



# GROWING BUSINESS AT THE HEART OF SCIENCE:

OUR STRATEGY FOR GROWTH  
THROUGH INNOVATION





At Sci-Tech Daresbury, our vision is for a high-growth economy, driven by technology, innovation and enterprise.

Our mission is to create a place where science and technology drives discovery and supports businesses to create high-value jobs and sustainable economic growth.

Our ambition is for Sci-Tech Daresbury to be home to 10,000 high-value jobs, 15 years from now.

A 50:50 public:private joint venture company spearheads the development of Sci-Tech Daresbury. Partners in the joint venture are:

- **The Science and Technology Facilities Council (STFC), one of Europe's largest multi-disciplinary science organisations, part of UK Research and Innovation (UKRI)**

- **Halton Borough Council, one of the six constituent councils of the Liverpool City Region Combined Authority**

- **Langtree, a property development and management company**

This strategy will be delivered through collaborative working between the partners.

We will deliver this strategy through five complementary priorities:

- **Driving excellence in science and technology** page 13
- **Business growth through innovation** page 17
- **Developing a world-class science and innovation campus** page 22
- **Attracting, developing and retaining talent** page 25
- **Impact through partnerships** page 29

# Growing business at the heart of science

**Sci-Tech Daresbury is a technology-driven, collaborative and innovative campus, with an established track-record of supporting high-growth, high-tech companies and delivering world-leading research.**

**The co-location of nearly 60 years' heritage in ground-breaking science at STFC's Daresbury Laboratory, with an ambitious and pioneering business community, has created a campus at the heart of growth and innovation in the UK.**

## **Direct reach into the UK's research and innovation landscape**

STFC is an integral part of UKRI's nationwide remit to create the best possible environment for research and innovation to flourish. Daresbury is a National Laboratory and the only UKRI asset in the North West of England. Through STFC, Sci-Tech Daresbury benefits from and contributes to the strengths of the seven UK Research Councils, Innovate UK and Research England, to build on local successes and opportunities, and deliver economic growth. We will work proactively through UKRI, with its strong single voice for research and innovation into central Government, to support the implementation of the UK's Innovation Strategy.

## **Leading-edge science, technology and facilities**

STFC Daresbury Laboratory is a world leader in computing and particle acceleration, each a product of decades of involvement in, and delivery of, some of the most demanding 'big science' projects. Its leading science facilities have innovation at their core, providing new opportunities for companies to use cutting-edge technologies to develop and improve products, and boost productivity in a very tangible way. In particular, the £210 million Hartree National Centre for Digital Innovation (HNCDI) was announced in 2021, a collaboration with IBM that will enhance the community of discovery on campus and reduce the risk of exploring and adopting innovative new digital technologies for businesses and public sector organisations. Over the next five years, STFC intends to establish new industry-relevant science facilities on campus.

## **A dynamic and growing innovation community**

The campus brings together this technology with around 150 companies, working in advanced engineering and materials, digital and health technologies, from fledgling start-ups to global players such as IBM, Atos, Croda and Hitachi.

This free-flowing access to collaborators and technologies catalyses idea-generation and

innovation, empowering companies to operate more productively and flexibly. Eight out of ten companies on campus actively collaborate with another company or organisation on site, and over the last four years over 500 products and services have been launched.

On-campus business survival rates are 95% - a testament to the impact of this fertile environment on business and economic growth.

As the campus grows, support is being tailored to the needs of high growth sectors, in order to develop thriving, highly networked clusters of health technology and digital businesses. The need to attract, develop and retain skills that are in growing demand and are critical to business growth is also a key focus to support continued excellence.

## **A beacon for regional economic growth**

Sci-Tech Daresbury is a key pillar in the ambition and aspiration of the Liverpool City Region's Local Industrial Strategy, and is an exemplar of the Government's 'Levelling Up' agenda. This potent mix of science, enterprise and highly skilled people has created a campus with a truly transformational impact across Halton, Liverpool City Region, Cheshire and Warrington, Greater Manchester and the wider Northern Powerhouse, extending into the national economy.

This strategy outlines how we will deliver our ambition through five complementary priorities:

1

Driving excellence in science and technology

2

Business growth through innovation

3

Developing a world class science and innovation campus

4

Attracting, developing and retaining talent

5

Impact through partnerships



# Our Ethos

At Sci-Tech Daresbury we have a strong business ethos with five core principles that guide all we do:

## Collaboration

We embrace and facilitate the power of working together to foster original thinking, create innovative solutions and accelerate implementation.

## Growth

Everything we do and the way we do it is focussed on facilitating the growth of our business and scientific community to deliver more value, create new jobs and careers and enable a better world.

## Talent

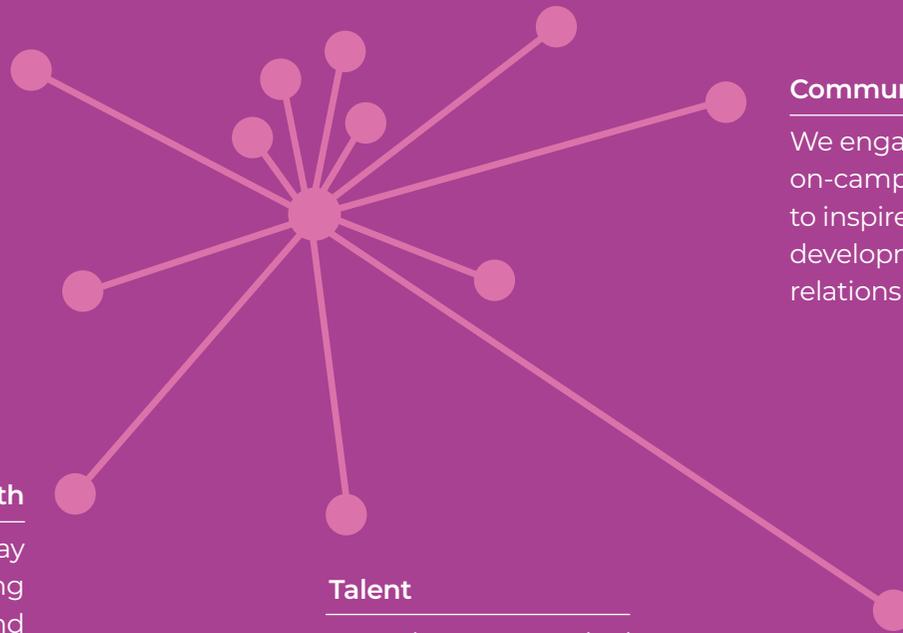
We strive to create the best environment and capabilities to attract and retain the best talent, helping individuals reach their full potential.

