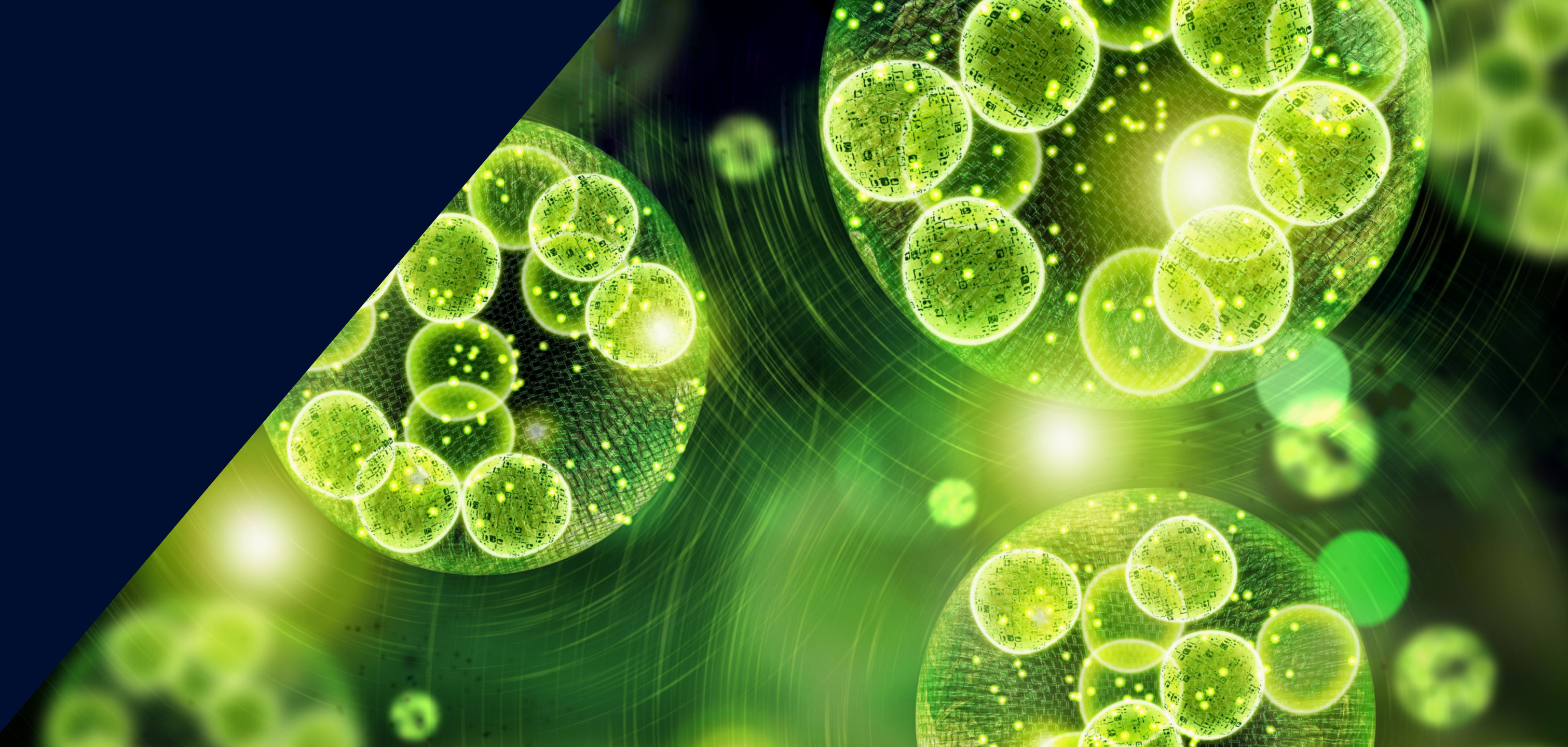


Industrial

Biotechnology



Beyond expectation

Our region is playing a vital role in shaping the way we live our lives. Our businesses seek and deliver new ways of making and doing things to improve all our futures. But it's our talented workforce, brilliant brains, and world changing innovations that really put us on the map. Creating the perfect conditions for opportunity and business to thrive.



