

Accelerating the UK Bioeconomy:

The scientific and economic case for investment



UNIVERSITY
of York



ASKHAM BRYAN
COLLEGE



York and
North Yorkshire
Combined Authority

A cross-departmental agenda
from Government...

....which aligns with the
bioeconomy opportunity
presented by York and North
Yorkshire

"We need the input of mayors and multinationals, councils and CEOs, trade unions, devolved governments, and experts to deliver prosperity through partnership"

The Rt Hon Rachel Reeves, Chancellor of the Exchequer

"Long-term, sustainable economic growth is impossible without innovation. You simply cannot make people better off without investment in R&D"

The Rt Hon Peter Kyle, Secretary of State for Science, Innovation and Technology

"we must, as the economy allows, protect and grow the basic curiosity driven science...that work is ultimately the goose that lays the golden egg; it is what, in years to come, creates all the economic benefits and societal benefit"

Lord Vallance, Minister for Science

" we will continue delivering a new deal for farmers, boosting farmer confidence and food security, as well as stability and economic growth in our rural communities"

Daniel Zeichner, Minister for Farming

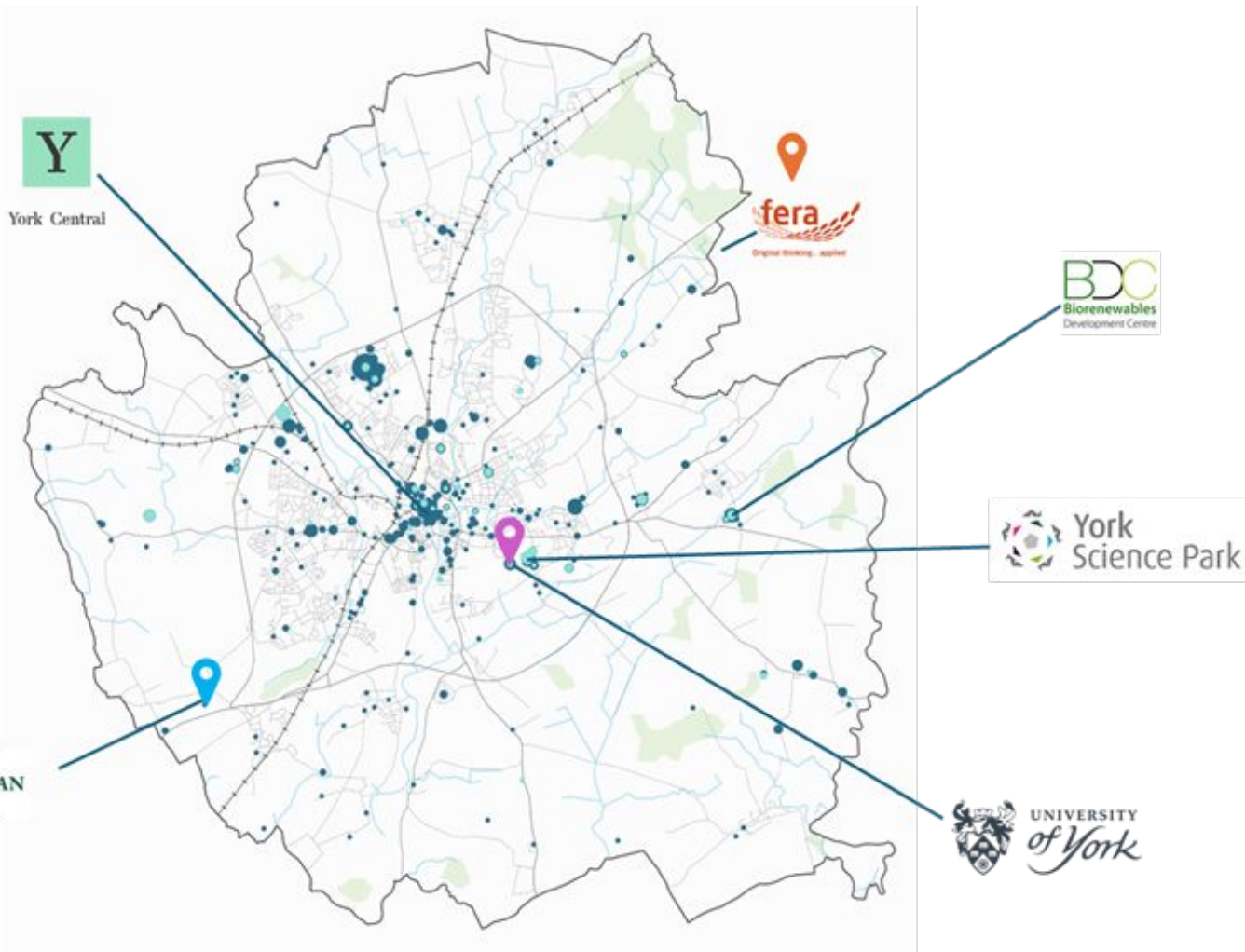
"I want to drive growth in every part of the country. For any area considering it, now is the time to take the plunge and speak to us about how we can work with you to transform your regions"

