

SOCIETY OF CHEMICAL INDUSTRY

# SME Survey

2024/25







# Foreword

Sharon Todd, CEO SCI

The UK's science-based SMEs are a key driving force behind innovation, job creation, and long-term economic growth. However, our latest SME Survey highlights that these businesses face persistent challenges in the form of funding barriers, skills shortages, and difficulties in scaling up. If the UK is to maintain its position as a global leader in science and industry, decisive action is needed.

The Government must implement targeted policies that foster stronger collaboration between public and private sectors, ensuring fair access to resources and simplifying critical funding mechanisms such as R&D tax credits. By supporting SMEs in high-risk, high-reward innovation and reducing obstacles to their growth, the UK can create an ecosystem where mission-driven science thrives. Only then can we unlock the full potential of our SME community, driving sustainable growth and global competitiveness – and delivering solutions to some of the biggest challenges facing society.

# Background

SCI's SME Survey provides a snapshot of the barriers and complexities that the UK's innovative science-based businesses are facing. It was carried out in late 2024 to present a bottom-up view from the SMEs on what more they feel needs to be done to support them to grow. Over 100 responses were received from SMEs operating across a wide range of sectors, from Materials to Agrisciences and Agritech, with the largest responses by the Biotechnology & Pharmaceutical sector, at 32% (See Figure 1).

The key findings showed that a significant number of respondents see challenges growing in the UK particularly around:

## FUNDING

While R&D tax credits and Innovate UK are widely used, there is limited awareness of other schemes, and the Horizon programme is seen as overly complex.

## SKILLS

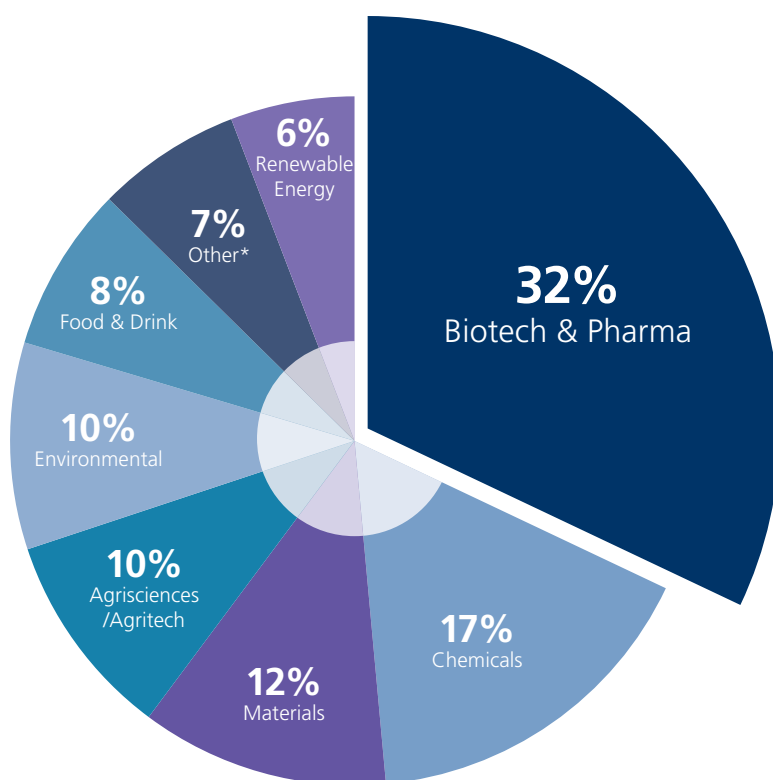
The current visa system is a major barrier for scientific SMEs, with a strong call to simplify it.

## INFRASTRUCTURE

Across multiple sectors, businesses believe the UK lacks the infrastructure needed to scale, prompting many to plan overseas manufacturing in the next decade.

## SCALE-UP SUPPORT

Notably, SMEs are also likely or very likely to move operations abroad, with around half considering listing overseas.



**Figure 1:**  
Responses by sector

\*Other includes 'Processing', 'Plastics', 'Nanotech', 'Cosmetics'

The finds from SCI's SME Survey offer an important insight into the support that UK's SMEs need to flourish. These finds have informed SCI's policy asks as the Government seeks to reinvigorate the UK economy and fire up economic growth.

The SCI policy asks, which are around the four areas of: funding, scale up, location for growth, and STEM talent; come with recommendations which SCI and its SME community believe can be put in place quickly and will boost the UK's growing businesses.



# Summary

The UK's scientific SMEs are an important driver for the country's economic growth. Leveraging our strong science base, by assisting these innovative SMEs to grow and list in the UK, could unlock an additional £230bn in GVA and create 230,000 skilled and well-paid jobs, according to a report by LEK Consulting and commissioned by SCI during 2023[1]