## Community

We engage our community, both on-campus and further afield, to inspire self-discovery, and the development of mutually-beneficial relationships and opportunities.

## Innovation

We drive innovation and new ideas through our science facilities and business community



# Agile and Resilient

The pace of change in technology, the economy and society creates challenges and opportunities in many different ways. At Sci-Tech Daresbury, we recognise that our community and our core values are more important than ever.

Our Campus is more than just a workplace; it is a place with purpose, which adds value to businesses and individuals, whether that be through finding the right collaborators, connecting with like-minded innovators, accessing new technologies, securing funding or benefitting from business support programmes. Our collective determination to be a place of innovation, opportunity and economic growth is unwavering. We will remain agile and flexible in the way we implement this strategy, responding to evolving research, innovation and business needs, locally and nationally.





# A strategy for growth

This strategy sets out how we will continue to develop our campus as a national centre where innovation, entrepreneurship and cutting-edge technology development converge to deliver business success, high-quality jobs, fresh innovations to the marketplace and ultimately growth of the UK's knowledge economy. Our approach is evidence-based, and informed by continual monitoring and evaluation, to ensure that our priorities are consistently relevant and address local, regional and national needs.

To realise our ambition of 10,000 high-value jobs, we must:

- Reinforce and extend our technology leadership position through continued investment and the establishment of new, industrially-relevant science and technology facilities

Continue to build on the strengths of business clusters rooted in our technology specialisms; particularly in health technology and emerging digital technologies

- Sustainably develop the built-environment of the campus at a pace that meets our ambitions, and in a way that supports collaboration, business growth, community and individual well-being
- Support the long-term sustainability of the campus by developing and attracting the right talent and extending the intellectual and technical capacity on which Sci-Tech Daresbury businesses thrive
- Nurture and develop mutually-beneficial partnerships that complement and enhance the campus

# Our 3-5 year focus

**This 3-5 year strategy is designed to catalyse the complex interplay between skilled individuals, world-class research and technology, agile small businesses, larger corporates, investors, infrastructure and local and national government – to the benefit of all our stakeholders.**

**Our focus over the next 3-5 years will be to:**

- Establish and deliver the Hartree Centre for Digital Innovation, a £210M collaborative programme with IBM Research bringing together world-leading expertise and reducing the risk of exploring and adopting innovative new digital technologies, such as artificial intelligence (AI) and quantum computing for UK industry
- Establish new science and technology facilities targeting industrial challenges, particularly around specialisms in advanced materials and engineering
- Expand the cluster of digital technology businesses centred around the Hartree Centre and extending into the wider campus and region
- Foster the continued development of the HealthTec cluster to support regional economic growth in the sector
- Provide tailored support to scale-up companies to optimise and accelerate their growth
- Equip the UK with next-generation light source capability, for real-time visualisation of biological and chemical reactions, through construction of a demonstrator facility on campus
- Implement new, evidence-driven interventions to support the skills pipeline into Sci-Tech Daresbury companies, and more generally into STEM career paths
- Continue the process of land acquisition and infrastructure development, enabling the construction of new buildings and facilities, and ensuring the campus grows with sustainability and well-being in mind



# Our Journey

The Sci-Tech Daresbury campus, through STFC's Daresbury Laboratory, has been the home of world-leading science and technology since it was **established in 1962**. Its research facilities have **contributed to two Nobel Prizes**. Since 2006, our Campus has seen rapid expansion, becoming home to an ever increasing number of technology-focussed national and international businesses, innovating, collaborating and growing. In 2012, Sci-Tech Daresbury was awarded **Enterprise Zone status**. In 2021, our growing Campus community includes around 150 businesses, alongside flagship industrially-relevant technology facilities such as the Hartree Centre, the Virtual Engineering Centre and the SuperSTEM electron microscope.



**27%**  
annual sales  
growth  
(2017-2020)

Business  
survival rate

**95%**



Of the 150 businesses:



**163**

new jobs created  
by companies on  
campus in 2020

**16%**



are pre-revenue  
start-ups

**75%**

are SMEs



**9%**



are large  
corporates



Sci-Tech Daresbury  
companies generated

**£135M\***

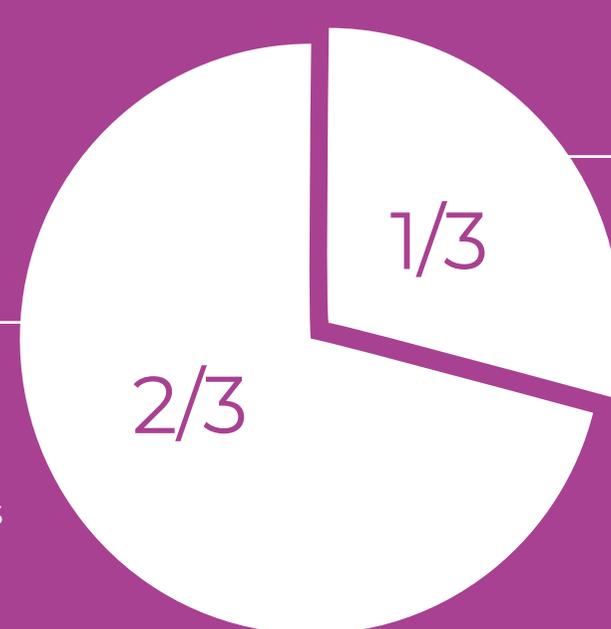
sales in 2020

(\*excluding corporates where attribution  
to a location is not possible)

