



**Biomass
Biorefinery
Network**

4th BBNet Conference

**The future prospects for biorefining:
Feedstocks, technologies and products**

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Integrated Biorefineries Mission

For Sustainable Fuels, Chemicals and materials

Kees Kwant, the Netherlands,

Mission Director



Mission Innovation

MI 2.0

- Launched in 2015
- 23 governments committed
- Catalyze innovation for clean energy

7
Missions

- Action-oriented to support R&D and derisk investments
- Global coalitions of Gov and non-state actors



**ZERO-EMISSION
SHIPPING**
MISSION

**CLEAN
HYDROGEN**
MISSION

**GREEN POWERED
FUTURE**
MISSION

**CARBON DIOXIDE
REMOVAL**
MISSION

**URBAN
TRANSITIONS**
MISSION

**INTEGRATED
BIOREFINERIES**
MISSION

**NET-ZERO
INDUSTRIES**
MISSION





International Collaboration **Integrated Biorefineries Mission (IBM)**

Goals

- Find innovative solutions to enhance commercialization
- Reduce costs of biorefineries for fuels and chemicals
- Accelerate development of different applications
- Support international collaboration between Mission members but also with academia and the private sector

Participants

- co-leads
 - Netherlands,
 - India
- core members
 - Brazil
 - Canada
- supporting members
 - UK,
 - EC
- NEW: Switzerland



➡ Open for new members





Innovation Roadmap with 3 pillars: With 8 actions

Research and Development

- New products
- Improved efficiency

Pilots and Demo

- Showcase results
- Learn and improve

Market and Policies

- Enabling environment
- LCA and carbon accounting

In collaboration with other initiatives and MI missions, CEM Biofuture, IEA Bioenergy, IEA, IRENA etc.



By Rap Interiors

Pillar 1: Research and Development

1. Consulting industry and academia
2. New Products, Biopolymers (focus PHA)
 - a. Information exchange, explore collaboration
3. Efficiency and cost price improvement
 - a. SAF modelling and standardised assessment
 - b. HE call: HORIZON-CL5-2024-D3-02





@2: new Biopolymers

- Webinar and Questionnaire with industry
 - (organised by UKRI)
- Start of collaboration on Biopolymers
 - Evaluation
 - Selection of PHA
- Webinar Collaboration on PHA
 - NL, Can, Sw
 - Drop in? Specialty?
 - Markets?
 - End of Life?
 - Resources? Wastes?
 - Conversion options?





@3: SAF Production via Integrated Gasification Pathway

Phase 1: A Brazil – Canada collaboration under MI using process simulation and optimization

Approach

- Harmonized approach to SAF production at commercial scale
- Harmonized economic assumptions and technology process efficiency
- Two feedstocks were considered:
 - Sugar cane waste for Brazil
 - Forest residues for Canada
- Life Cycle Assessment scope standardized

Output to reduce risk

- At least four performance metrics:
 - Minimum Selling Price
 - Carbon Intensity
 - GHG Abatement Cost
 - Energy Return on Investment
- a standardized carbon accounting
- An harmonized approach to production
- Identical understanding is a first step to reduce risks

@3: SAF pathways phase 2 and 3



Start in 2025

Phase 2: Integration in **existing facilities**

Brasil in a sugar mill

Canada in a paper mill

Phase 3: Integrated production of **fuels and chemicals**
assessment by TNO, Netherlands

- Gasification Fischer Tropsch of wood
- Ethanol 2 Jet
- Biomethanol



@3b: EU funded projects

- 101234808 **BIOVAL** Integrated BIOrefinery to VALorize CO₂ and biomass for the coproduction of advanced biofuels and bioproducts
 - The biorefinery also targets biofuels (advanced algal Hydrotreated Vegetable Oil HVO, bio-H₂, biogas/CH₄, and IPA) and high-added value bioproducts like pigments (e.g. astaxanthin), using microalgae and bacterial gas fermentation as core technologies in a cascade/parallel approach.
- 101235677 **BioSMART** BIO-BASED FUELS AND SUSTAINABLE MATERIALS FROM ADVANCED RENEWABLE TECHNOLOGIES
 - NL, UK and IN are in the consortium.
- **3rd project** is expected to be signed by the end of the month and it is better to wait until then. If all ok this will start on 1/01/2026.

