

# AGRI-TECH

THE CHANGING LANDSCAPE OF **AGRICULTURE** STARTS IN **GLOUCESTERSHIRE** 



## Welcome to Gloucestershire: The Natural Home of Agri-Tech.

Centrally located in the heart of the UK, Gloucestershire is leading the way in the innovation, development and commercialisation of Agri-Tech. The sector is valued at almost £1.5 billion and already supports more than 50,000 jobs in the wider economy.

Gloucestershire is able to provide a world-class level of talent, investment and lifestyle, it's easy to see why so many businesses are turning to this beautiful county as the natural home for their success.

# AGRI-TECH

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As the world's leading chemical company, BASF has a long term strategy focused on global sustainability and diversity.

One of the cornerstones of our global strategy concentrates on crop protection and agriculture. Gloucestershire is the number one location to develop such diverse opportunities.

**Bob Smallwood** Head of Catalysts Recycling Europe





# DIVERSE. BEAUTIFUL. OUTSTANDING.



## **BALANCE**

And it's not just our Agri-Tech proposition that's world class. Gloucestershire is renowned for its heritage, culture and diversity. Bringing together all the benefits of city living with the beauty, relaxation and space to breathe of the countryside, the county offers something for every taste. From Michelin starred restaurants and the delightful Cotswolds, to world class festivals, museums, retail and historical sites, Gloucestershire is the 'go-to' destination for visitors from across the globe.

## **OPPORTUNITY**

Thinking further afield, data shows that Gloucestershire has the largest and fastest growing network of high growth SMEs in the Agri-Tech sector. Of these, two thirds operate in mainland Europe with the balance operating throughout the US and Africa. Gloucestershire's unique ability to develop, test and scale Agri-Tech innovation ensures the industry is commercially viable in the long term. The opportunities for partnership and investment are significant, building even greater potential return on your investment.

## COMMITMENT

Underpinning everything that Gloucestershire has to offer, be that our well established pedigree and proven sector success, our cutting edge innovation and advances in technology, or our unique, breath-taking scenery, history and lifestyle, lies our commitment to the advancement of Agri-Tech. Attracting, retaining and investing in the very best businesses, the best people and the best facilities, we are committed to shaping the future of Agri-Tech and we hope that you will join us.





OVER

£32m

INVESTMENT RECEIVED BY LOCAL AGRI-TECH BUSINESSES



## THRIVING SMEs

Gloucestershire is focused on supporting innovation and growth of companies. Invest in Gloucestershire is a dedicated programme set up by GFirst Local Enterprise Partnership to support foreign businesses to relocate to Gloucestershire and thrive. With a team of fully funded experts, we help international businesses by providing business advisory support including; search for premises, recruitment of staff and introduction to the local business network. Invest in Gloucestershire is supported by the Department for International Trade and all local authority partners to provide foreign businesses first class business support.



# THE RIGHT PEOPLE THE RIGHT TECHNOLOGY RIGHT HERE, RIGHT NOW.

## **R&D ASSETS**

The UK's first and largest Agri-Tech incubator is located in Gloucestershire. Farm 491, based at the Royal Agricultural University in Cirencester offers land for research and testing.

Hartpury University and Hartpury College's Tech to Plate Centre offers real on farm demonstrations of the latest technology to farmers, producers and students. The key objective is to showcase the full potential that technology can bring to overall farm performance and productivity.

Along with Campden BRI, a national and international leader in food chain research and advisory services and The Countryside and Community Research Institute (CCRI), part of the University of Gloucestershire, the largest specialist rural research centre in the UK, Gloucestershire brings together thought leaders in research, development and market innovation.



## **TALENT**

When it comes to the future, Gloucestershire is shaping the sector, boasting one of the highest concentrations of agricultural, academic and teaching institutions in the UK. With an estimated 600 sector specific academics working across three principal institutions, Gloucestershire is supporting more than 13,000 students on their journey to becoming your future workforce.