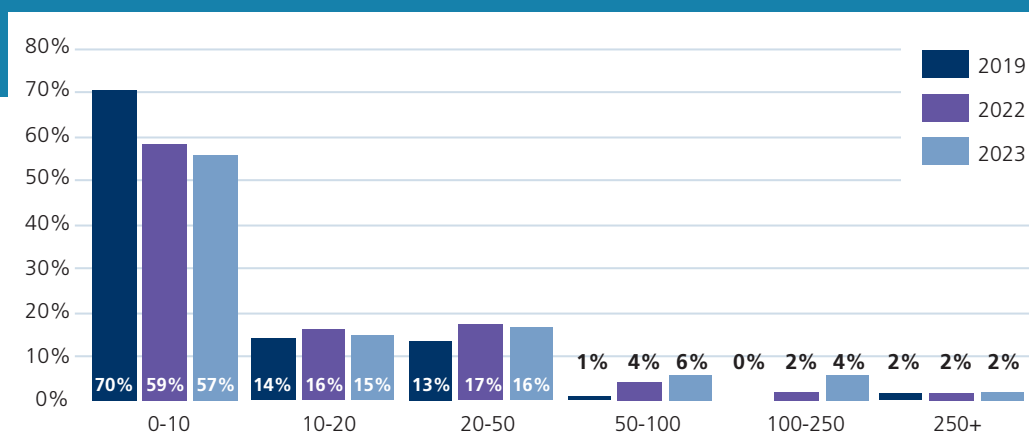
To understand the roadblocks that are preventing our science-based SMEs from realising their full potential, SCI surveyed its SME community. With more than 100 respondents that have a combined sales of more than £300m and employ some 2300 people, the survey, carried out between June and October 2024, provides an overview of the struggles faced by many SMEs in navigating the complex landscape of government assistance.

The UK's science-based SME community is vibrant and is positively impacting the UK economy. The SMEs surveyed by SCI have increased their total number of employees by 69% between 2019 and 2023. (See Figure 2). This cohort also saw their combined revenues grow 61% in the same time frame from £145.6m to £235m. (See Figure 3).

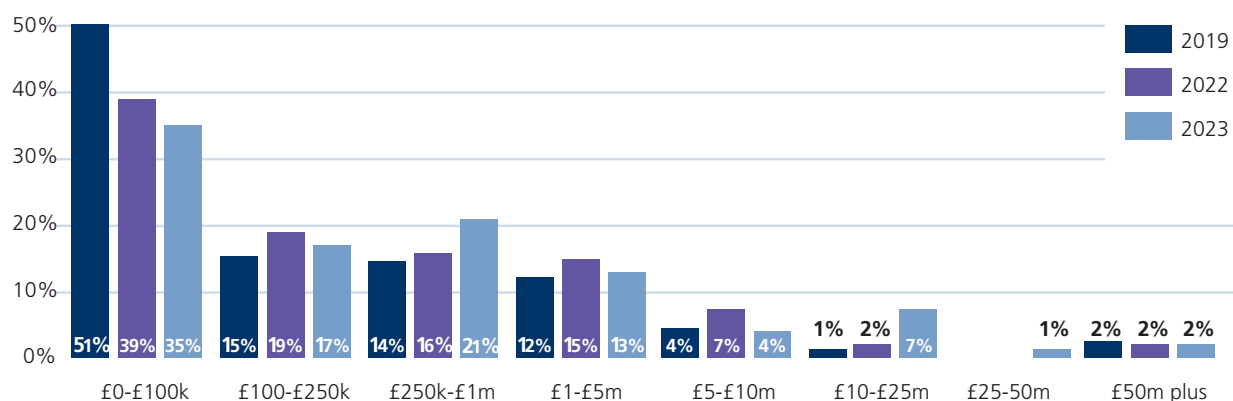
It highlights the need for a more streamlined approach across the UK policy and support landscape, as well as a greater appreciation of the complexity and time required for a science-based SME to get an idea from the laboratory to a fully functioning and growing entity.

The SME survey responses, along with experiences shared in case studies\*, highlights the sizable opportunity being-missed by the UK to see economic growth and fire up investment both in the UK and from overseas.

**Figure 2:**  
Change in Employees  
over time



**Figure 3:**  
Change in Revenues  
over time



\*The case studies presented in this document are extracted from longer documents submitted by SCI's SME community. Some companies have requested to remain anonymous.

## THE UK'S SMEs ARE ADDRESSING GLOBAL CHALLENGES

SCI's SME community is vibrant and diverse, with responses to our survey coming from biotechnology and pharmaceutical sectors, through to materials, renewable energy as well as nanotechnology and personal care. All these sectors are addressing a range of challenges that will support national goals such as improved health care, net-zero, and sustainability. These challenges are also global and therefore provide opportunities for global sales and expansion for our UK SMEs.

All of the respondents to the SCI survey are established SMEs operating at bench scale to large scale research or are actively commissioning to scale their businesses and hold patents for their technologies. While half of our respondents (51%) currently have up to 10 employees (Figure 4) and 35% have revenue of up to £100,000 (Figure 5), our survey shows that 50% aspire to scale their businesses and double in size over the next five years (Figure 6). This aspiration fits with the 49% of respondents who said that over the next five years their R&D spend would increase. (Figure 7)

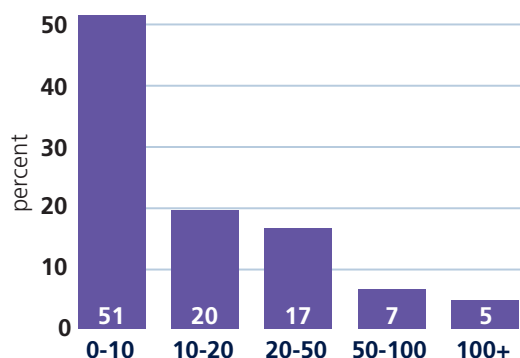
However, these growth aspirations and increased R&D spend are facing headwinds. This survey sets out the four key challenges that SCI's SME community told us it is facing, these being:

- 1 Funding
- 2 Scale up support
- 3 Location for growth and possible future listing
- 4 STEM talent

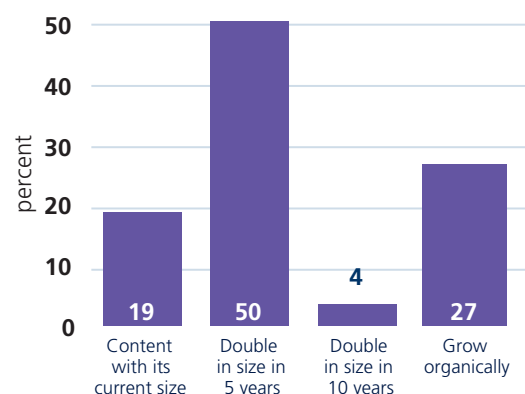
These challenges are interlinked. Funding supports the all-important research and development. However, without the skilled workforce that is needed SMEs struggle to turn the dial on their ideas. If getting the overseas talent into the UK becomes too time consuming, then these businesses may well look to locate overseas and begin their growth and revenue generation journey outside the UK. With what the UK's scientific SMEs are facing, it serves as a succinct overview of what is at stake for the UK's economy and the UK's position globally.