Each project funded with about 3.5 M€, TOTAL 10,5 M€ for 4 years

Collaboration with Integrated Biorefineries Mission





Pillar 2: Pilots and Demo

1. Standards
Review of existing standards in Canada and UK
2. Legislation
Identification of challenges and solutions
3. Business plan
Guide available on internet, based on interview with financiers

Pillar 3: Markets & Policies

1. Sustainable Biomass availability with CEM Biofuture
2. Carbon Accounting and LCA (with UNEP LCA)
3. Start an international trajectory to realise policy support for renewable (biogenic) carbon in chemicals and materials
EU -> COP29 -> COP30



Collaboration and alignment is crucial



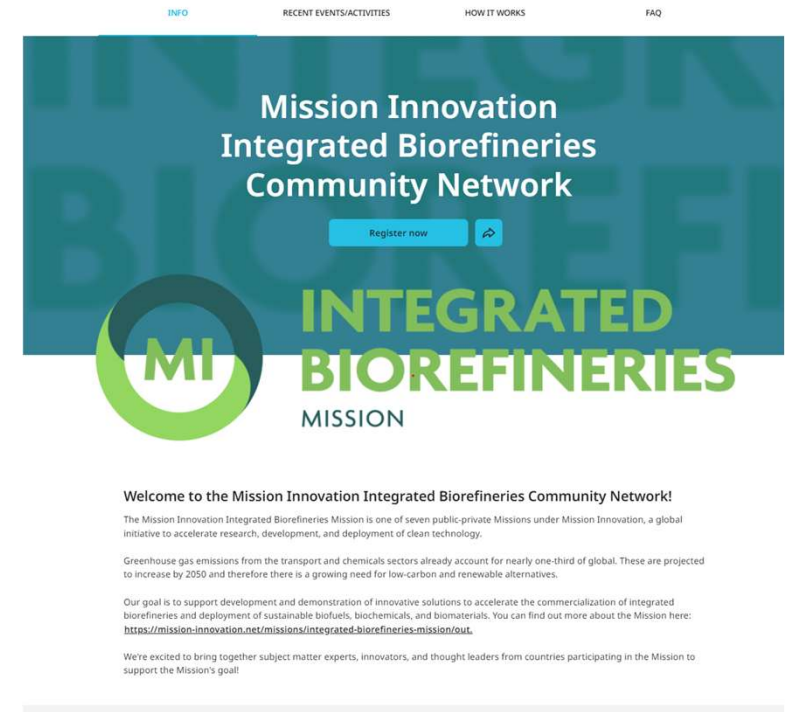
1. MI Zero Emission Shipping
 - biofuels for shipping?
2. MI Hydrogen
 - H2 utilisation in chemical/SAF industry?
3. MI NetZeroIndustries
 - biobased procurement support and potential joint call
4. CEM Biofuture Initiative and Council
 - Market introduction
5. IEA and IEA Bioenergy
 - Information Exchange, Task 39 and 42
6. European co-funded Projects





Biorefinery Platform

- Digital platform for Biorefinery platform:
 - Enables networking and matchmaking
 - Mission will organize webinars through this platform
 - Followers can find each other and develop joint activities, eventually proposals for funding
- Till now 170 participants, (UK, Can, India, NL, others)



<https://www.b2match.com/e/biorefineries-platform>



Key takeaways

- The Mission has a network of collaborators across 4 continents.
- Platform to leverage international expertise and share lessons
- Alignment of assessment SAF technologies possible,
- Start of Alignment of PHA research
- Start of EU funded projects (funding 10,5 M€)
- Access to a broad range of expertise for joint RD&D projects.
- Open to additional member countries.



Join us at EUBCE in The Hague 19 – 22 May 2026



**Call for papers
is open!**

**Submit your abstract by
31 October 2025**



World Forum The Hague
The Netherlands
19 - 22 May 2026



Mission Integrated Biorefineries

THANK YOU

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[INTEGRATED BIOREFINERIES MISSION – Mission Innovation
\(mission-innovation.net\)](http://mission-innovation.net)



Integrated Biorefineries Mission Contacts and Links

- Website
<https://mission-innovation.net/missions/integrated-biorefineries-mission/>
- LinkedIn
<https://www.linkedin.com/company/integrated-biorefineries-mission/>
- Biorefinery Platform
<https://www.b2match.com/e/biorefineries-platform>