The **buses** and **trains** that keep the world moving



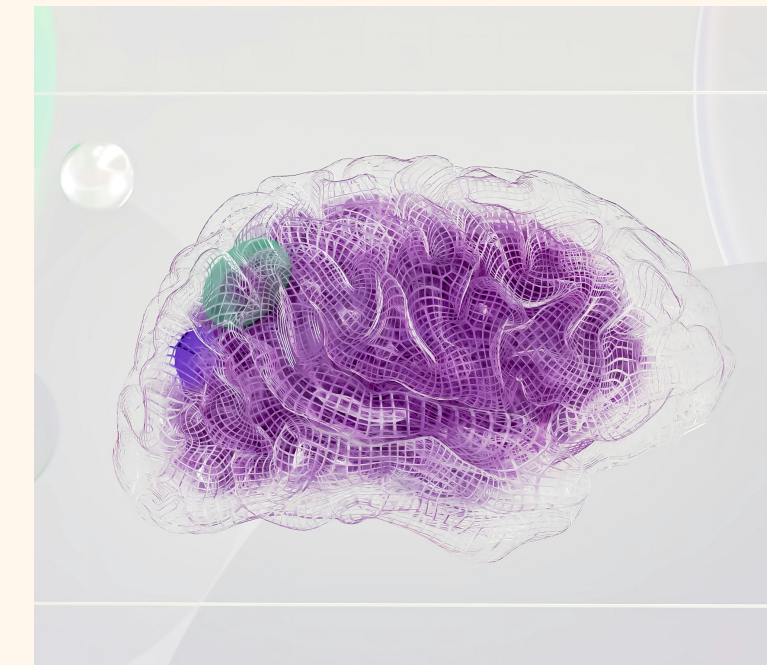
The **food** on your plate



The **special effects** in your favourite TV show



The **technology** in your pocket and your workplace



Your **healthy** future



Even your **tea** break



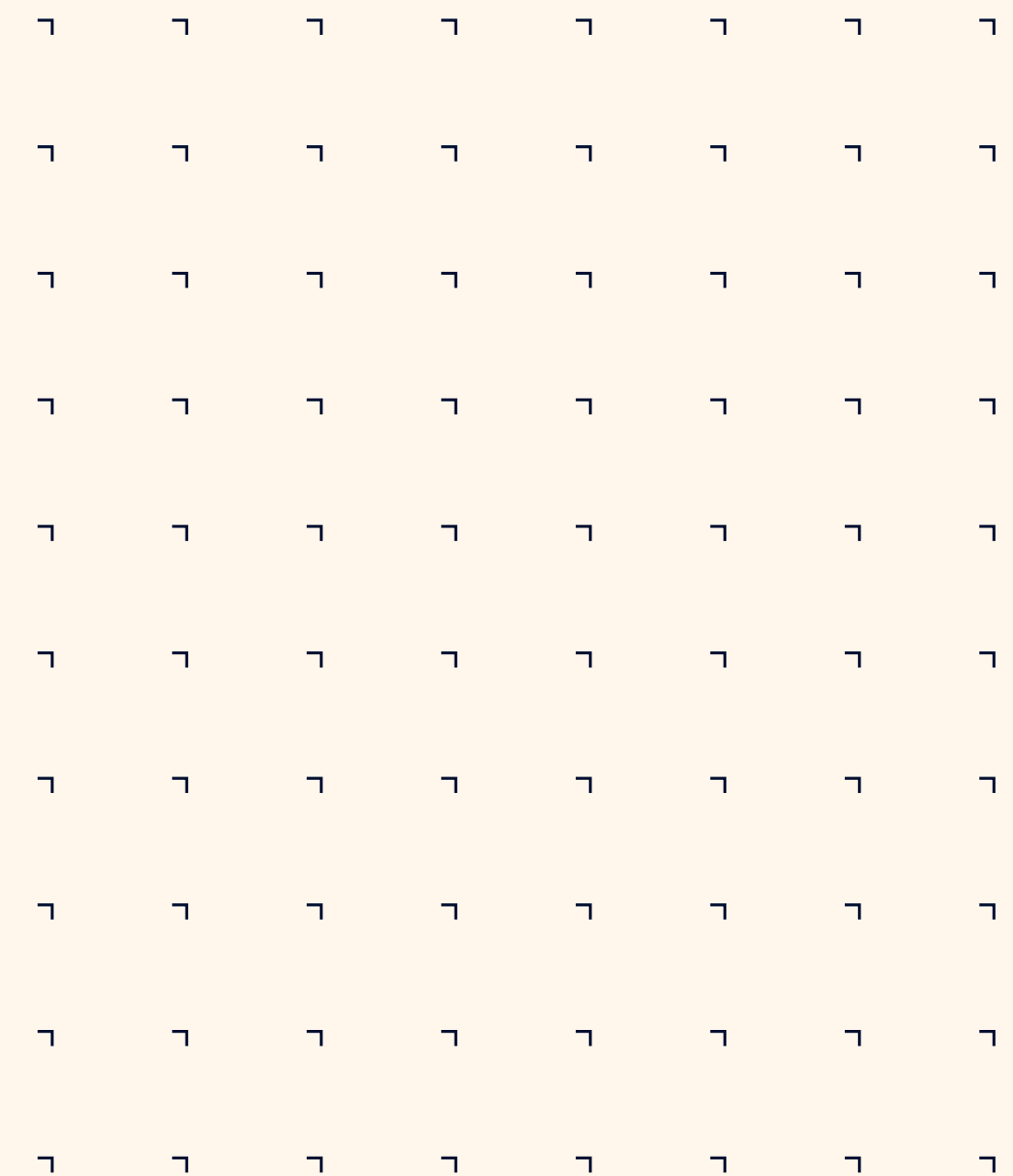
Why York & North Yorkshire?