## SME GROWTH, INVESTMENT, AND FUTURE ASPIRATIONS IN THE UK

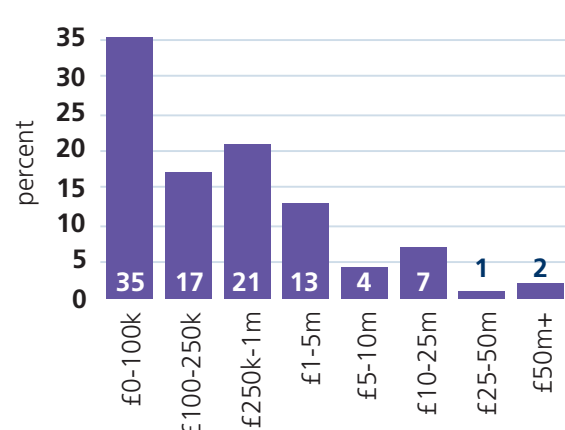
**Figure 4:**  
Number of employees



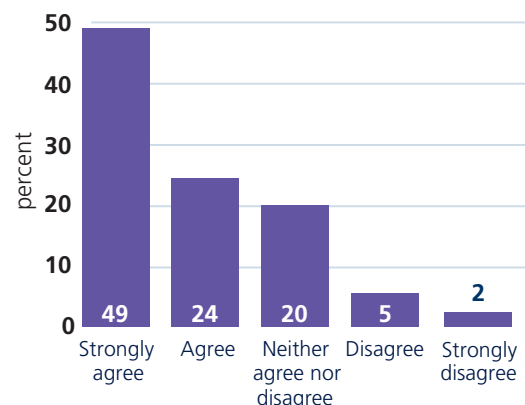
**Figure 6:**  
Growth Aspirations



**Figure 5:**  
Revenue last year



**Figure 7:**  
In the next five years our R&D investment will double



# 1 Funding:

## CLEAR AND CONCISE SIGNPOSTING NEEDED

The importance of tax credits and support through Innovate UK funding cannot be overstated. Our survey shows that 89% of respondents use the R&D tax credit scheme. Only 8% said that they weren't aware of the scheme, with another 3% of respondents saying that the process for applying was too complicated. (See Figure 8)

Given the size of the sector, 11% represents a significant opportunity cost to the UK economy, if scaled up across the UK scientific SME community, this would represent a lot of companies either unaware of the support schemes or finding the application process too complicated.

Indeed, UK Government data from 2021/2022 indicated that the UK is home to 247,000 manufacturing SMEs (246,000 SMEs-247,000 manufacturing businesses in total in the UK)[2], with over 6000 in the lifescience sector alone[3]. A very similar pattern was observed in relation to knowledge of Innovate UK funding. While 82% of respondents had used this funding stream, a total of, 18% of respondents were either not aware of the support or found the process too complicated (see Figure 9).

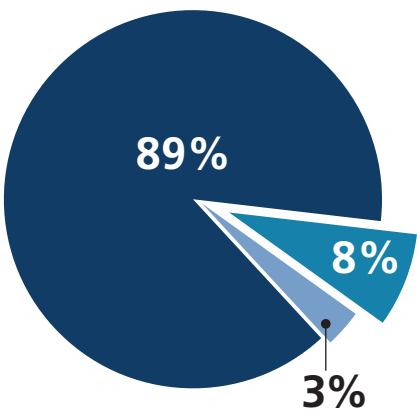
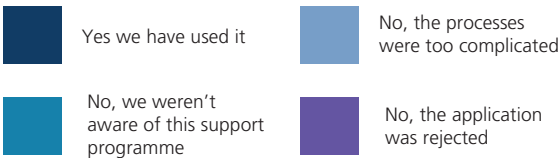
With most of the survey's respondents (51%) having no more than 10 employees, it is clear that the capacity to investigate and then decide if the business should apply to receive the support, is a process that has to be weighed up against the needs of the essential day-to-day work. Employing someone skilled in these applications is not an option for many.

Very few respondents are not aware of the range of government support schemes available to them. These include schemes such as Launchpads Funding and Northern Powerhouse Investment Fund. (See Figure 11). Surprisingly, SCI's SME survey pointed to a lack of knowledge about the government backed British Business Bank (BBB) which was established in 2014 and whose purpose is: "to help smaller businesses to start up, scale up and stay in the UK[4]," The BBB specifically targets SMEs providing easier access to finance through, for example, start-up loans and the 'Growth Guarantee Scheme' as well as providing guidance and advice about angel investment, venture capital and private equity. BBB's commercial subsidiary British Patient Capital is completely focused on growth stage capital[5].