Biorefining Landscape Review

Sophie Mason, Senior Consultant
17th October 2025

Project Scope

- A piece of collaborative research commissioned by **BBNet**. Drawing on literature, data analysis and stakeholder engagement to review the progress made throughout the UK's biorefining sector over the past decade and to identify key priorities for future development.
- The project brings together three work streams:
 - **Task 1 – Biorefining Landscape Review (Alder BioInsights)**: A review of biorefining in the UK and internationally from 2014-2024
 - **Task 2 – Stakeholder Engagement (Frey Consulting)**: Identification of development needs, challenges and opportunities expressed by stakeholders
 - **Task 3 – Economic Analysis (Perspective Economics)**: Understanding the value of biorefining to the UK and the economic opportunity

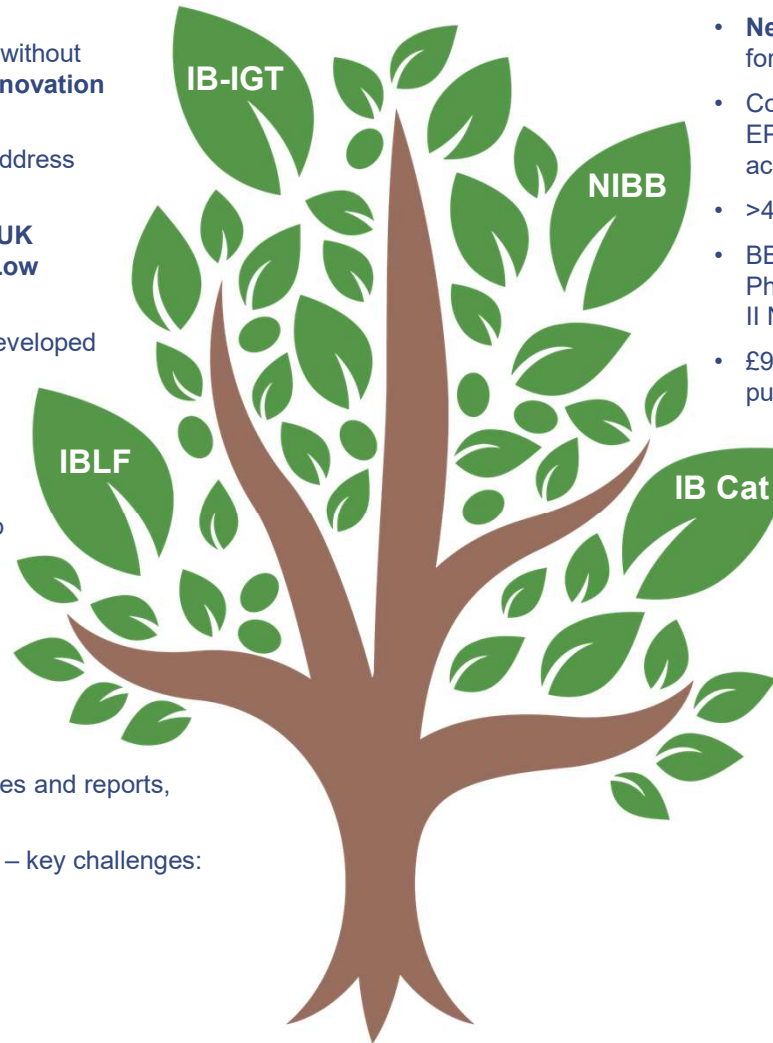
Task 1 aims:

- Capture the key attributes of the biorefining landscape.
- Focus areas: the **science & innovation** landscape (research and innovation facilitation programmes), the **policy context** stimulating biorefining, and the prevailing **regulatory environment**.
- Describe how the UK's RD&I landscape has evolved over the last 10 years highlighting key investments in facilities and capabilities, where facilities have been lost, and how projects and collaborations have been used to facilitate and coordinate scale-up activities.



Science and Innovation Landscape

- The biorefining sector of today would not be what it is without the establishment of the **Industrial Biotechnology Innovation & Growth Team (IB-IGT)** in 2007.
- Its purpose was to work with industry to explore and address challenges to innovation and growth in the IB sector.
- In 2010, the IB-IGT published “**IB2025 - Maximising UK Opportunities from Industrial Biotechnology in a Low Carbon Economy**”.
- The report paved the way for key IB initiatives to be developed in the UK.
- The **Industrial Biotechnology Leadership forum (IBLF)** is a UK-government-backed initiative whose aim is to provide strategic coordination and leadership for the UK's IB sector
- Key aims:
 - **unite** industry, academia, and government
 - **promote** industrial biotechnology as a key enabler of clean growth and sustainability;
 - coordinate strategic **planning, policy** alignment, and **investment**
- The IBLF has contributed to several major UK strategies and reports, including a 2015 update to the IB2025 report.
- Despite acknowledging notable progress in the sector – key challenges:
 - **Commercialisation bottlenecks**
 - **Technical process limitations**
 - **Market & policy uncertainty**
 - **Skills and knowledge gaps**