Because we're good at what we do, and ambitious about what we want to achieve.

We've been the home of innovations in **rail** and **manufacturing** for decades, while leading the way in sustainable food production through our expertise in **agritech** and **industrial biotechnology**.

And thanks to our region's research institutions, universities and businesses there's a real buzz and a clear vision in our emerging sectors like **creative & digital** and **healthy ageing**.

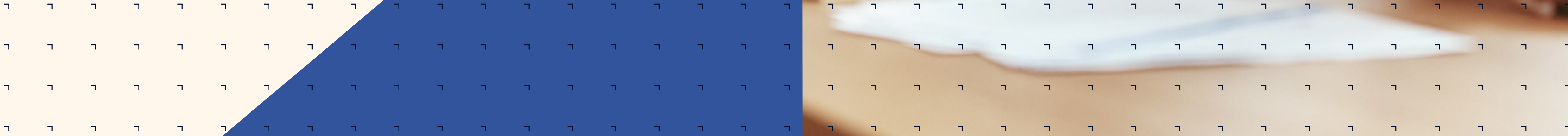
In fact, we're so confident about what York and North Yorkshire is best at, we've identified these particular sectors as somewhere we see massive potential for investment and growth.



We have you covered

Invest in York & North Yorkshire is a partnership dedicated to driving investment into our region and enabling growth for us and you. We're achieving this by welcoming UK and international businesses to our region and making the whole process as easy as possible.

Comprising a support team, concierge service and business experts from York and North Yorkshire Combined Authority, City of York Council and North Yorkshire Council, our service has you covered right from the start.



The solution is here already

£8.7 billion

Our region's established Bioeconomy Cluster

2 Freeports

in neighbouring Teesside and Hull, making importing and exporting hassle-free.

4 airports

within easy access for freight and passenger travel, including Leeds, Tees Valley, Newcastle and Manchester, and just two hours, by train from Heathrow.

499,800

people of working age, plus thousands more within easy reach in neighbouring Teesside, West Yorkshire and Hull.

4 universities

including the Russell Group University of York - ranked 4th in the UK for excellence in bioscience research.

Innovators

shaping the future of biobased products for fuels, chemicals and materials.

A1, M1, M62

keeping you easily connected to the UK's main road network.

£22.1 billion

is the worth of our economy, and is a major economic driver in the north of England.

40,000

registered businesses in the region.

< 2 hours

from York to London and Manchester, thanks to our direct rail links.