Nearly 1600 people  
are employed at  
Sci-Tech Daresbury

Are employed in public  
sector/university science  
and technology research

Are employed by  
our Campus business  
community





## Key

- |   |                     |    |  |
|---|---------------------|----|--|
| 1 | Ultraviolet         | 9  | The Innovation Centre                  |
| 2 | Violet V1           | 10 | STFC Daresbury Laboratory              |
| 3 | Violet V2           | 11 | STFC Incubation Laboratories           |
| 4 | Violet V3           | 12 | Campus Technology Hub                  |
| 5 | Techspace Two       | 13 | SuperSTEM                              |
| 6 | Techspace One       | 14 | STFC High Performance Computing Centre |
| 7 | Vanguard House      |    |  |
| 8 | STFC Hartree Centre |    |  |

# The Campus Masterplan

Our ambition to be home to 10,000 high-value jobs in science and technology translates into an ambitious and achievable masterplan for development and expansion of the campus.

## Ultraviolet

The latest development within the campus, Ultraviolet could comprise up to five buildings of Grade A office and lab space; up to 180,000 sq ft

## Violet

New development of 42,000 sq ft of Grade A office space

## Techspace One

High quality office and laboratory building for lab-based companies

## Vanguard House

High quality office/technical office building

## Future Development:

The continued expansion of the campus will deliver new industrially-relevant science facilities, high specification offices and lab space, and new amenities to meet the needs of a growing campus community

## Hartree Centre

Helping UK industry gain a competitive advantage by harnessing the power of big data and Artificial Intelligence. Home to one of the world's most powerful supercomputers accessible to businesses

## The Innovation Centre

High quality office and laboratory building with flexible space for technology companies

## Daresbury Laboratory

Renowned for its world leading scientific research in fields such as accelerator science, physics, chemistry, materials, engineering and computational science

## Virtual Engineering Centre

Part of the University of Liverpool's School of Engineering delivering innovative digital engineering solutions to industry

## STFC Incubation Laboratories

Affordable and flexible equipped lab space for bio tech start-up companies

## Campus Technology Hub

Rapid prototyping facility enabling businesses to harness the power of 3D printing, VR/AR and more, to improve product development

## STFC High Performance Computing Centre (HPCC)

The HPCC will be a state-of-the-art centre enabling vital scientific and technological progress, and is part of the Hartree National Centre for Digital Innovation.

# 1 Driving excellence in science and technology

Research capabilities at Sci-Tech Daresbury are underpinned by an extensive skills-base in engineering, advanced digital technologies and detector technology. Daresbury Laboratory provides the world with research tools that drive forward almost every scientific discipline, specialising in:

- High performance computing, data analytics & AI – applying expertise for the advancement of science and industrial competitiveness
- Accelerator technology – particle acceleration for multidisciplinary and frontier science, and commercial applications

The investment in these world-leading specialisms is managed by STFC. STFC is committed to developing these specialisms individually and in synergy, so that they continue to expand the frontier of human understanding and address the major interdisciplinary challenges of the 21st century. STFC's mode of working is inherently collaborative across academia, government and businesses of all sizes and at all stages, consistently seeking to maximise the economic and societal impact of STFC science and technology for the benefit of the UK.

Centres of excellence at Sci-Tech Daresbury include:

- **Hartree Centre**, home to some of the most technically advanced high performance computing, data analytics and artificial intelligence (AI) technologies and experts in the UK. The Hartree Centre is helping UK businesses take full advantage of Industry 4.0 technologies and embrace digital transformation to improve the productivity of people and processes. It drives growth and economic impact through strategic partnerships with industry leaders including IBM Research, Atos, NVIDIA and the University of Liverpool Virtual Engineering Centre. In 2021 the Hartree National Centre for Digital Innovation was announced, a new £210M partnership with IBM Research which will enable the adoption of AI and quantum computing technologies by industry.
- **STFC Scientific Computing Department** provides large scale computing infrastructure and data services to scientists across the UK and beyond, and is home to leading experts in fields such as computational chemistry and engineering, materials science and software engineering.
- **The Virtual Engineering Centre (VEC)**, led by the University of Liverpool in partnership with the Hartree Centre, the VEC is the UK's leading centre for Virtual Engineering technology integration for commercial applications.
- **The Cockcroft Institute** is a national centre of excellence in accelerator science. The Cockcroft Institute collaborates closely with a range of international organisations and industry on large-scale scientific projects, including contributions to research facilities such as the Large Hadron Collider at CERN.
- **STFC Technology Department** is a leading centre providing multidisciplinary engineering solutions and detector systems for devices ranging from the nanometre scale to large-scale accelerators, light sources and laser facilities. The Engineering Technology Centre provides advanced technology and engineering support for high-profile UK and international collaborations such as CERN, the European Spallation Source and DUNE.
- **SuperSTEM**, is one of the world's most powerful scanning transmission electron microscope facilities. It is used for multidisciplinary research and allows its users to see materials at single-atom detail. SuperSTEM is an Engineering and Physical Sciences Research Council facility led by a consortium of six UK universities, and has over 80 active user groups from across the globe. The facility works closely with Hitachi High-Technologies, also based on campus, to complement and build this hub of expertise in electron microscopy and materials analysis.



## IN BRIEF

We will reinforce and extend our science and technology leadership position through continued investment, and establish new collaborative research facilities and projects that have natural synergy with our research and innovation strengths.

## UK-US COLLABORATION TO DISCOVER THE SECRETS OF THE UNIVERSE - CASE STUDY

Through a £65m investment, the UK is the biggest contributor outside of the USA to DUNE (Deep Underground Neutrino Experiment), a flagship global science project based in the United States that could rewrite our understanding of the universe.

The experiment will involve over 1000 scientists from 31 countries, with STFC managing the UK's investment in the facility. Teams at Sci-Tech Daresbury are making a critical contribution to the project, drawing on leading expertise in accelerator and detector technologies. STFC teams have already delivered the first prototype Anode Plane Assembly, the largest component of the DUNE detector, one of 150 panels that will be built at Daresbury.