The Rt Hon Angela Rayner, Deputy Prime Minister and Secretary of State for Housing, Communities and Local Government

Proposed assets

-  Global Bioeconomy Institute
-  Sustainable Learning Centre and Living Lab
-  Fera Science hub

-  Bioeconomy & emerging sectors
-  Bioeconomy



BioYorkshire's scope and key aims

Connecting chemicals, biomanufacturing and agriculture



Profitable bio-based production of chemicals, materials and fuels



Net zero food production, farming and wider land use practices

powering
the
economy

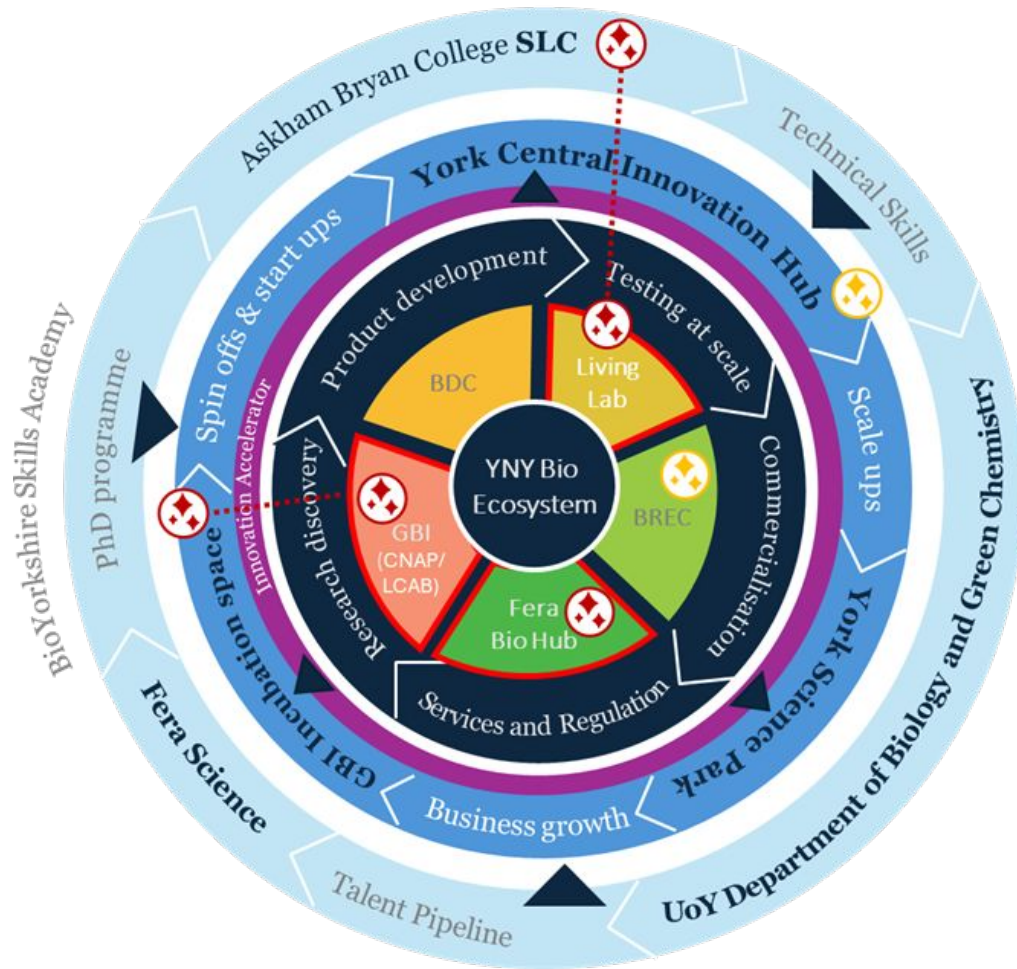