Well-connected to the rest of the UK



- York & North Yorkshire
- Airports
- Motorways
- Freeports
- Rail Links

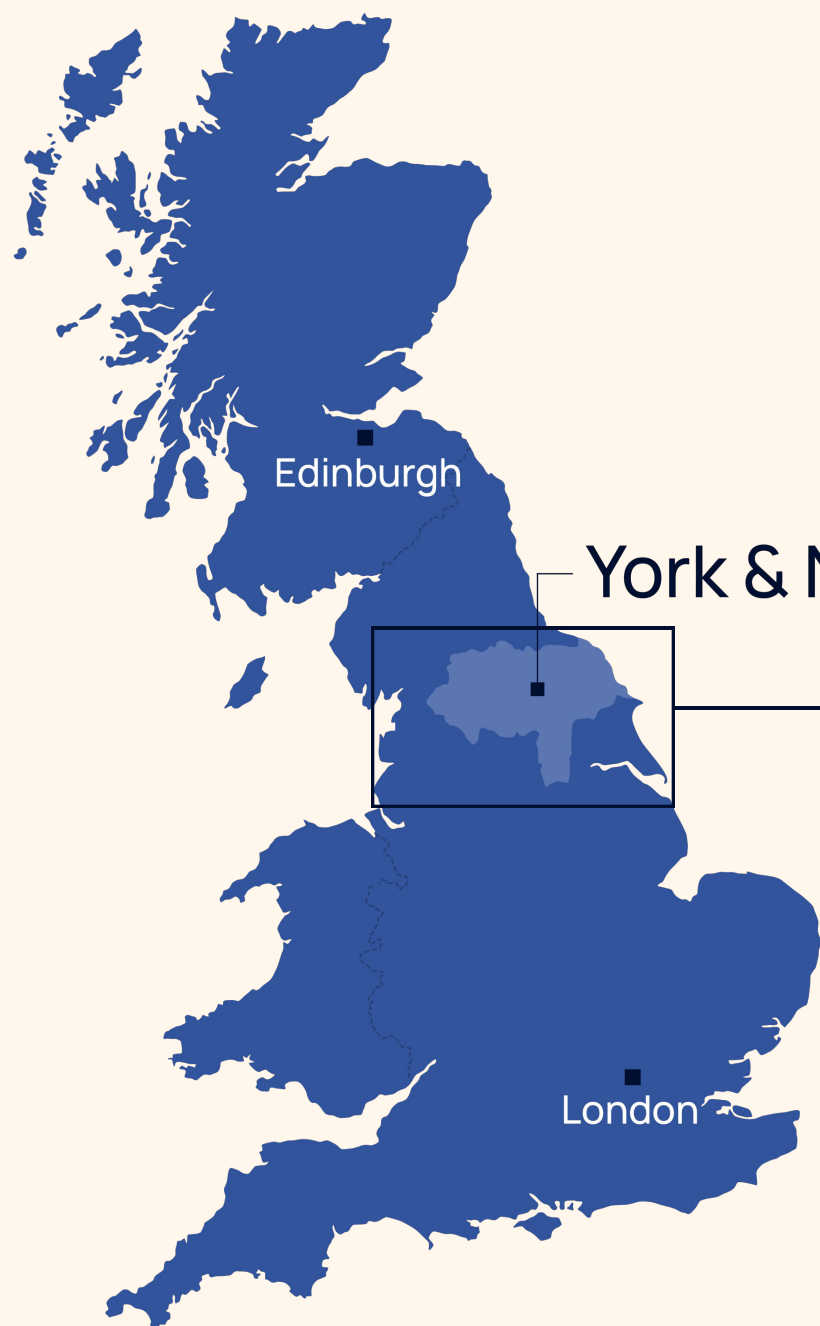


The science superpower behind the UK's Bioeconomy

York & North Yorkshire is where science and industry innovation meet to deliver a bio-based global future. Our **research and development assets** are extensive and respected; from the **University of York**, and the internationally renowned **Fera Science Ltd**, to the open-access research facilities at the **Biorenewables Development Centre**.