#### Our priorities are:

- Through continued investment in the Hartree Centre, position the UK as a global leader in the application of AI and High-Performance Computing to industrial challenges, creating jobs and boosting the economy. Allied with this, implement a regional programme to support adoption of AI technology in the North West, with particular impact expected in the Manchester-Liverpool corridor
- Engage with UKRI to establish significant new collaborative science facilities and projects, with particular focus on industry-led challenges in materials innovation and advanced manufacturing, to complement research strengths on campus and in the regional industry base
- Enhance accelerator-enabled research, including the upgrade of CLARA (Compact Linear Accelerator for Research and Applications), and the establishment of new facilities that underpin the UK's current and future multidisciplinary research infrastructure
- Develop STFC's nationally leading advanced engineering capability and infrastructure, which delivers STFC's science programme and supports businesses to innovate and adopt new technologies – especially in intelligent sensors, particle accelerator technologies, rapid prototyping and virtual prototyping techniques
- Engage through UKRI to support the government's implementation of the UK 's Innovation Strategy

## PARTICLE ACCELERATION FOR NEXT GENERATION CANCER THERAPY - CASE STUDY

**Proton therapy currently represents less than 1% of all external radiotherapy systems installed worldwide. However, recent forecasts project that the global proton therapy equipment market will grow annually by a double-digit rate.**

Advanced Oncotherapy plc, which acquired ADAM, a spin-out from CERN (the home of the Large Hadron Collider), in 2013, aims at commercialising a breakthrough linear proton therapy system called "LIGHT", for cancer treatment. In 2018, STFC signed a major new agreement with Advanced Oncotherapy plc to build the company's assembly and testing centre at Sci-Tech Daresbury. By joining Sci-Tech Daresbury, the company has been able to take advantage of the pre-existing accelerator infrastructure, as well as the extensive on-site experience in developing accelerator systems. Choosing Sci-Tech Daresbury to establish its assembly site has helped Advanced Oncotherapy plc to reduce risk, and save time and money in development. It has created 15 new jobs to date, with plans for further expansion.

## 2 Business growth through innovation

The community of around 150 high-tech companies established on campus play a critical role in the successful commercialisation of new science and technology, and in our ambition to be home to 10,000 high-value jobs over the next 15 years. Our approach facilitates growth through all stages of the business lifecycle:

- Supporting **start-ups and SMEs** on their growth journey end to end, from hot desk/laboratory bench space to their own building – providing a true ‘home for life’ offering
- Providing tailored support to the growing array of existing and potential **scale-up companies**, to optimise and accelerate their growth
- Building on the diverse business environment of the campus by attracting additional **mid-size and blue-chip companies** looking to collaborate with SMEs or STFC to access key expertise and/or routes to market
- Continuing to attract and embed **overseas companies** on campus through a targeted soft landing support programme

We will also foster clusters of economic activity rooted in sectors or technologies which play to the strengths of the campus:

- **Digital technology** – drawing on research strengths in high performance computing, data analytics and AI for industrial applications
- **Advanced engineering and materials** – drawing on the full breadth of engineering disciplines, rapid prototyping facilities, laboratory/analysis equipment and industrial digitalisation capabilities
- **Biomedical and health technology** – drawing on Sci-Tech Daresbury’s high-specification, fully fitted laboratory facilities, and the deployment of sensor technologies, data analytics and AI for improved healthcare outcomes

In 2019 we launched the HealthTec Cluster, which will be followed by the Digital Technologies Cluster in 2021. Clusters stimulate innovation and facilitate commercialisation through the co-location of knowledge, skills and facilities in specific areas of excellence. This enables companies to access new technology, information or expertise that would otherwise need to be developed independently. By fostering these connections around key areas of expertise we will position the campus as a leading centre in these sectors.

In 2021, STFC will also lead the development of a strategy for a North West Space Hub, supported by the UK Space Agency and bringing together local authorities and businesses, to create a plan for how the North West can take maximum advantage of opportunities in the commercial space sector and attract investment from space companies to the area.



## IN BRIEF

We will provide innovative businesses of all sizes with the facilities and the access to knowledge, technology, skills, markets and funding opportunities they need in order to grow and succeed.

## COLLABORATING TO SUCCESS - CASE STUDY

Sci-Tech Daresbury's collaborative environment has allowed Valuechain to innovate faster, access new markets and grow.

Valuechain develops smart software to support manufacturing companies in the fourth industrial revolution; improving productivity and competitiveness through digitalisation. The company moved its operation to Sci-Tech Daresbury in 2016 to take advantage of the expertise and facilities, as well as to surround itself with other like-minded businesses and organisations.

Since being on campus, Valuechain has collaborated on multiple projects with both the Virtual Engineering Centre and the Hartree Centre to enhance its product offering and to access new markets. The company has used these collaborations to access new clients, including Bentley, through joint projects, and have streamlined internal data handling processes by working with computer scientists at the Hartree Centre, helping to grow the company from seven to more than 80 staff since locating to Sci-Tech Daresbury.

### To meet the needs of technology-focused start-ups and scale-ups, our priorities are:

- Implementing targeted sector-specific business support and networking programmes relating to the HealthTec and Digital Technologies clusters, and nurturing cross-cluster collaboration and business growth in the Digital Health sector
- Provision of business incubator facilities through STFC, in collaboration with major international partners CERN and the European Space Agency, to provide tailored support for start-ups in key technology areas
- Equipping companies for growth through a comprehensive business support strategy and delivery programme, including tailored support to scale-up companies to optimise and accelerate their growth
- Accelerating access to new customers and markets, working in partnership with the Department for International Trade to assist companies to expand their business to new territories
- Access to a wide range of traditional and novel funding and investment options; pre-revenue equity, grant funding schemes, debt finance, venture capital and private equity
- Maximising growth by helping companies access the best talent as detailed in the Sci-Tech Daresbury RADAR Talent and Skills strategy
- Increased collaboration opportunities with STFC and partners, particularly the Hartree Centre, to enable exploitation of specialist and emerging technologies such as blockchain, AI and Industrial Digitalisation Technologies for improved business competitiveness

## DRIVING THE FUTURE OF HEALTH TECHNOLOGY - CASE STUDY

Cross-sector connectivity is a proven way to support economic growth, enabling companies and organisations to operate more flexibly and productively through easy access to knowledge, skills and technologies.