improving
the
environment



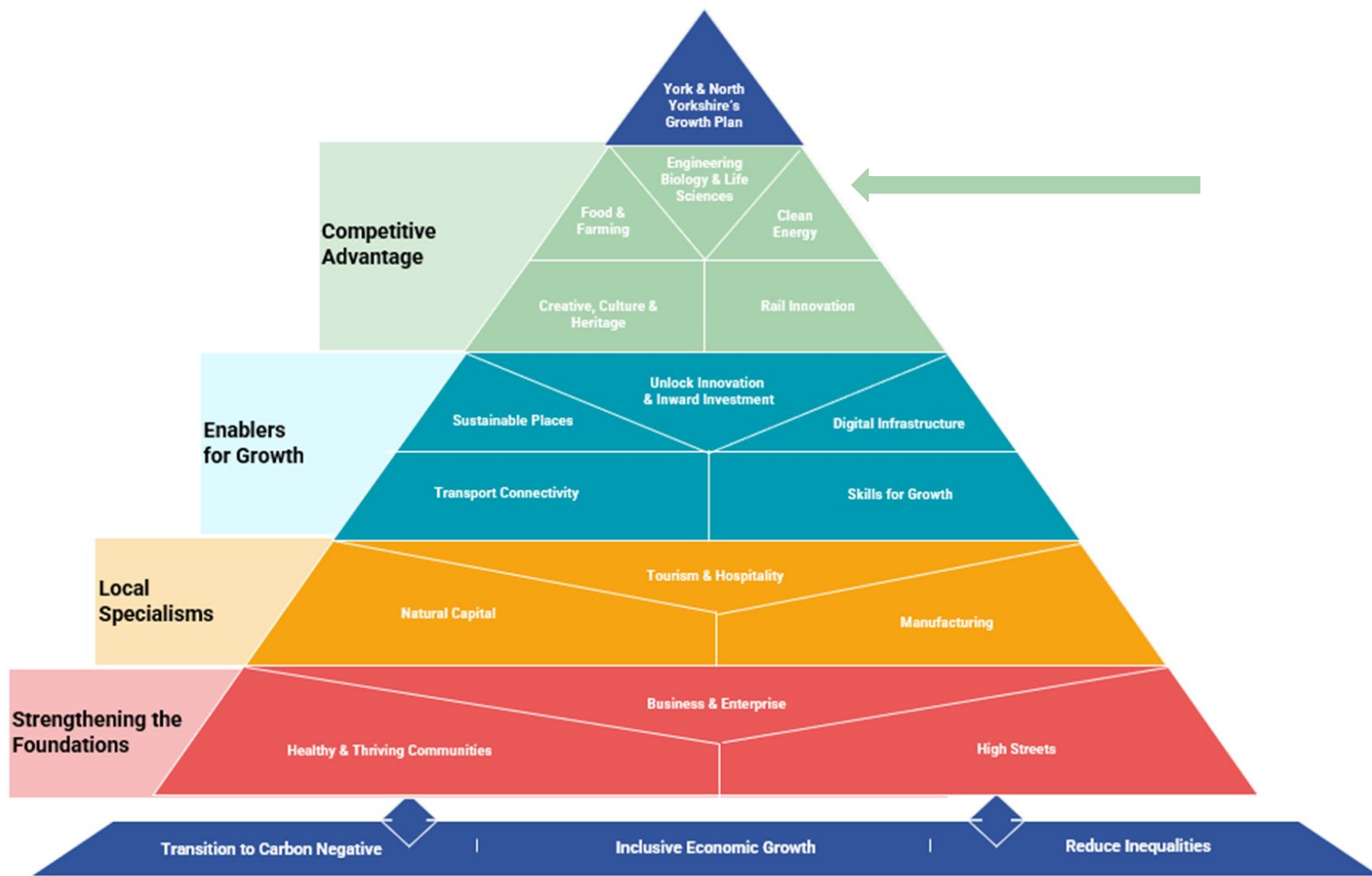
boosting
innovation





-  **Proposed New Assets for Investment**
-  **Other Planned New Facilities**
-  **Skills Training and Talent Development**
-  **Innovation and Growth Spaces**
-  **Innovation Accelerator**
-  **Bioeconomy Assets by TRLs**





Celebrating 100 years of Croda

Our first site opened in Yorkshire almost 100 years ago. We're proud to still manufacture there, close to our roots. Although today, we have more than 5,500 people working at manufacturing sites and in offices in 37 countries.