With leading agri-education and research centres, commercial opportunities, world-class training and a highly-skilled workforce, Gloucestershire can provide your foothold to the future. We have the largest network of high growth SMEs and thousands of skilled agri-student graduates remaining in Gloucestershire. This 'ecosystem' is a conscious and deliberate creation of our commitment to Agri-Tech and support for this globally significant sector.

## The people, the support systems and facilities to test and scale innovation



#### **R&D** Assets

## Collective strength that breaks barriers to adoption of technology

- Home to world-leading agri-food research centre (Campden BRI) that focuses on food safety, the UK's largest agronomy business (Agrii) and many more leading agri-food companies and research institutions including: Unilever, BASF, NIAB-Tag, Lucozade Ribena Suntory, Organic Arable, Pasture for Life Association and Organic Research
- Two dedicated agricultural universities: Royal Agricultural University (RAU) and Hartpury University and Hartpury College (Hartpury)
- Countryside and Community Research Institute (CCRI), part of the University of Gloucester, is the largest specialist rural research centre in the UK

#### **Talent**

### World leading talent on your doorstep

- 15,000 people serving the agricultural service industry including agronomy and livestock consultants, large veterinary practitioners, land agents and solicitors
- Top 1/3 of the UK for workforce in the high and medium technology manufacturing sectors
- 1,200 Higher Education students at undergraduate and postgraduate levels at RAU
- 3,600 students in undergraduate and postgraduate degrees, Diplomas and A-Levels at Hartpury University and Hartpury College

## **Thriving SMEs**

#### Scale-Up Your Business

- Global network of SMEs operating in mainland Europe (75%), USA and Africa (25%)
- Over 200 SMEs supported through Farm491 workshops and events
- Continued investment focused on supporting the scaling of Agri-Tech SMEs

#### Incubators and Demo Farms

#### Practical solutions to meet business needs

- Agri-Tech Centre at Hartpury is a practical demonstration site of the latest commercial technology to support adoption by producers
- Farm491 at RAU is an incubator and innovation space dedicated to Agri-Tech
- Farm-Ed at Chipping Norton is a new demonstration centre for farming and food education focusing on the crucial link between good food and farming

#### **Thought Leadership**

## Food Forever: Pioneers in developing advanced Agri-Tech

'Food Forever' is Gloucestershire's bold mission to create a healthy circular economy in food and farming that cools the climate, builds natural capital, and ends food-related illness. Gloucestershire's aim is to be the first place in the world to make this the 'norm' with investment and co-innovation in advanced Agri-Tech, applied in the county to benefit our people, businesses and landscapes