Launched in 2019, the HealthTec Cluster is borne out of a partnership between STFC and the North West Coast Academic Health Science Network – The Innovation Agency. This brought together two key players in the health technology sector to understand where value could be added to further support innovation.

In its first year, the HealthTec Cluster saw a 15% growth, with more than 40 local, regional and national companies and organisations, employing 400+ individuals. These organisations are working together to improve intelligence sharing and to boost collaboration and growth opportunities.





## IN BRIEF

We will develop the right infrastructure to grow Sci-Tech Daresbury as an internationally-recognised science and innovation campus that fosters sustainability and the well-being of people on site, providing a home to world-class science and technology facilities, and innovative businesses.

# 3 Developing a world-class science and innovation campus

Sci-Tech Daresbury is a continually evolving and growing campus. Significant investments into buildings, infrastructure, and the campus environment has helped to cement the campus as one of the leading science parks in the UK. The development of Techspace One and Two, and most recently project Violet, is providing high-specification grow-on office and lab space for companies, delivering on the campus' 'home for life' message.

Sci-Tech Daresbury is one of the government's flagship Enterprise Zones specifically focused on science and technology. The Enterprise Zone status helps provide routes to funding over a 25 year period to support the development of the campus and the ambition of 10,000 high-value jobs, including:

- National-scale science facilities and capabilities
- A 'pathway' of business facilities from hot desks and small incubation offices through to larger offices and single occupier buildings, complemented by access to specialist technical facilities and equipment on-site, and manufacturing facilities in the wider Halton area
- Future-proofed campus infrastructure including power, data, roads and bridges
- Sustainable transport access and support
- On-site amenities and activities to support the needs of a growing campus community
- Provision of an open, green environment to support health and well-being

**Our priorities are:**

**Currently Implementing**

- Project Violet – circa 42,000 sq ft. of Grade A office space in three new high quality office buildings at the gateway of the campus
- Implementing a visually impactful gateway to a world class science and innovation campus, creating a "sense of arrival"
- Acquisition of neighbouring land with which to expand the campus in the future
- Promoting community-led initiatives such as the Daresbury Green Group, and peer support networks such as Women in STEM and LGBTQ+, and taking an active role in our wider community through support for a nominated charity

### Short-term

- Project Ultra Violet – progressing technical designs for the next phase of development, with the potential to provide over 150,000 sq ft of Grade A high-specification office and lab space, further establishing a high-profile gateway to Sci-Tech Daresbury
- Securing the investment and developing designs for improved infrastructure to enable the delivery of the future expansion of the campus
- Construction of the STFC High Performance Computing Centre as part of the Hartree National Centre for Digital Innovation programme
- Augmenting the already substantial utilities infrastructure, resilience, and capability to enable 'big science' at Daresbury Laboratory
- Installation of additional photo-voltaic systems, electric charging points, and additional cycle storage facilities on campus
- Sustainable transport provision – on-going implementation of a sustainable transport strategy to increase access to site for non-car users

### Medium-term

- Delivery of Project Ultraviolet including the potential for a landmark, headquarter building at the gateway to the site
- Adding to the existing amenity facilities on site with the potential to provide additional catering facilities, social networking and meeting space, and a health and fitness suite
- Maximise efficiency of space on campus through sustainable transport engagement, and more efficient car parking solutions
- Connection into the Hibernia line fibre loop through Hartree Centre and IBM high-performance computing capabilities as part of the Liverpool City Region Full Fibre Network project
- Creating new high-specification, flexible and highly-serviced large-scale engineering manufacturing units to support 'big science' projects within the STFC site
- Exploring the potential to create a dedicated building to support the delivery of skills and public engagement activities at Sci-Tech Daresbury

### Long-term

- Development of the continued expansion of the campus to deliver high specification offices and lab space in order to target the objective of providing the capacity for around 10,000 jobs
- Exploring opportunities to re-purpose and better utilise established landmark buildings such as the Daresbury Laboratory Tower to maximum benefit of the Sci-Tech Daresbury community



## PROJECT VIOLET – DELIVERING ON 'HOME FOR LIFE' - CASE STUDY

A £17.8m investment to meet our ambitions for growth and the increasing demand for office space at Sci-Tech Daresbury is planned for opening in 2021. Project Violet will provide three buildings totalling 42,000 sq ft grade A office space.

The buildings will be the ideal environment for high-tech, innovative scale-ups and SMEs to flourish and grow on site, whether these are new companies to campus or existing companies that require larger premises.

In addition, major landscape improvements and upgrade of amenities as part of the project will further enhance the dynamic environment at Sci-Tech Daresbury.



## 4 Attracting, developing and retaining talent

**Skills and expertise are the bedrock of both scientific excellence and high growth technology companies. Access to the right talent and skills enables our science to stay at the forefront of global research, and businesses to remain competitive in a constantly evolving marketplace.**

National reports indicate that there is a 600,000 shortfall of workers in technical STEM vacancies, with skills shortages costing an estimated £6.3bn to the UK economy. At a local level, 34% of campus companies have reported talent and skills shortages, representing a potential barrier to growth on site.

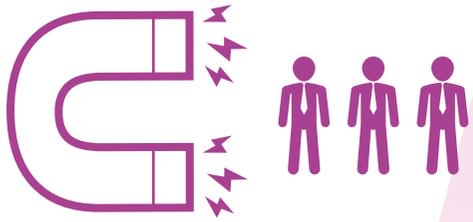
In response to this rising problem, we have developed Sci-Tech Daresbury RADAR, our talent and skills strategy for science, innovation and growth, which builds on our collective strengths to address talent and skills shortages in science and engineering sectors and the campus.