1925

Our business was founded in 1925 by an entrepreneur, Mr Crowe, and a chemist, Mr Dawe. From the outset, we understood the central role science plays in our everyday lives. Originally, that meant refining wool grease from the prosperous Yorkshire wool trade into lanolin.



George W. Crowe,
Chairman and founder

1930's
& 40's

Lanolin had been found to be an effective rust preventative, and our first decades of business saw us working with engineering and automotive industries.

The Second World War brought new contracts to supply items like camouflage oils, insect repellents and gun cleaning oils. As the war ended, we diversified into new areas, notably cosmetics.



1950's
& 60's

After the war, our CEO Fred Wood led company growth, taking Croda to the USA in the 1950s and establishing our office in New York.

Continued expansion saw our global headquarters move to Cowick Hall, a few miles from our first manufacturing site.



1970's
& 80's

These decade saw continuing growth and a series of acquisitions that saw us diversify into many new markets. By now, we were manufacturing paints, printing inks, adhesives and dyestuffs alongside chemicals, and even processing honey.



1990's
and
00's

The 1997 acquisition of Sederma brought us new capabilities in skincare active ingredients and acquiring Uniqema from ICI in 2006 established us as a global leader, strengthening manufacturing capabilities with additional sites in Europe and Asia.



2010's
to
today

2019 and 2020 brought two significant acquisitions that added new expertise to our Health Care; we also expanded into a new market flavours and fragrance, as we made our biggest acquisition yet: Iberchem.

2020 was a milestone year for Croda as we launched our Purpose: Smart science to improve lives™.

**BRITAIN'S
MOST
ADMIRED
COMPANIES
2021**
Management Today

WINNER

Delivering positive impact

The breadth of our portfolio of sustainable ingredients and sector-leading Sustainability Commitment helps us to have a positive impact on everyday life:



Preventing, treating and potentially curing diseases through the development of drug delivery systems



Enhancing crop yields, enabling land savings and improving food security through the development of crop care technologies



Promoting the hygiene, health, wellbeing and confidence of consumers through the creation of impactful Consumer Care ingredients



Reacting to climate change and nature loss through the delivery of our 2030 Commitment and use of sustainable feedstocks



Sustainably improving lives through the Croda Foundation which is working to improve access to healthcare, reduce poverty and hunger, and protect and restore ecosystems

Key

Climate Positive

Land Positive

People Positive



Regional highlights

Supporting local biodiversity at Cowick Hall

Croda's international headquarters is based in Yorkshire at the impressive Cowick Hall, a Grade 1 listed, 17th-century Georgian country house. Our vision is for Cowick Hall to be carbon neutral and a haven for indigenous species. A team of volunteers have been working hard enhancing our site.



Investing in skills at our Goole warehouse

Goole is home to our worldwide distribution hub for products made at our three northern UK manufacturing sites. The site is also where our new International Employee Training Centre is located, providing development, alongside additional employment opportunities in the region.



Sustainable manufacturing at Rawcliffe Bridge

Through collaborative development, Croda and its partners have designed and built a continuous reactor system utilising novel technology to increase capacity to cope with growing customer demand. The new manufacturing process has enabled Croda to improve the safety and sustainability of the process.



Innovation through collaborations with the University of York

Croda has many projects ongoing with the University of York. Two notable projects have been awarded funding, as part of a £42 million programme, to work with Croda in co-developing new sustainable technologies for health care, agriculture, cosmetics and wastewater treatment.



Regional partnerships with BDC and Fera

Croda have also embarked on several projects with partners based in York and North Yorkshire. These include the Biorenewables Development Centre, Fera and the High Value Biorenewables and Biomass Biorefinery Network also based out of the University of York.



Connecting locally through the BioYorkshire Industry Forum

As part of the BioYorkshire Industry forum Croda endeavour to connect further within the York and North Yorkshire region. New collaborations are in development with Industry Forum members Yorkshire Water exploring degradation of chemicals in water treatment systems.



York and North Yorkshire

The Science Superpower
behind the Bioeconomy.