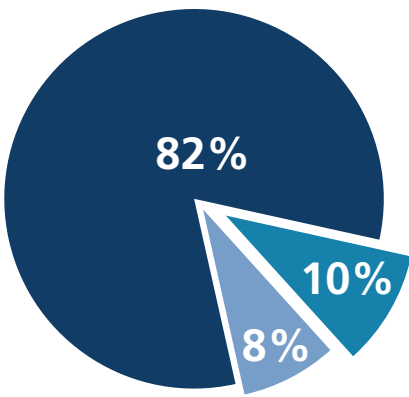


At this point it is worth making mention of Horizon Europe, the £80bn funding package supporting research and innovation which runs from 2021 to 2027, which now has the UK Government encouraging applications. With 47% of our SMEs saying that they have used this funding line, Horizon Europe is an integral to the success of our SMEs. However 24% of our survey said that they weren't aware of it, and 22% said that the process was too complicated, 7% mentioned that they had their application rejected[6] (See Figure 10)."

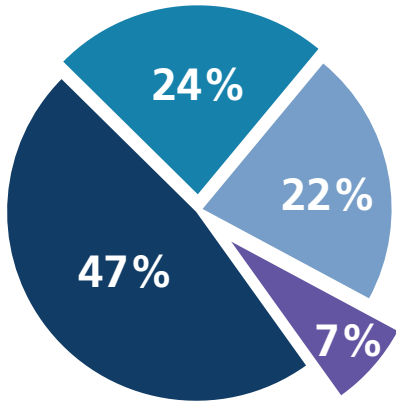
Many of our SMEs are missing out on important opportunities to access funding. To improve knowledge and access to these funding streams the creation of a central hub where the available financing and eligibility are set out clearly and simply would go some way to saving SMEs a lot of valuable time and effort.



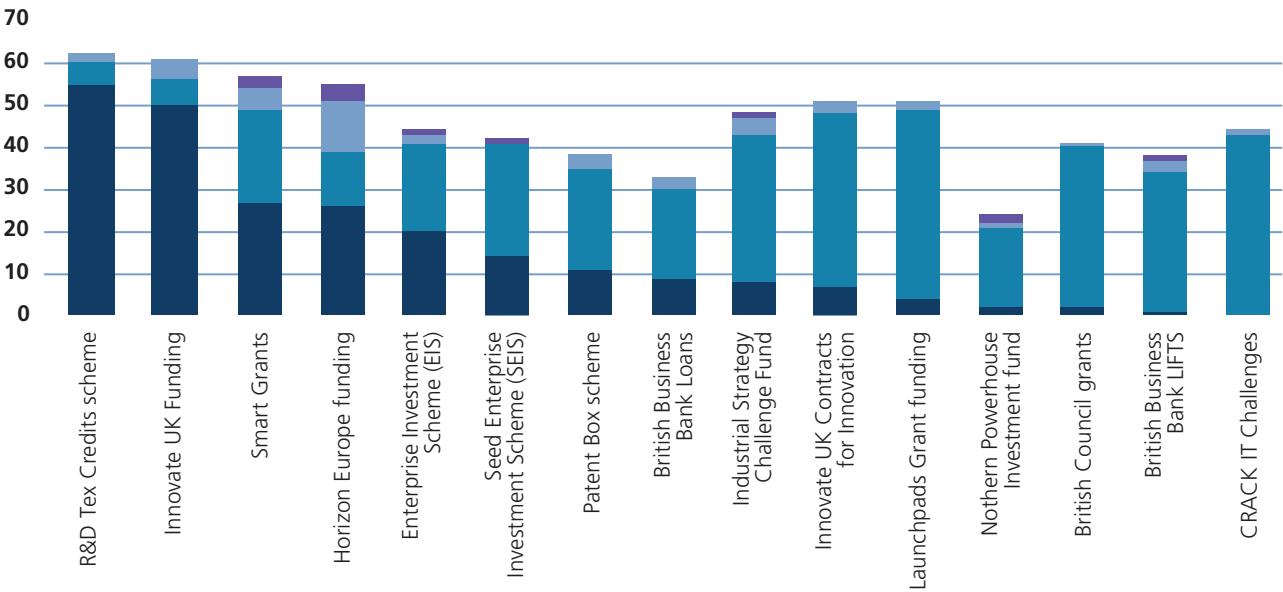
**Figure 8:**  
Does your organisation use the R&D Tax Credits Scheme?



**Figure 9:**  
Does your organisation use Innovate UK funding?



**Figure 10:**  
Does your organisation use Horizon Europe Funding?



**Figure 11:**  
Awareness of Government Support Programmes



## CASE STUDIES

**Uberbinder** Developers of novel biopolymerised sulphur binder which is meeting the need for more sustainable advanced materials. Uberbinder's product is capable of replacing the current energy and carbon-intensive fossil and oil-based binders across industrial applications such as road surfacing.

"We received seed capital from angel and impact investors through our own existing networks. Finding support seemed nearly unachievable at first, as an early stage, pre-revenue startup cannot afford to hire the people who could engage with us and provide valuable support. Given the 'islands of expertise' out there, it seems that there is very little in the way of resource that has the experience, capability and motivation to bring disparate, (perhaps a first-of-a-kind) stakeholders grouping in some cohesive way.

"We invested a lot of time and effort engaging with UKRI but were more than disappointed with their bureaucratic ways and have pivoted to Europe and the USA for similar opportunities. E.g. EIC's resource support ecosystem is an order of magnitude better than UKRI, in our opinion."

**Micropore Technologies** Designs and manufactures equipment based on the principles of membrane emulsification and membrane micromixing. The micromixing applications provide a scalable manufacturing route for the creation of liposomes or lipid nanoparticles, such as used in some COVID vaccines.

"We are funding a lot of our product development through Innovate UK grants, five in total, three still running. We have been involved with a single EPSRC grant and two Horizon 2020 grants. The later Horizon grant involved 16 multidisciplinary researcher all completing PhDs. Micropore supervised two of the PhDs."

