEP IN THE RIGHT DIRECTION

Several inventions have already been welcomed, such as full expensing for business, the ongoing commitment to a strong R&D tax credits scheme, the recent Mansion House Reforms on pension fund investment and the new LIFTS funding scheme announced by the British Business Bank.

The announcement in the Spring Budget of £92 million worth of investment to help encourage innovation and support jobs in life science is also step in the right direction. AstraZeneca's plans to invest £650 million in the UK to boost research, development and manufacturing of vaccines at its sites in Liverpool and Cambridge was encouraging. The comment from Sir Pascal Soriot, AstraZeneca CEO, that the investment demonstrated an 'ongoing confidence in UK life sciences,' is reassuring and demonstrates progress.

However, measures to support business and innovation from Government have been largely piecemeal, short-term and inconsistent. Major investments in the UK by science-based companies, such as that announced by AstraZeneca, should not be unusual or unexpected.

The global markets across life sciences and clean tech alone amount to over \$3 trillion and they are growing rapidly, spurred on by scientific inventions, yet the UK is capturing very small shares of this growth. From 1998 to the end of 2022, the UK has created 157 unicorns². Life sciences spin-outs accounted for only 10 of these.

AMBITION AND BOLD MOVES ARE NEEDED

SCI believes that with the right backing it is possible to see five new life science unicorns listing in the UK by 2030. Our great universities are likely to be one of the main conduits for these new companies, as 19 of the UK's current 157 unicorns are university spin-outs. We want to see more of those innovative businesses born in the UK list in the UK. We are missing great opportunities to create value, jobs and real economic growth.

Getting the environment right for growth is an imperative. Revised R&D data confirms that the UK has a strong innovation base. The Government has already acknowledged that while many UK companies are at the forefront of innovation, the development and commercialisation of that innovation is lacking. We need to move on from talking about R&D (research and development) to D&C (development and commercialisation).

INVEST FOR THE LONG-TERM

SCI would like to see more focus on promoting skills and knowledge transfer in innovation growth areas. Indeed two of the

10 actions in the Government's Science and Technology Framework released in March 2023 centred on 'boosting private and public investment in research and development for economic growth and better productivity' and 'ensuring researchers have access to the best physical and digital infrastructure for R&D that attracts talent, investment and discoveries.'

There is also an argument to be made for taking the investment in R&D beyond the 3% of GDP already achieved. R&D expenditure should be used to promote levelling up, equality and societal welfare. There are some big global challenges, not least climate change and progress towards sustainability.

The Government is taking some steps in support of market led investment in R&D, as set out in the Government's Advanced Manufacturing Plan published in November 2023. A UK Battery Strategy document also outlines the need to provide funding for later stage product development and marketing to protect the UK's supply chains.

These are steps in the right direction. But as it stands, investors and innovators have to sift through a mountain of information and knock on several Government department doors just to get to the starting point.

A straightforward strategy that takes innovators and investors on the journey from science laboratory bench to business is needed to propel the UK into the position it deserves to be in, making it a 'Science Superpower' and a great place to do business. If we are to lead the World once more with our industrial science ingenuity and support the UK into a sustainable future, we must secure our core business now, as we head into a new parliamentary term.

References

- 1 World Bank
- 2 Scale Up Institute Review 2023

SCI published A Manifesto for an Industrial Science & Innovation Strategy in August 2023. It forms a comprehensive blueprint to support UK science-based business. To read the manifesto visit bit.ly/SCIManifestoPdf or scan the QR code below.