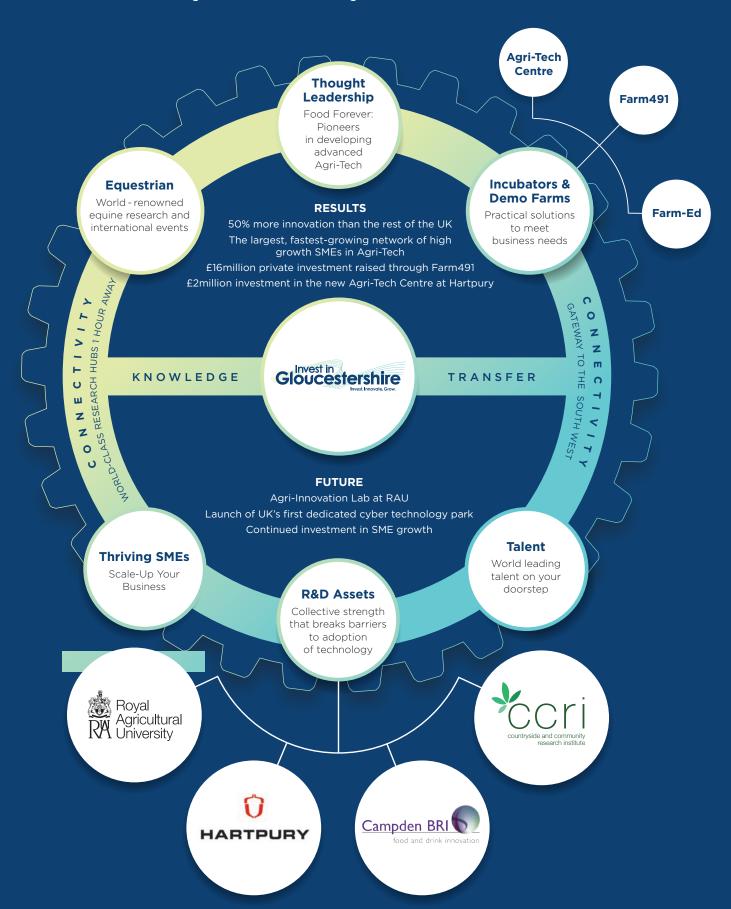
#### **Equestrian**

## World-renowned equine research and international events

Gloucestershire is home to the famous Gold Cup Races, Badminton Horse Trials and Festival of British Eventing. Hartpury University and Hartpury College (Hartpury) also hosts 60 competitions, including three major annual events. Hartpury has been at the heart of UK equestrianism for more than 25 years and continues to lead the way with a cutting-edge centre for equine therapy, rider performance and top-quality research



## An ecosystem built for your business to thrive



## CONNECTIVITY





Gloucestershire's research centres are well placed to help you adopt best practice and navigate emerging policy. The depth and breadth of expertise is testimony to their well-established reputations and forward-thinking nature. Working in a number of fields these centres carry out projects that focus on testing real-life solutions. Fields include: emerging Agri-Tech, agri-food supply chain, agricultural ecology, agri-business & rural enterprise, land management, rural policy, agri-food policy, and animal welfare.

# 600 academics in agri-food applied research, knowledge exchange and education

Gloucestershire



#### HARTPURY

## The UK's largest agri-education institution and a pioneer in the equine industry

A leading specialist education provider with TEF Gold status (university) and Ofsted Outstanding (college) ratings. Research at Hartpury is industry-driven with a direct impact on the equine, agriculture, sport and animal science and veterinary sectors. £50million has been invested in state-of-the-art campus facilities over the last 20 years, including a Sports Science Centre, world class equine facilities, an extensive animal collection and canine hydrotherapy centre, and a commercial farm with a dairy unit supplying major retailers, beef, sheep and arable enterprises.

A global collaborative network

Agri-Innovation Lab aimed to shape a more sustainable and responsible agri-food system for all

food fraud

£2M Agri-Tech Centre to demonstrate latest Agri-Tech innovations for productivity



**3D printing of food**, assessing its potential and limitations, and exploring new capabilities



## An international leader in food chain research and advisory services

400 staff serving 2,500 member companies in the food and drink chain who operate 4,500 sites in 80 countries. Its services include:

Testing, ensuring safety and product quality Operational Support, manufacturing risk management and product development

Research and Innovation, in partnership with members and the government

Knowledge Management, providing best practices, training and advisory services.



## At the forefront of agricultural education since 1845

The Royal Agricultural University (RAU) has been educating agricultural leaders and entrepreneurs at its beautiful campus in Cirencester since its foundation in 1845 and has an influential and international alumni network. The University prides itself on combining the knowledge and industry connections which stem from its rich heritage with an innovative, forward-thinking approach and is recognised as a sector leader in enterprise and innovation, having been awarded Centre of Excellence status by the Institute of Enterprise and Entrepreneurs in 2019.