Applying for grants is incredibly time consuming and the administration required to fulfil reporting obligations is a lot. They all involve collaborations with external companies and academics which represents its own challenges.

**Globachem Discovery Ltd** is the UK R&D for Globachem NV, a Belgian agrochemical business. Globachem Discovery looks to identify novel herbicides, insecticides and fungicides for commercial development, tackling diseases and improving crop yields.

"Additional knowledge of funding opportunities that Globachem Discovery could have been eligible for would have been beneficial. The R&D work we do isn't academic but has an industrial focus and therefore the timelines and expectations didn't always meet some of the Innovate UK funding criteria."

"A database of consultants and experts in the field of agrochemicals and scaleup chemistry – pilot plant to plant and process engineering – would have been beneficial."

**Britest** A UK-based micro-sized company that utilises innovative tools and methodologies to support sustainable process design. The company works in the UK and internationally with organisations across the chemicals, materials, biotechnology and pharmaceutical sectors to enable sustainable operations through better process understanding.

"The biggest frustration we have is with Innovate UK's 'portfolio approach' to funding projects. Very often it is not the applications that score the highest that are successful. Instead, projects are selected by Innovate UK on the basis of how their staff feel they align with their priorities. The expert opinion of reviewers is often ignored/overruled. The whole process is cloaked in secrecy with zero feedback as to why lower scored projects are funded over higher scoring applications."

**AquaPak** Polymers Development and manufacture of specialty polymers.

"Government funding needs to be less prescriptive, and the distribution of money should be in the hands of genuine experts, not paid for evaluators who often do not know enough. The procedure should also be more transparent, simply getting a score and not being able to answer questions or challenge the conclusion is time wasting and pointless."





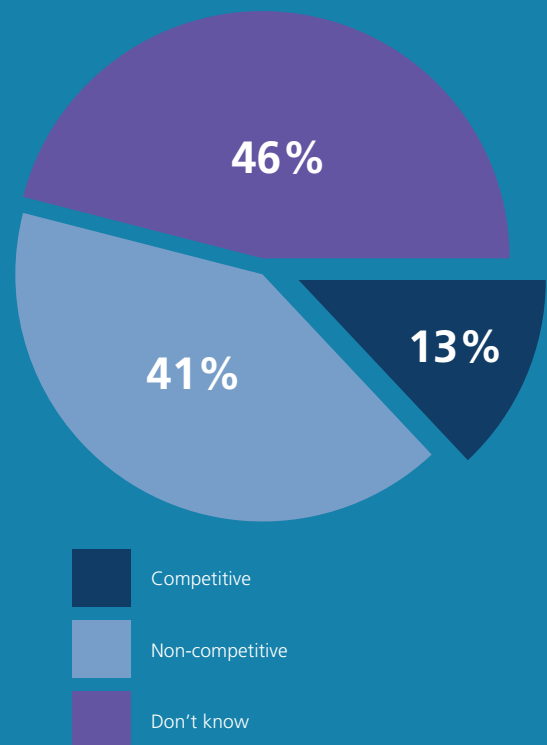
## 2 Scale Up:

### SMES DO NOT CONSIDER THE UK TO BE COMPETITIVE FOR SCALE UP SUPPORT

Boosting economic growth requires our SMEs to set up and then scale up in the UK. However, this is proving difficult for a significant proportion of the companies SCI surveyed, with 41% saying that the UK is not a competitive location for scaling their science businesses when compared with other locations in the world. (See Figure 12).

Our respondents indicated that facilities required to run and test their processes at scale were not always available in the UK. While 49% of those surveyed said that they used the existing facilities in the UK to advance their plans to scale their businesses, 39% said that the UK did not have the right scale up facilities for their needs.

While the majority of those surveyed, 51%, said that they do not currently use existing scale up facilities, when looking at the figures by sector, 71% of respondents from the agriscience/food sector, said that the UK had the right scale up facilities. The chemicals and materials sector were the least well served with 39% agreeing that the UK had the right scale up facilities.



**Figure 12:**  
How does the UK compare international with scale up assistance

Funding support came up as an issue for our SMEs with 41% saying that the UK was not competitive when compared internationally for scale up assistance. And while access to scale up facilities is essential, our respondents indicated that funding was key to their scale up plans.

The responses from our SMEs echo the findings of the Scaleup Institute, which said in its Annual Review 2024 Highlights, that “access to talent, access to capital, access to markets and infrastructure continue to remain consistent themes in scaleups’ top challenges. Our largest ever Scaleup CEO survey of 800 leaders in 2024 is clear on their priorities to see more R&D and regional funding access, easier more joined up pathways to procurement, [and] collaboration[7].”

## CASE STUDIES

**Stoli Chem** *Develops and delivers continuous manufacturing into the chemicals sector using proprietary reactor technology.*

*“The main scaleup funding was £1.3m awarded by the Industrial Energy Efficiency Accelerator. Over the years we have benefited from £500 000 Innovate UK grant, participation in the Royal Society of Chemistry Emerging Technologies competition, and the award of a Royal Academy of Engineering Enterprise Fellowship, KTN accelerator and a €1.2m Horizon 2020 SME Instrument Grant.”*

*“Finding premises to expand is exceptionally difficult. Running a chemical laboratory has its problems, for example; the cost of disposing of solvent wastes is exorbitant, and requires totally unnecessary paperwork.”*

*“Mentoring is mainly through networks. Paid or public-paid mentors were rather average because they rarely have real-life hands-on experience in relevant areas/business. The theory they provide could be Googled in 10 minutes, that would be more cost efficient!”*