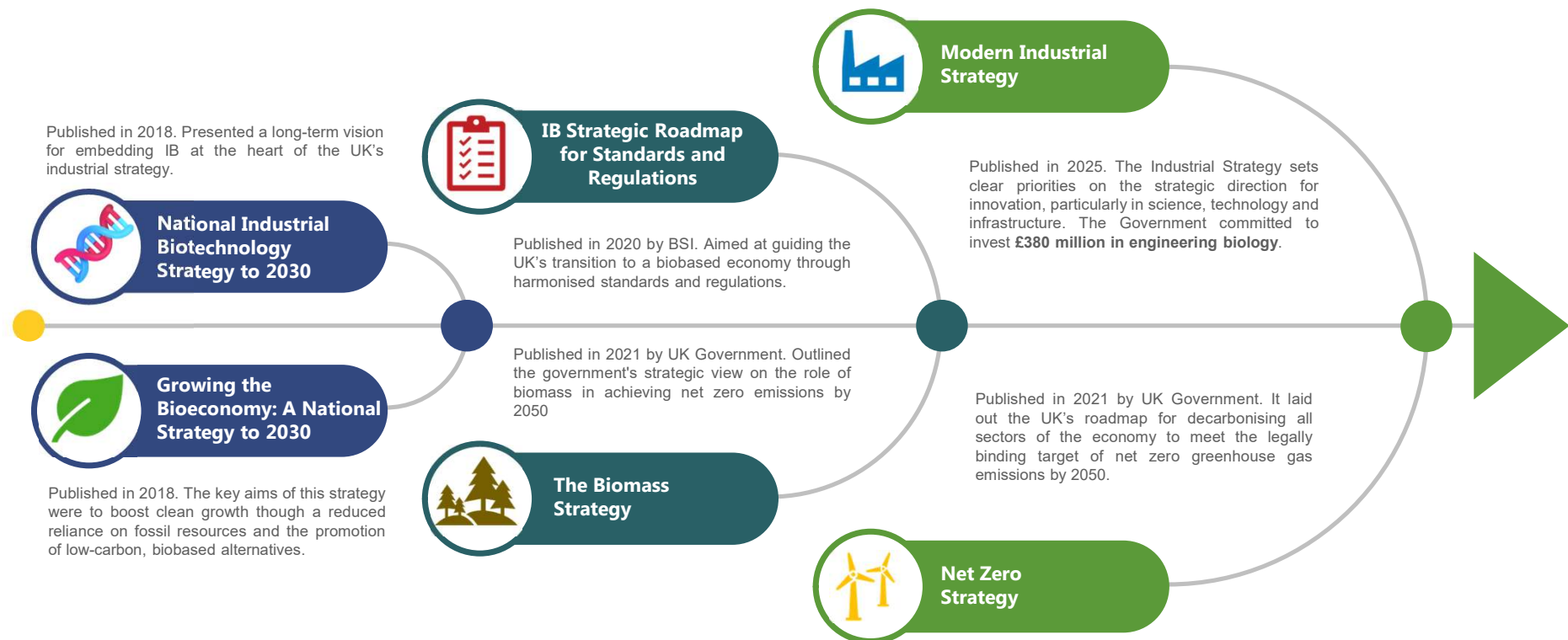


- **Networks in Industrial Biotechnology and Bioenergy (NIBB)** formed as a recommendation of the IB-IGT IB2025 report.
- Collaborative research communities funded by the BBSRC and EPSRC – with a mission to foster partnerships between academia, industry, policymakers, and NGOs.
- >40 spin-out companies created
- BBSRC initially committed **£18 million** in investment to fund the Phase I NIBBs, and an additional **£11 million** to fund the Phase II NIBB.
- £98 million in additional funding leveraged from a mixture of public and private funders.
- The **IB Catalyst** was a £76 million funding initiative jointly delivered by Innovate UK, BBSRC, and EPSRC supporting IB projects across 3 stages:
 - feasibility studies;
 - industrial research;
 - experimental development.
- ran from 2014 to 2018, and was designed to bridge the gap between early-stage research and commercialisation.
- In total, the IB Catalyst funded 82 projects across 5 key challenge areas:
 - **fine & speciality chemicals**
 - **commodity chemicals**
 - **liquid & gaseous biofuels**
 - **peptides & proteins**
 - **Chemical processing**



Policy Landscape

Strategies impacting on biorefining in the UK



Regulatory Landscape



UKCA Marking

- Post-Brexit Product Regulation
- This regulation replaces the European CE marking for products in Great Britain.
- The implication of this on the UK's biorefining sector is that biobased products must now meet UKCA requirements for safety and performance, instead of the CE marking which is used across the EU.