Our strategy is a multi-faceted approach, which will help:

- Tackle market failure by developing a new, local and targeted approach
- Increase the level of investment and participation in talent support and skills development activities by companies
- Enhance the Sci-Tech Daresbury offer, supporting increased levels of inward investment, business formation and growth

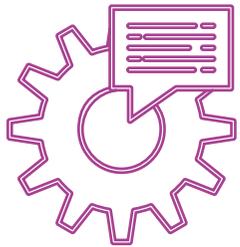
RADAR focuses on attracting, developing and retaining skills; providing a flexible, responsive and integrated skills and employment programme to address the skills required for business growth.

Employer-led talent attraction and skills development is at the heart of the strategy, facilitating a close relationship between employers and talent and skills providers and developing an approach to talent and skills delivery that is 'needs driven' and sustainable. We also recognise that all the tangible and intangible benefits of a high-quality campus environment are important enablers in attracting and retaining talented people on campus.



## ATTRACT

attracting, inspiring and involving the very best talent and building a pipeline of talent and skills for the future, with a focus on local talent where possible



## DEVELOP

developing the skills of the workforce

## RETAIN

engaging, inspiring and retaining talent and skills



## IN BRIEF

We will attract, develop and retain the wide range of talent and skills essential to maintaining Sci-Tech Daresbury as a high skills, high knowledge, high growth campus.

### Our priorities are:

#### Attracting, inspiring and involving the best talent:

- Promote the Sci-Tech Daresbury offer, in terms of employment opportunities and the wider benefits of the campus
- Form strategic partnerships to support local talent attraction including local universities and apprenticeship programmes
- Increase the reach of our public engagement programme into local schools, with a particular focus in Halton and on 8-14 year olds, a critical age for forming ideas around STEM careers. Our local programme aligns with the wider STFC Wonder initiative, which aims to connect people from all backgrounds, and especially under-served communities, with opportunities to explore science and technology.
- Facilitate networks such as Women in STEM and LGBTQ+ to support equality, diversity and inclusion within our campus community

#### Developing the skills of the workforce:

- Provide expert input to SME leadership teams
- Enable training support to enhance the skills sets of the current workforce, including development of modular on-line resources through STFC
- Facilitate more opportunities for placements and internships

#### Retaining talent and skills:

- Support businesses in the development of their talent and skills strategies, embedding a culture of people and development
- Work with strategic partners to facilitate opportunities to retain talent at Sci-Tech Daresbury, in Halton and the wider Liverpool City Region

## UNIVERSITY OF LIVERPOOL PARTNERSHIP - CASE STUDY

Sci-Tech Daresbury's strategic partnership with the University of Liverpool is benefitting students, businesses and the local area through better employment prospects, enhanced skills and a stronger local economy.

Through a dedicated relationship manager, Sci-Tech Daresbury companies are being actively matched to placement students, interns and graduates. A student ambassador has also raised the profile of the campus within the university community.

In addition, companies are developing mutually beneficial relationships with university departments, supporting curriculum development and providing invaluable industry insights to improve students' understanding of the skills required in the job market, as well as building relationships with potential hires. Through partnership with the University's Management school and their Growth Catalyst programme, campus companies have benefited through development of their leadership and management skills.

Engagement with students within Halton is also a strategic focus, driving stronger engagement from the campus into the local borough, and the Liverpool City Region, to support graduate retention. Through a programme of awareness-raising events, we are helping to boost the employment prospects for local graduates in campus companies, ensuring that the economic impact of the campus is realised at a local level.



## INSPIRING AND INVOLVING DIVERSE AUDIENCES - CASE STUDY

Public engagement with science, technology, engineering and maths (STEM) is essential for building the value of STEM in the public consciousness, facilitating understanding and critical analysis of scientific information in the public domain, and displaying the benefits of STEM careers for future generations.

STFC delivers an extensive programme of public engagement activities to inspire and engage diverse audiences with science and technology.

Through direct engagement with school pupils and the public, Daresbury Laboratory's public engagement programme reaches over 10,000 people each year. Additionally, it is estimated that a further 30,000 pupils are reached every year through the training of around 140 local teachers.

Following engagement with these programmes, 89% of people reported that they value STEM careers and 45% of pupils felt encouraged to go into a STEM career.

*"Children enjoyed the experience and it opened up opportunities to them. They learned first-hand how science is used in their world and how important it is. There was a purpose to their learning and it gave them a focus. Children enjoyed the coding too and it was invaluable learning direct from Daresbury."*

Mrs Connolly, The Holy Spirit Catholic Primary School.

# 5 Impact through partnerships

**Partnerships are integral to the success of Sci-Tech Daresbury. The foundations of its operation are based on a public-private partnership through the Sci-Tech Daresbury Joint Venture company, and we therefore understand the great value that a partnership approach can deliver.**

The proven effectiveness of these underpinning partnerships is exemplified by the many successful campus-based partnerships that have already been established here, including the Cockcroft Institute, the ESA Business Incubation Centre United Kingdom, and the Virtual Engineering Centre's partnership with the Hartree Centre.

We are also working broadly across the region to continue to build strong links with the Combined Authorities and Local Enterprise Partnerships to ensure coordination with policy and to promote local economic growth. We play an active part in the delivery of the Liverpool City Region's Local Industrial Strategy, linked closely to the growing digital and creative sector and a fibre network roll-out which will unlock significant growth across sectors.

Our close relationships with universities covering research, enterprise and talent continue to be central to developing many opportunities. For example, the Cockcroft Institute, a partnership between STFC and the Universities of Lancaster, Liverpool, Manchester and Strathclyde, highlights the benefit of bringing together the excellence of the academic research base with the scientific infrastructure of the region. In addition, our strategic partnership with the University of Liverpool is key to our skills programme, developing channels for retaining the best emerging talent within the Liverpool City Region.