The Farmer Led Innovation Network, 19 national organisations tackling real on-farm problems The UK's largest
Future of British
Farming Agri-Tech
Showcase, focused
on the adoption
of early-stage
Agri-Tech

## Hennovation,

bridging the science-practice gap in the laying hen and livestock sectors

#### SoilCare,

investigating profitable and sustainable crop production in



## Largest specialist rural research centre in the UK

Part of the University of Gloucestershire and the largest specialist rural research centre in the UK. CCRI works at the interface of agriculture, environment and society. Current areas of activity include: Agricultural knowledge and innovation systems, farmer behaviour and decision making, alternative and local food networks, natural resources management and governance, well being and social value, rural and regional development.



You now have the opportunity to locate your business at the heart of Agri-Tech innovation: Gloucestershire. With the second-highest rate of innovation activity in the UK and the largest network of Agri-Tech SMEs to work with, this is the best possible destination for cost-effectively testing new technologies and building solid partnerships to grow your business. The existing Agri-Tech innovation initiatives, such as Farm491 and Farm-Ed, together with the strong future commitment by local authorities make Gloucestershire the go-to place for everything Agri-Tech.

## Supercharge your SME business with testing facilities and incubator support

#### - Farm491

- Tech to Plate
- Farm-Ed - Campden BRI

### **EXISTING** INFRASTRUCTURE

- Cost-effectively test and showcase your technology
- Risk-free space for innovation - Scale-up rapidly and achieve commercial viability
- SME incubator support
- World class food testing facility

Continued investment in Agri-Tech SMEs by public initiatives

## **FUTURE**

- **COMMITMENT** Access to cutting edge facilities and business expertise
- Grants to support steady growth in Gloucestershire
- £580M invested in infrastructure. communities and business support in the last 5 years
- £9.4M invested in the Growth Hub network initiative to support the growth of SMEs



#### - UK's largest network of Agri-Tech SMEs

- Local Enterprise Partnership's Agri-Food and Rural Group
- Campden BRI membership

### **COMMUNITY TO** COLLABORATE

- Like-minded entrepreneurs to work with
- Established businesses to learn from
- Collaborative spirit to achieve common goals
- Business growth opportunities

"Farm491 is an excellent platform to reach out to current and prospective clients: it allows us to keep growing and to provide the best service possible to our client'

**CRM Agricommodities** 

Farm491 was established in 2016 as part of the Royal Agricultural University and has become the leading Agri-Tech incubator and innovation space in the UK. It offers Agri-Tech SMEs a network of farmers, industry partners, investors, mentors and like-minded entrepreneurs to help them scale and grow. 66 members (and counting), more than 200 SMEs supported and more than £16M angel and venture capital investment raised is proof of its unrivalled success.

Agri-Tech Centre, 'Tech to Plate' based at Hartpury has a conference hub and two new live demonstration facilities, including a livestock housing facility accessed via a viewing gallery to see the latest commercial technology in a real commercial environment, as well as a biosecurity building set up to show good industry practice with regard to disease transfer.

Farm-Ed based at Chipping Norton is a new centre for farming and food education focussed on the crucial link between good food and farming. Facilities include crop rotation and trial plots, natural flood management, woodlands, wildlife habitats, livestock, orchards and apiary (bee-keeping).

## CASE STUDIES



#### Breedr

Breedr enables a more efficient, sustainable, and trusted livestock supply chain through data.

Working with Farm491, Breedr raised £2.2million seed Venture Capital funding. Recent funding will help company add 20,000 animals to its platform. It currently employs 9 people, increasing to 13 soon.