**Company X** *a company focused on tackling weed resistance to herbicides. The company has created an entirely new way of developing safe and effective new herbicides which can tackle resistant weeds. The company was spun out of Oxford University in 2017 and is at Technology Readiness Level 6.*

*“Funding at this size is extremely difficult. There are virtually no financial investors based in the UK that are or capable or large enough to lead an investment round of a deep tech company at Series C stage. The investors which are big enough either lack sufficient deep tech knowledge, and/or have no risk appetite to invest in breakthrough technology which will need regulatory approval and might be six or seven years away from reaching market.*

*“There is an opportunity here for the UK to lead the world in agricultural innovation, and if lists, the UK could be home to a company potentially worth billions of pounds and creating many high skilled jobs. But it is very difficult to see how this will be possible when the UK cannot fund deep tech at scaleup stage.”*

# 3 Location for growth:

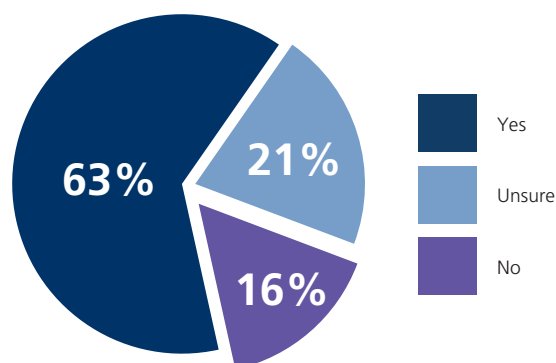
## UK SMES ARE CONSIDERING LEAVING THE UK

This lack of scale up support means that 63% of our SME respondents would look to move their manufacturing overseas in the next 20 years. (See Figure 13)

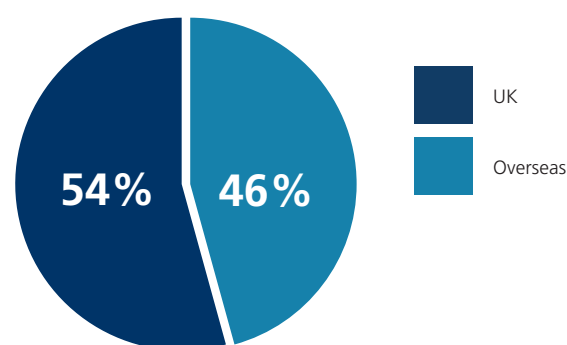
The question of relocating overseas is particularly an issue for SMEs operating in the biotechnology and pharma sectors with 95% of responses indicating that leaving the UK to scale was in their thinking. When it came to staying in the UK, SMEs in the environment and energy sector, 33%, said they would keep their manufacturing in the UK. (See Figure 15).

Our survey also indicates that there is much appetite for listing outside the UK. While 58% of respondents said that they would list in the UK, 54% of respondents, where the Technology Readiness Level (TRL) was at four or more, in other words, that their technology had reached basic validation in a laboratory environment, said they would list overseas. Even at a relatively early stage the UK's SMEs are considering taking their R&D, expertise and future revenue outside the UK. (See Figure 14).

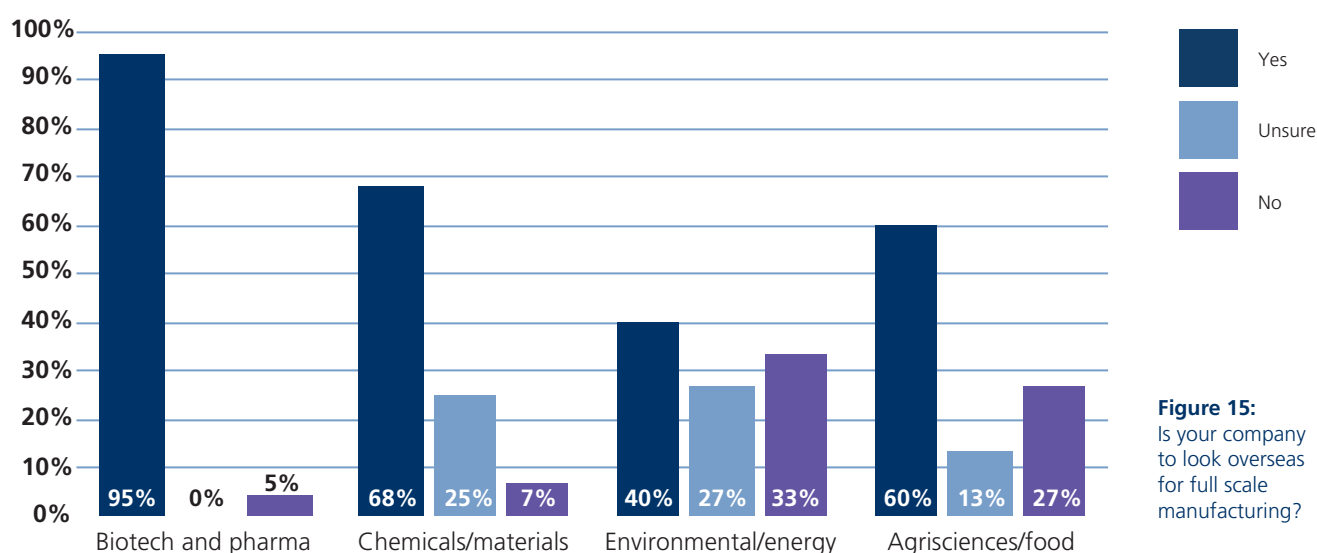
If the results from our SME survey are indicative of the wider science-based SME community, then the outlook is bleak indeed. There is an urgent need to address this thinking by removing barriers and simplifying processes so our innovative SMEs can test and scale their developments and support wealth creation in the UK.