We recognise that long-term partnerships with international corporate businesses are critical to increasing understanding of market needs, accessing complementary technical and domain expertise, and increasing economic impact. This has already been demonstrated through an extensive, evolving multi-year partnership between the Hartree Centre and IBM. Sci-Tech Daresbury is one of only two IBM Research bases in the UK, and the partnership provides a package of technology, IP and on-site expertise for businesses. A growing number of international companies, such as Bentley Motors and Unilever, also have longstanding successful partnerships with organisations on campus.

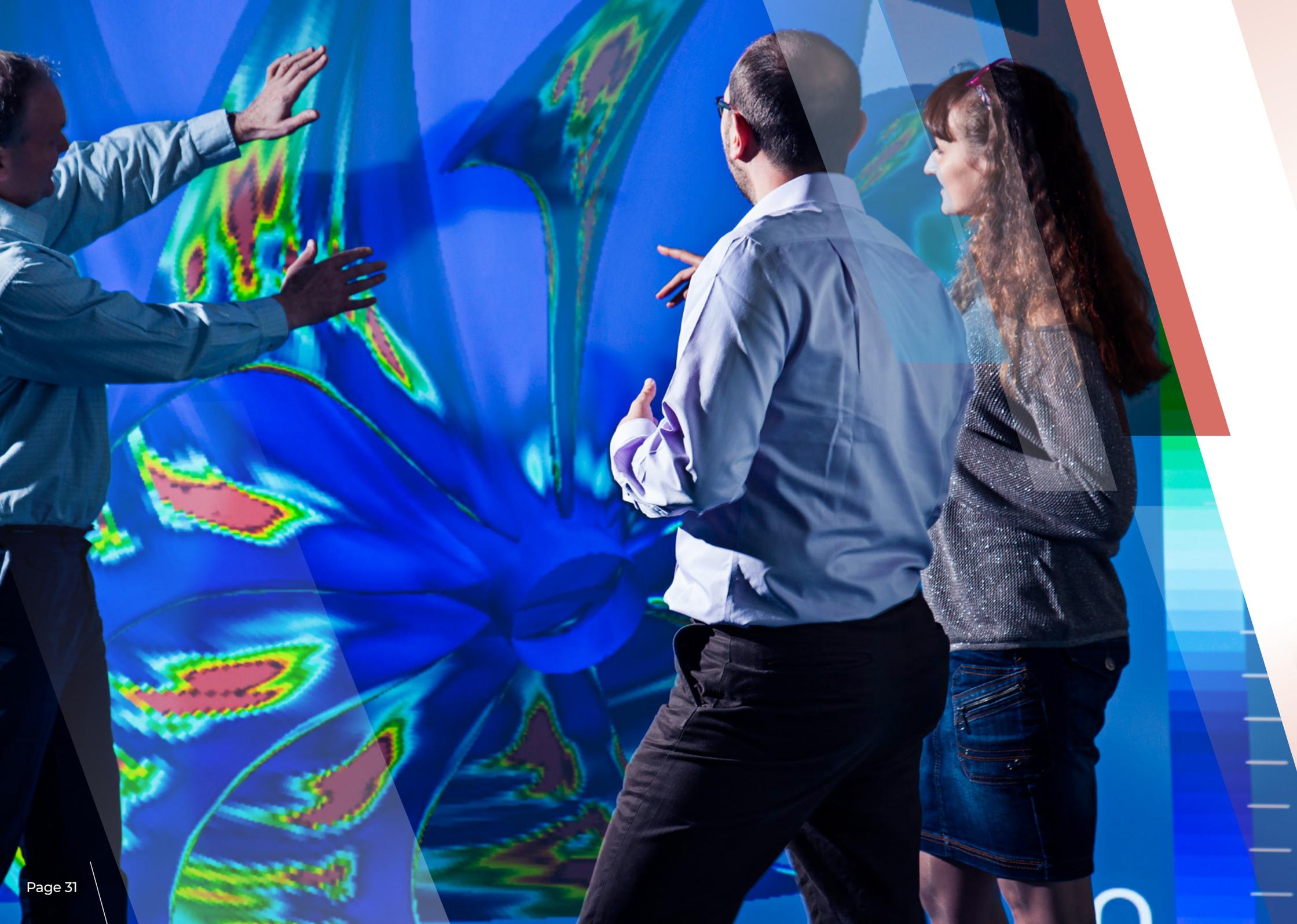
STFC's science is inherently collaborative, with partnerships which span the globe, and it is critical that STFC continues to develop and strengthen its reach across the international 'big science' landscape. As part of UK Research and Innovation, STFC will ensure alignment with national and international science and innovation strategic goals. As a campus, we will continue to build upon our relationships with Innovate UK and the other research councils within UKRI, to support the overarching UKRI mission to build a thriving, inclusive research and innovation system that connects discovery to prosperity and public good.

We are committed to pursuing further partnership opportunities to replicate our tried and tested approach across our key sectors.



## IN BRIEF

We will consolidate existing partnerships and build new ones with public and private sector organisations, to complement our specific areas of technology and expertise.



## SHAPING THE MANUFACTURING INDUSTRY OF TOMORROW - CASE STUDY

LCR 4.0, financed by the European Regional Development Fund, has been instrumental in transforming Liverpool City Region's manufacturing sector through digital innovation. Delivered by regional partners consisting of the University of Liverpool's Virtual Engineering Centre, STFC Hartree Centre, Liverpool John Moores University, Sensor City and the Liverpool City Region LEP, the business support programme has provided Liverpool City Region businesses with funded access to the expertise, technology and collaboration opportunities needed to boost productivity, reduce costs and drive innovation.

Over the course of the programme over 300 SMEs were given the tools and resources to explore the opportunities and challenges of Industry 4.0 technologies, such as big data, systems integration, Internet of Things (IoT), augmented reality (AR) and 3D printing. This has to date resulted in 248 R&D collaborations, 61 direct new jobs, 57 new products to market and 88 new products to firms. The programme is on target to generate £31m GVA to the local economy and create 955 additional jobs over the next three years.