#### **CRM Agricommodities**

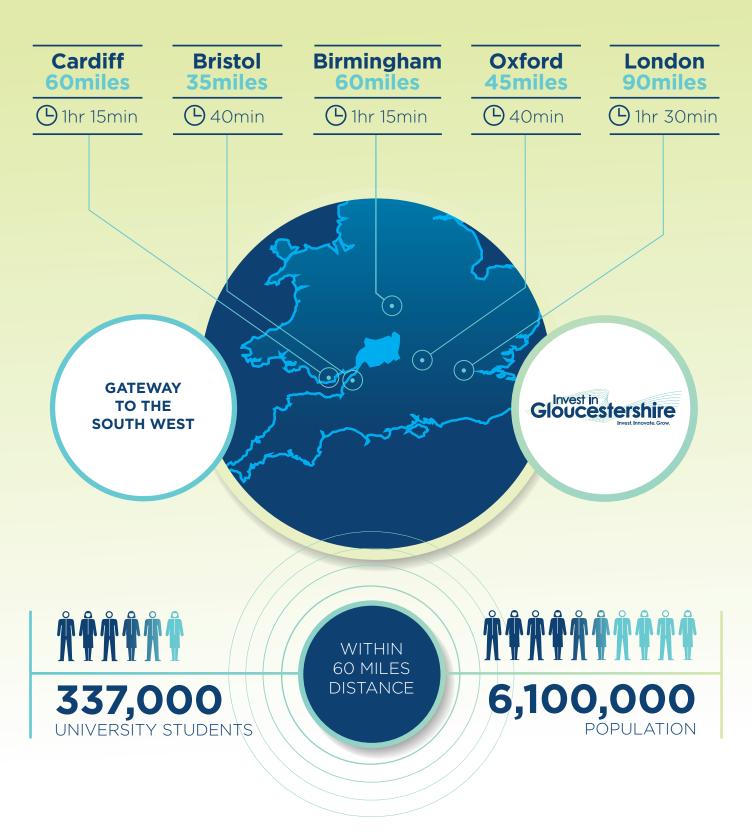
**CRM** Agricommodities helps buyers and sellers of grains take fewer risks, whilst delivering consistently strong financial performance in an increasingly volatile market.

Since moving from Cambridge to Gloucestershire, CRM Agricommodities has grown to 3 staff members with a substantial increase in revenue.



Centrally located in the heart of the UK with prominent agriculture institutes, Gloucestershire is leading the way in the commercialisation and innovation of Agri-Tech application. Within one hour's drive from Gloucestershire you can also reach top Russell Group universities, renowned by their research focus and academic achievement, like the University of Oxford, the University of Bristol and the University of Birmingham.

## Highly skilled people now and in the future



Gloucestershire offers an extensive agri-specialist talent pool, with substantial figures of 4,800 students and 600 academics in agricultural-related studies. Around 4,000 people are employed in the Agri-Tech sector. Taking the whole agri-food supply chain into account, this number rises to around 15,000. This workforce includes agronomists, livestock consultants, large veterinary practices, land agents and solicitors.

As the home of two of the most prestigious agricultural universities in the country, Royal Agricultural University and Hartpury University and Hartpury College, Gloucestershire leads the way in higher education, knowledge exchange and applied research in the Agri-Tech sector.



'Food Forever' is Gloucestershire's bold 2030 mission to find solutions to the global challenge of how to feed the world, today and tomorrow. The aim is to create a healthy circular economy in food and farming that cools the climate, builds natural capital and ends food-related illness. Through the application of advanced Agri-Tech systems, individuals, businesses, and natural environment as a whole will thrive and benefit.

## Innovation that brings prosperity and benefits for businesses and humans alike



Most Agri-Tech investment focuses on increasing yield and reducing farm production costs. Advanced Agri-Tech, on the other hand, looks at the whole agri-food system in order to:

- 1 Create value from 'soil to sewer'
- 2 Use digital solutions to deliver public and environmental value, as well as commercial value
- 3 Design solutions in which technical and social innovation go hand in hand.