**Figure 13:** Is your organisation likely to look overseas for manufacturing?



**Figure 14:** Where would you list your business? (TRL4+)



**Figure 15:** Is your company to look overseas for full scale manufacturing?



A background image showing three scientists in a laboratory setting. A man on the left is looking down at something, a woman in the center is looking towards the right, and another woman on the right is looking down. They are all wearing white lab coats. There are some lab equipment and papers visible in the foreground.

## CASE STUDIES

**Corbeau Innovation Ltd** *Starting as a consulting business, Corbeau Innovation has developed its own agritech products. The company launched its instrumentation and service products in November 2024 and has since made sales. Its core technologies are machine learning, spectroscopy. Electronics, 3D printing, GPS and IoT.*

*"Strategic planning for key infrastructure is essential. Energy, internet data, geopositioning are all lacking. Cellular networking and other comms solutions are a mess in the UK. Government has failed to realise excellent, fast reliable internet access over LoRa/2G/3G/4G/5G."*

**AquaPak Polymers** *"Inevitably the expansion of production and particularly into other geographical regions is a logistical, administrative and costly challenge. Site identification, lease contracts etc, equipment purchases and installation. Finding the right expertise and advice is a challenge."*

*"Government departments are not joined up so often complexities such as expansion of facilities or moving to other locations requires multiple departments, none of whom talk to each other."*

**Globachem Discovery Ltd** *"Challenges the business faces include access to skilled people in regulatory and toxicology who are experienced in delivering novel innovations to registration globally and recommending tiered studies and key deliverables at the right time to derisk projects without spending a huge amount of money and risking business capital."*

**Company X** *"Government changes to workers rights and taxes on employment will be a discouragement to taking on more employees and further increase the likelihood of expansion happening in the US rather than the UK."*

**Acu-Flow** *Is developing a new category of nebulisers to address the unmet need in respiratory drug delivery.*

*"As Acu-Flow looks to scaleup, access to talent is an issue. Easing the labour market requirement for visa sponsorship, especially where the salary requirement would be lower, but the skills are specialised, would be helpful."*

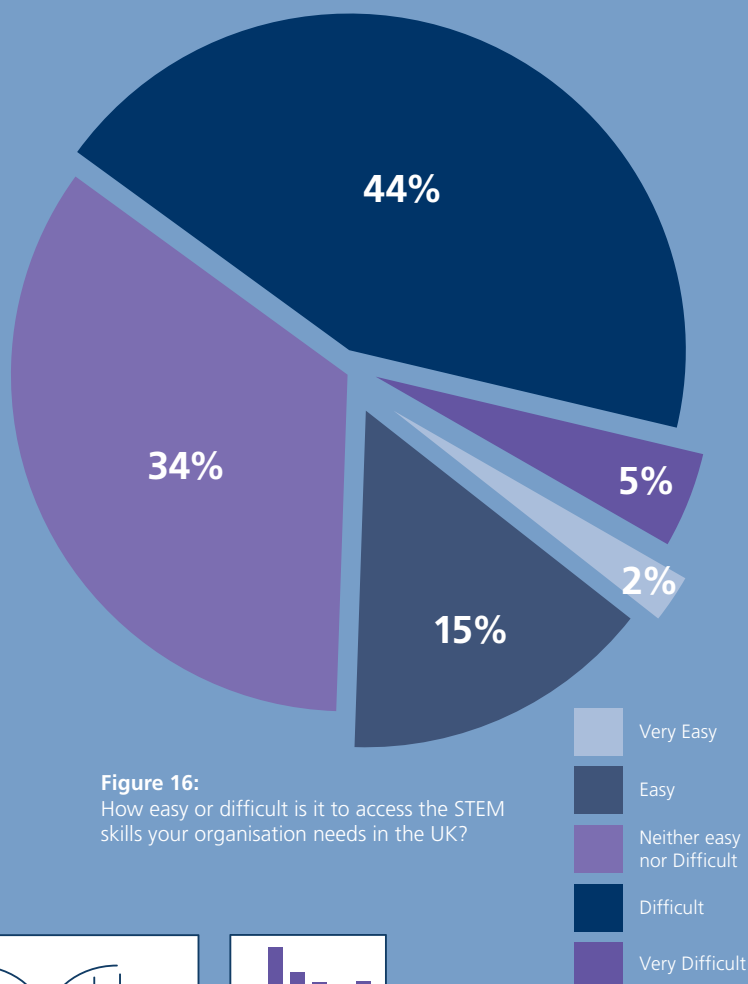
# 4 Skills:

## ACCESSING STEM TALENT IS A CHALLENGE

SCI's SME survey clearly shows that recruiting the STEM talent needed to grow their businesses is challenging, which is going some way to leading our homegrown SMEs to consider leaving the UK.

Half of our respondents, 49%, indicated that they were finding it difficult or very difficult to access the STEM skills they needed in the UK, while 37% agree that the UK is very uncompetitive or uncompetitive for STEM skills needed for their organisations. (See Figure 16).