David Skaith

Mayor of York and North Yorkshire



York and North Yorkshire City Region, Rural Powerhouse

- Innovation as our economic driver
- Net Zero carbon by 2034,
and carbon negative by 2040
- Solutions for food insecurity
- Lead and define growth in a rural
context as a **Green** Economy

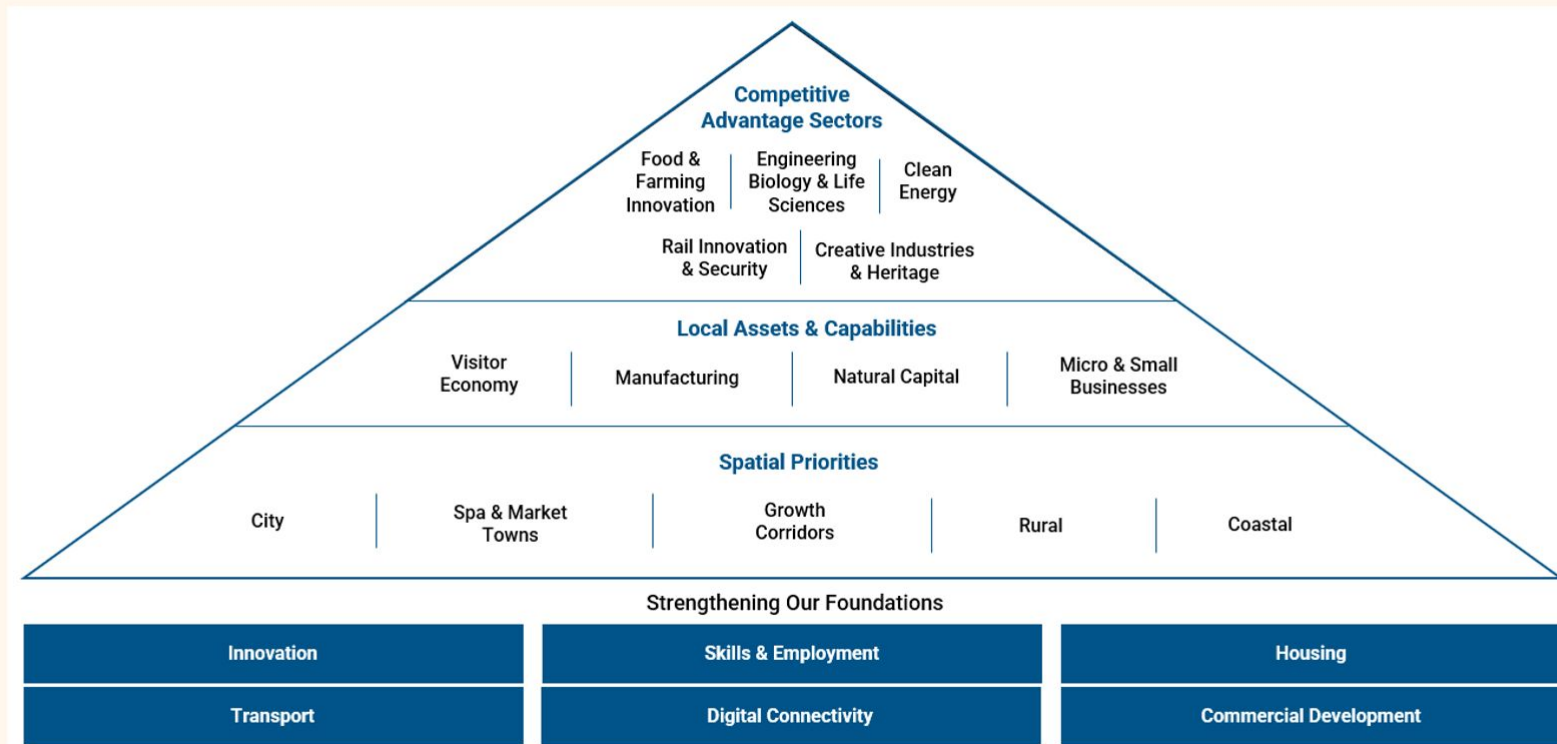


Image: Visit North Yorkshire

Image: Visit York



Plan for Growth





York Central



York and North Yorkshire - A leader in Industrial Biotechnology research and development



Source:

Thank you



Image: H2Boost, Biorenewables Development Centre