## Local 'Advanced Agri-Tech' projects under development\*:

- Net Zero Now: World-leading knowledge, research and trial hub to develop the protocols, systems and evidence for new models of 'net zero' farming.
- **Agri-Innovation Systems:** Transferable networks for peer-to-peer data sharing, innovation and knowledge exchange that enable productivity and resource efficiency on farms and across the food supply chain.
- Advanced Agri-Tech Skills: Transformative partnerships between colleges, universities and commercial training providers to develop world-leading technical and business skills.
- **Dynamic Procurement:** Accelerate the development of dynamic procurement platforms with traceability, sustainability, origin and ingredient credentials.
- **Digital Mapping:** Incubate the digital systems, data infrastructure and data security protocols to map natural capital and productive assets.
- \* Awaiting funding confirmation



Gloucestershire is home to the famous Gold Cup Races, Badminton Horse Trials and Festival of British Eventing. Hartpury University and Hartpury College (Hartpury) also host 60 competitions, including three major annual events. Hartpury has been at the heart of UK equestrianism for more than 25 years and continues to lead the way with a cutting-edge centre for equine therapy, rider performance and top-quality research.

# Leading the way in equine therapy, rider performance, global competitions and top-quality research

#### **Equine Therapy Centre:**

Opened in 1999, it has helped thousands of horses to achieve their performance potential. It includes an aqua fit water treadmill, the first of its kind in the UK, for low-impact exercise for rehabilitation and conditioning.

## The Margaret Giffen Centre for Rider Performance:

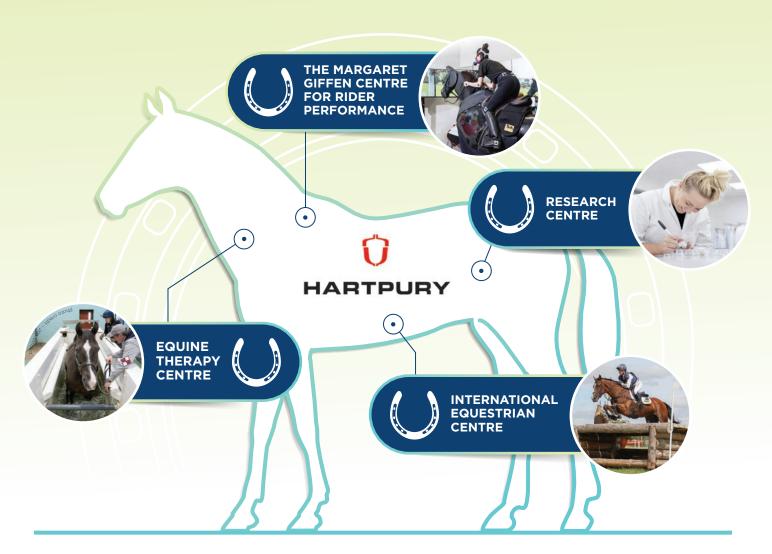
It gives riders access to world-class resources and specialist expertise in assessment, strength and conditioning, sports psychology and nutrition. Facilities include a Racewood Eventing Simulator.

## International Equestrian Centre:

Hartpury Arena plays host to more than 60 competitions throughout the year, including: the NAF Five Star Hartpury International Horse Trials, the Hartpury Festival of Dressage and the Hartpury Showjumping Spectacular.

#### **Research Centre:**

With access to up to 230 horses on-site, as well as an Equine Academy and the numerous international events, the aim of all Hartpury Equine Centre's research activities is to find practical solutions to real life problems.



## CASE STUDIES

#### Tharos:

UK based equine supplement company Tharos approached Hartpury to investigate a new nutritional supplement, which aimed to improve digestive health in horses. Hartpury's scientists undertook extensive analysis and the results helped to craft important messages for marketing materials.

### 2 Master Saddle Fitting Consultants:

A collaboration between Hartpury experts, professional saddle fitters and an expert equine veterinarian, to evaluate the effectiveness of current saddle fitting techniques. By comparing anatomical landmarks, found using radiography, with external palpation techniques, the findings helped change the saddle fitters' technique.



Please get in touch with our Inward Investment Team Visit our website **www.investingloucestershire.com** Email us at **enquiries@investinglos.uk** 