### **Our priorities are to build upon existing partnerships, and create new ones, with:**

- The Liverpool City Region Combined Authority and Local Enterprise Partnership (LEP), to ensure that Sci-Tech Daresbury is fully aligned with the ambition for a globally competitive, environmentally sustainable and socially inclusive regional economy
- Greater Manchester Combined Authority and LEP, and the Cheshire and Warrington LEP, to ensure that the utilisation and development of Sci-Tech Daresbury assets and capabilities continue to enhance economic and innovation plans across our region
- International corporate businesses, to attract new business opportunities, investment and expertise to the campus, especially in aligned technology areas including AI, data analytics, industrial digitalisation technologies, materials, health technologies and particle accelerator technologies
- Innovate UK and the research councils of UKRI, to support multidisciplinary working, catalyse collaboration, and support businesses to develop and realise the potential of new ideas
- Relevant Catapults (e.g. Digital, High Value Manufacturing), to bring new and complementary sector-specific expertise to campus, to assist in building links into corporates and to create clear pathways for campus companies to access the capabilities of the Catapults
- Science organisations and laboratories such as CERN and ESA, to maintain and enhance the impact of our research and expertise on an international stage
- Research-intensive universities, to optimise connectivity across the innovation landscape

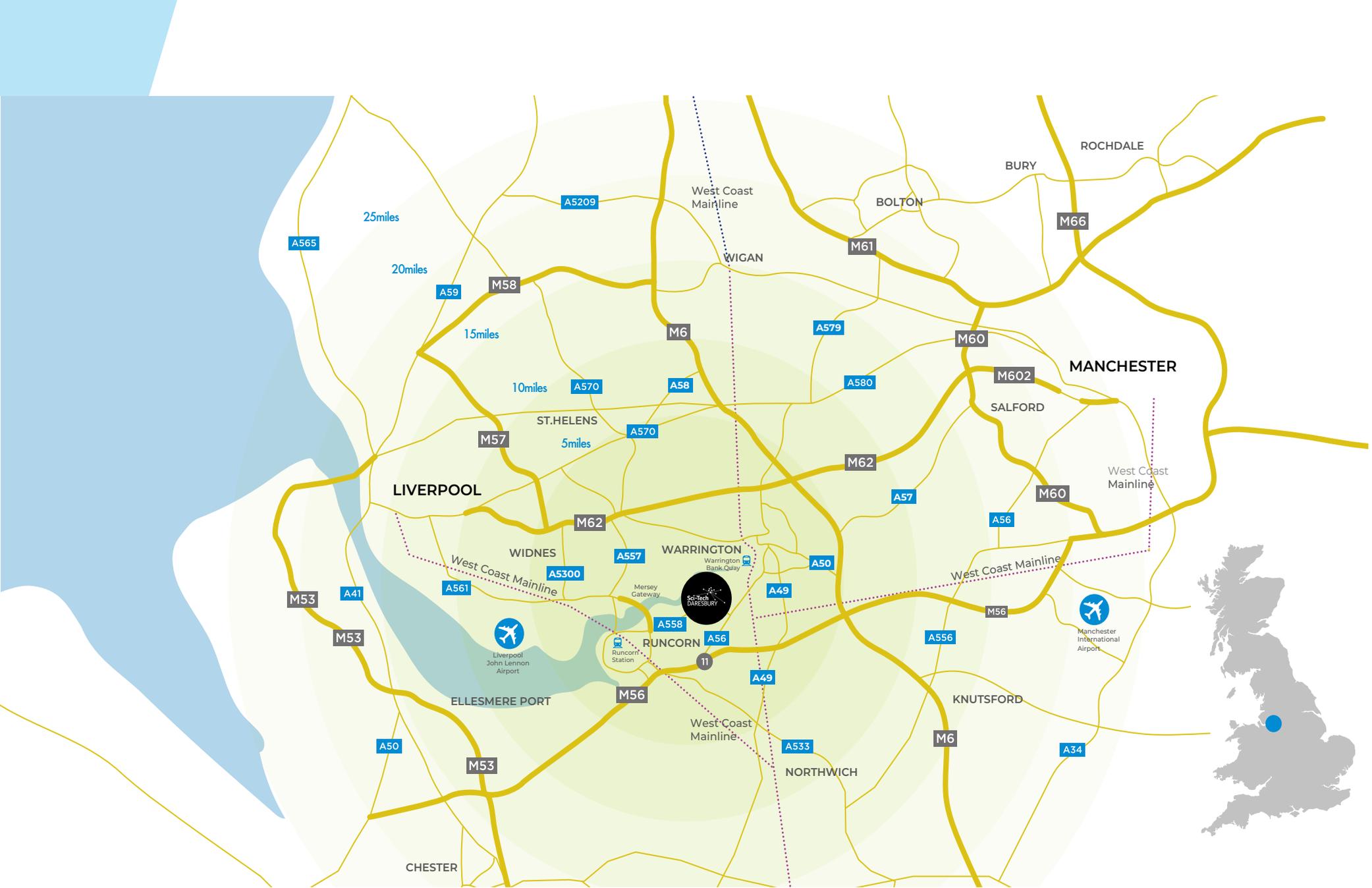
# A roadmap to success

Our progress towards our ambition for Sci-Tech Daresbury to be home to 10,000 high-value jobs, 15 years from now, will be monitored through the survey we have been undertaking annually since 2011, and through the high-level board that governs the Joint Venture company.

This strategy leads us towards an ambitious future for Sci-Tech Daresbury, which will see us enhance our reputation on regional, national and international stages, deliver professional support designed around the needs of our companies, create the right connectivity and networks for our enterprising science and innovation community, nurture world-class talent and the ability to recruit locally, and deliver real economic and business growth for the region and the UK as a whole.

The Joint Venture Board is committed to delivering on this strategy, for the Borough of Halton, the Liverpool City Region, the North West and the wider Northern Powerhouse, and in this way play a full role in supporting economic growth in the UK.





Situated between Manchester and Liverpool, and no more than half an hour's drive from either airport (between them serving over 250 destinations worldwide), Sci-Tech Daresbury provides easy access from the region, the UK and beyond.



home for life

A Joint Venture between



Science and  
Technology  
Facilities Council



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