Environmental Permitting Regulations (EPR)

- Affects industrial processes and waste management.
- Therefore, biorefining processes that use waste feedstocks must navigate complex permitting systems, which may not be well adapted to novel technologies.



REACH

- Registration, Evaluation, Authorisation and Restriction of Chemicals Regulations
- Biorefinery chemical products must comply with REACH, which can be challenging due to a lack of clarity around the classification of bio-based vs. fossil-based equivalents, and the need for tailor testing protocols for novel bio-based substances.



Renewable Transport Fuel Obligation (RTFO)

- The RTFO sets sustainability criteria for transport fuels.
- Biofuels must meet strict sustainability and carbon intensity standards.
- Therefore, biorefining fuel products are directly affected by RTFO compliance.



Packaging Waste and Compositibility Regulations

- Governs the end-of-life treatment of packaging materials.
- Biobased materials, particularly biobased plastics, face hurdles due to a lack of harmonised standards on biodegradability, as well as unclear compostability certification pathways



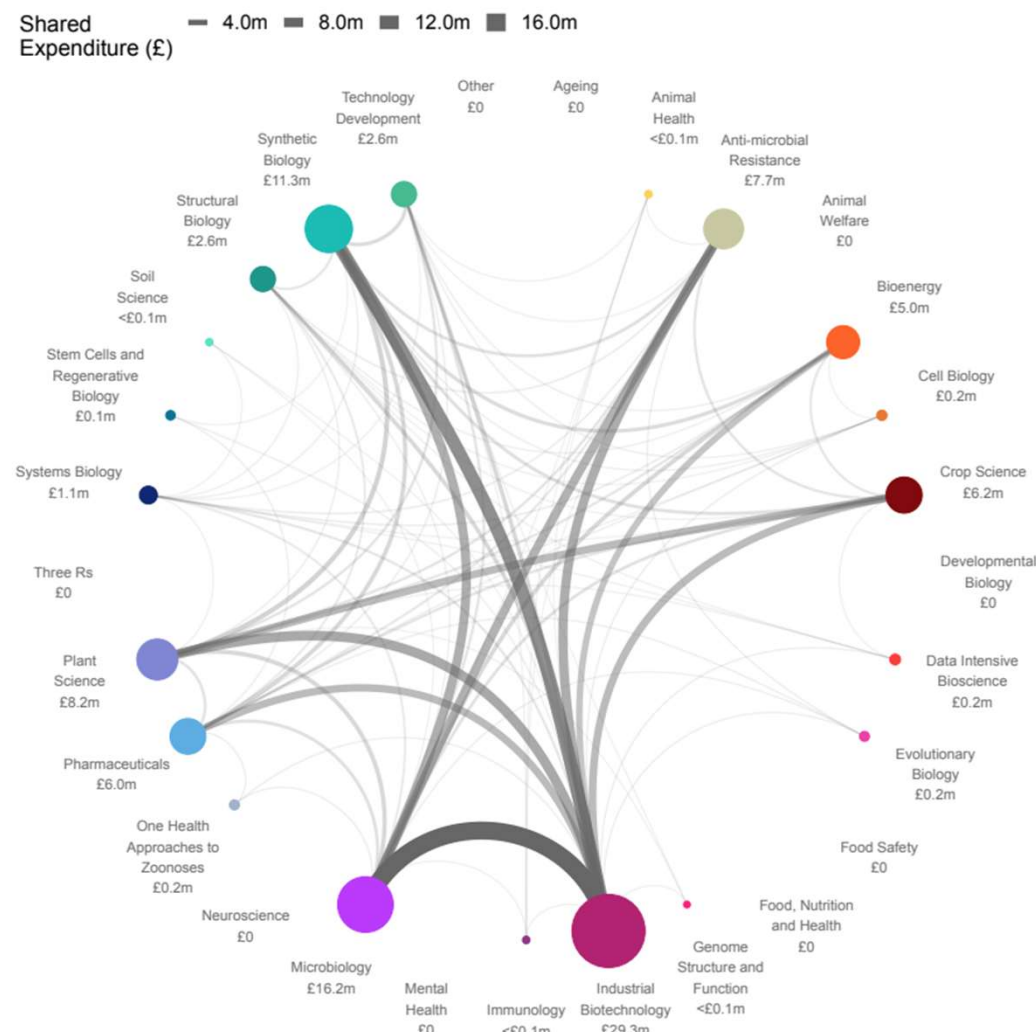
Plant Protection and Animal Feed Regulations