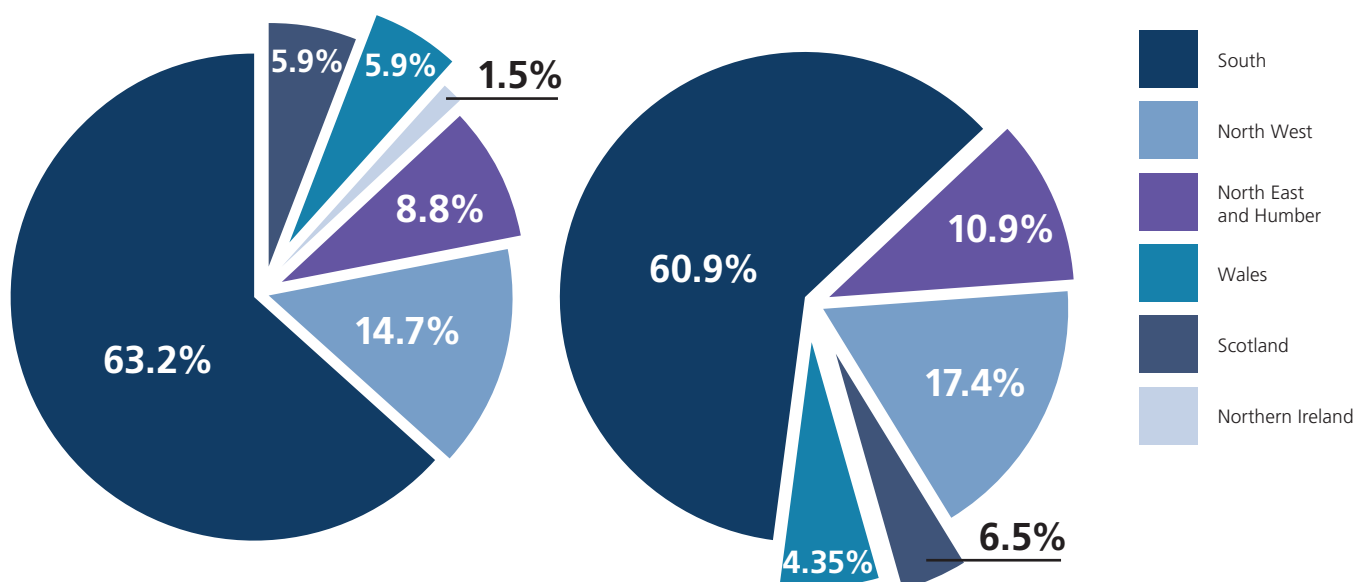
The main source of frustration is the UK's visa system with 48% of survey respondents saying that the UK visa system is ineffective. Simplification of this system is ranked by the survey's SMEs as biggest improvement needed. SMEs also expressed concern about its impact of increased National Investment Contributions (NICs) and proposal to restrict workforce flexibility.



**Figure 16:**  
How easy or difficult is it to access the STEM skills your organisation needs in the UK?







**Figure 17:**  
Geographical analysis of SMEs

**Figure 18:**  
Organisation uses R&D tax credit scheme

# The Regional View

It is worth noting that 63.2% of our responses came from businesses in the south of the UK, likely reflecting this areas status as hub for scientific industries with strong infrastructure and innovation ecosystems. (See Figure 17) Lower responses from the rest of the UK could reflect a need to improve support systems and provide greater visibility and access for networks in these areas.

It is also interesting to note that the largest proportion of our SMEs surveyed said accessing the R&D tax credit scheme and Innovate UK funding were also from the south of the UK. (See Figure 18)



# Conclusion:

## SIMPLIFICATION OF COMPLEX SYSTEMS WILL BOOST GROWTH

Difficulty in accessing funding and qualified talent, and a lack of understanding as to how the existing policy environment is impacting our innovative science-based SMEs, is hampering the UK's engine for economic growth. The UK has an innovative and entrepreneurial talent pool, which if the policy environment is right will make the UK an internationally competitive economy. We need these SMEs to establish themselves, grow and potentially list in the UK.

The findings from SCI's SME Survey offer an important insight into the support that UK's SMEs need to flourish. These findings have informed SCI's policy asks as the Government seeks to reinvigorate the UK economy and fire up economic growth through its Modern Industrial Strategy[8]. SCI welcomes this move and have long made the case for a well thought out Industrial Strategy to provide the focus that the UK needs to internationally.

The SCI's policy asks, which are around the four areas of: funding, scale up, location for growth, and STEM talent; come with recommendations which SCI, and its SME community, believe can be put in place quickly and will boost the UK's growing businesses.

Tools such as AI, which the UK Government is championing, can be leveraged to assist SMEs in key areas such as funding applications. Hubs for information would allow the pooling of resources that are currently too widely spread to be easily found. Tapping into the regional centres of excellence and building knowledge transfer in these areas would allow the acceleration of business growth in regions across the UK.

We believe that getting the small things right will create the foundation on which the UK's science-based SMEs can not only build on, but have confidence that their needs are understood and the policy environment supports them.

**By Alex Owens and  
Harvey Walsh**

## REFERENCES

- (1) <https://www.soci.org/-/media/files/industrial-strategy/uk-industrial-strategyscaling-and-commercializing-uk-science-and-technology.ashx>
- (2) Bioscience and health technology sector statistics 2021 to 2022 - GOV.UK <https://researchbriefings.files.parliament.uk/documents/SN06152/SN06152.pdf>
- (3) BPE\_2024\_detailed\_tables.xlsx Business population estimates 2024 - GOV.UK
- (4) <https://www.british-business-bank.co.uk/about/research-and-publications/annual-report-and-accounts-2023>
- (5) <https://www.british-business-bank.co.uk/finance-options>
- (6) <https://www.gov.uk/government/news/events-and-grants-to-help-britainsbusinesses-and-researchers-reach-the-horizon-from-uks-association-with-80-billion-research-programme>
- (7) ScaleUp-Institute-Annual-Review-2024-website-2.pdf
- (8) <https://www.gov.uk/government/consultations/invest-2035-the-uks-modernindustrial-strategy/invest-2035-the-uks-modern-industrial-strategy>



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