Regional Assets





• Photo: 'P3P, Selby



US \$30tr

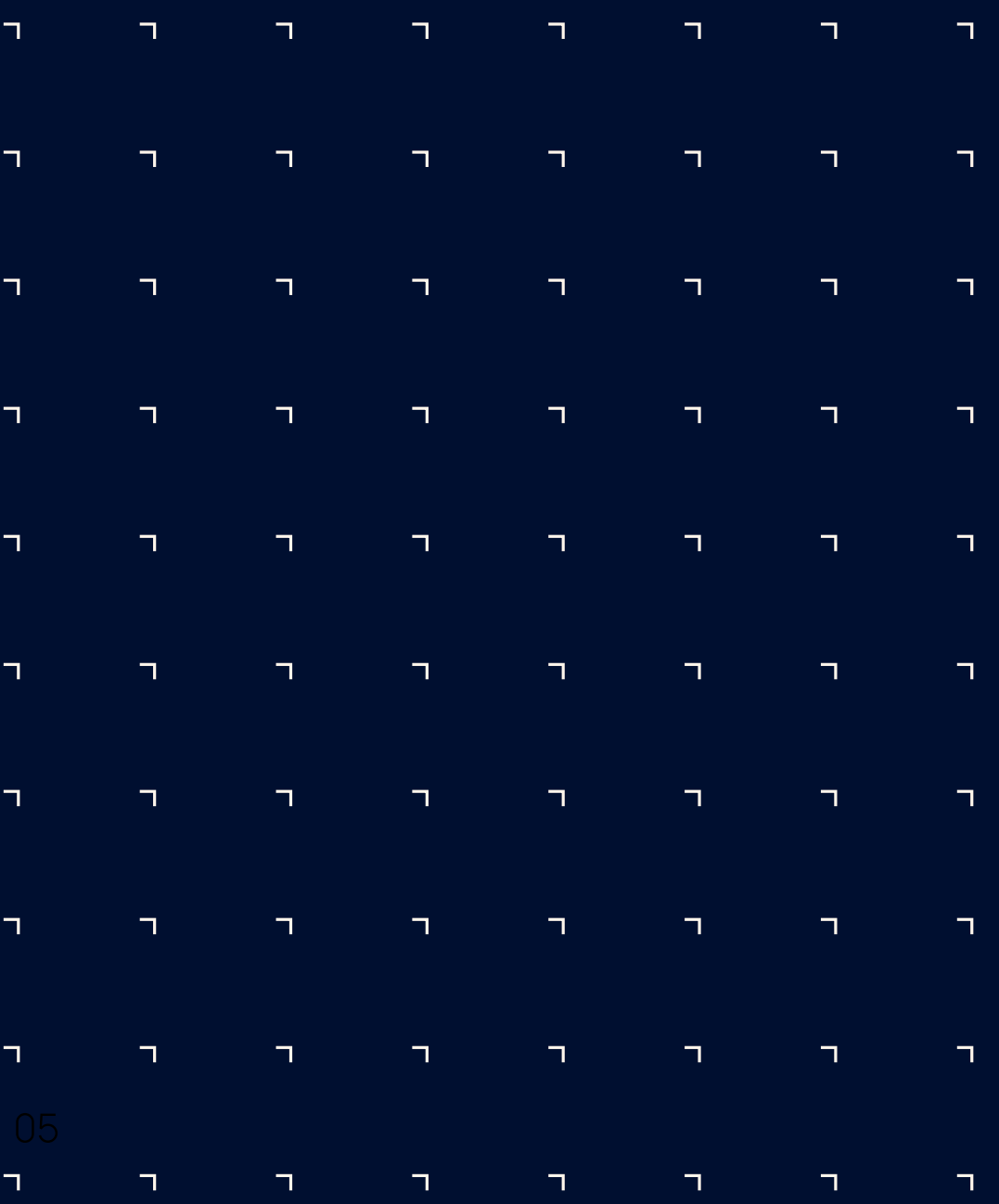
Global Bioeconomy to be worth US\$30 trillion by 2030 according to Global Bioeconomy Forum 2022. Climate change is driving the world's need for sustainable, bio-based products and processes.

The Global Bioeconomy Forum estimated that by 2030, alternative bio-based solutions would account for a third of all global economic activities.

In York & North Yorkshire, we are at the heart of the UK's bioeconomy and striving to reduce reliance on fossil fuels. We're welcoming your business to play a part in that ambition.

Delivering biobased solutions

For chemicals, materials and fuels



Our region is at the forefront of technologies such as sustainable alternatives to fertilisers, bio-based lubricants, bio-based cosmetics, alternative construction materials and textiles, Carbon Capture Under Sea (CCUS) and more.

Bring your business to York & North Yorkshire and we'll support your aspirations for growth through our global connectivity and infrastructure, a wide range of site options and a highly skilled workforce.





Transforming the UK's Bioeconomy

York & North Yorkshire is neighbour to two of the UK's major industrial clusters, Tees Valley and the Humber, this includes access routes to two of the UK's Freeports.

By collaborating with our regional neighbours, York & North Yorkshire is developing a golden triangle for industrial biotechnology in the north of the UK.

• Photo: Drax Selby

BioYorkshire

York & North Yorkshire is an established UK science superpower for industrial biotechnology, providing your business with the strong foundations and a supportive ecosystem.

BioYorkshire is a programme set up by the University of York in partnership with Fera Science Ltd and Askham Bryan College.

Working alongside the agricultural sector and wider industry, BioYorkshire harnesses scientific expertise to develop bio-based alternatives for fuels, chemicals, and materials.

The University of York is ranked fourth in England for its bioscience research. With a research focus and knowledge that excels in bio-renewables, biomass, bio-refining and waste valorisation, the university also has an established network of partnerships and initiatives with industry.



• Photo: Biorenewables Development Centre



Strong foundations for growth

01



From leading edge research at the University of York (ranked 4th in England for quality of Bioscience research)*

*Source: Times University Rankings 2024

02



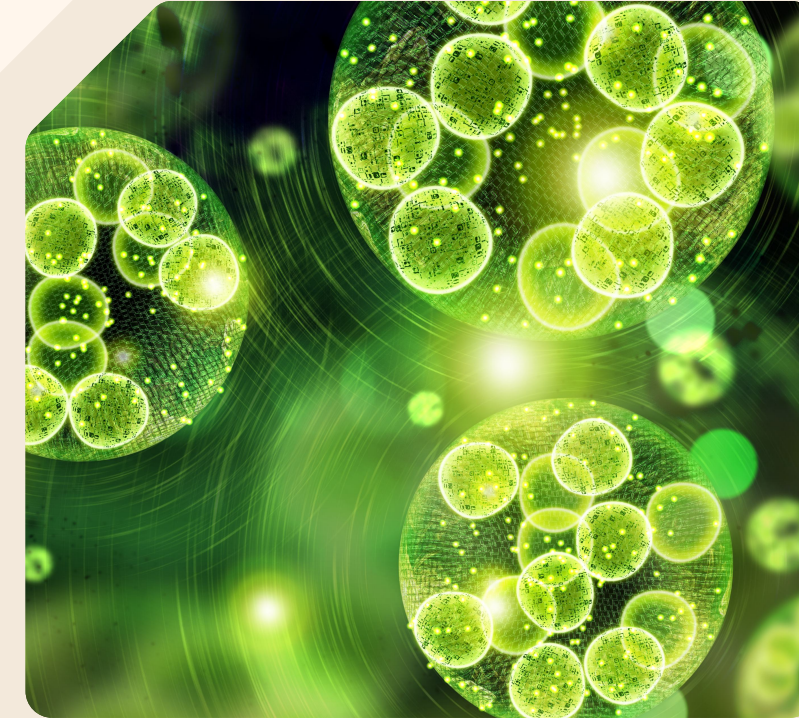
To world-class scale up and commercialisation at the Biorenewables Development Centre (BDC), York & Centre for Process Innovation (CPI), Tees Valley

03



Regional neighbour to two major UK industrial clusters, intent on decarbonisation

04



Value of Yorkshire and Humber bioeconomy estimated at £8.7billion. A regional sector workforce of 105,000 people

05



UK Government target of 80% of fossil fuels and petrochemical products to be replaced with biobased alternatives by 2035*

*Source: UK Government

Spotlight on our expertise

Here are some of the
organisations in our region,
**driving innovation in
industrial biotech.**





• Photo: Biorenewables Development Centre

The BDC is a collaboration between the Green Chemistry Centre of Excellence and the Centre for Novel Agricultural Products, based at the University of York.



It offers open-access facilities and expertise covering the whole bio-based value chain, from resource assessment, through process development, to market evaluation and commercialisation.

Process capabilities span upstream and downstream, including feedstock preprocessing, anaerobic digestion, fermentation, pyrolysis, distillation and product separation and recovery.

The Centre supports entrepreneurs, academics, and industry through world-class development, scale-up and demonstration of new, greener processes and products.

Spotlight

Azotic was formed to introduce sustainable biofertilizer options around the world, through a research and development facility here in York, and centres in the USA and Canada.



The company has taken more than 20 years of academic research to become a global leader in Nitrogen-fixing technology. Azotic is focused on the development and commercialization of technology which supports on-farm **profitability and sustainability**.

Its flagship technology is a unique nitrogen-fixing bacteria capable of converting atmospheric nitrogen into a usable form for multiple crop species.

The patented technology was commercialised in 2019 and is manufactured in the UK and distributed to markets globally.

Talk to us today



Tracey Taylor-Preston
Sector Development Relationship Manager,
Agritech & Industrial Biotechnology

Get in touch now at
invest@yorknorthyorks-ca.gov.uk

Or click [here](#) to visit the Invest in
York & North Yorkshire [website](#).