- Controls the use of biological agents in agriculture.
- The implications of this on biorefining is that products used in agritech applications will require risk assessments, field trial approvals, and regulatory clarity on novel biological inputs.

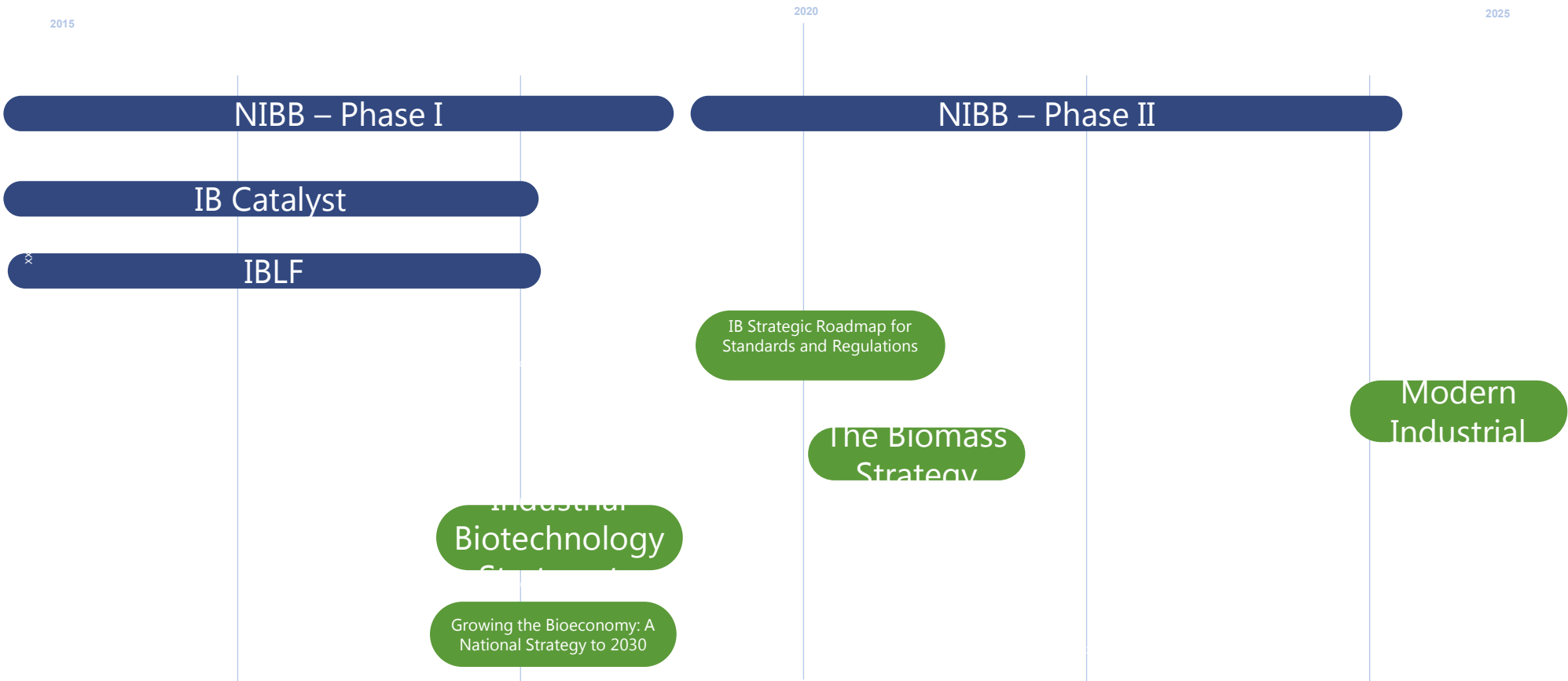


BBSRC Funding

- A report published by BBSRC titled “**Evaluation of the effectiveness and impact of BBSRC’s investments in Industrial Biotechnology**” outlined where key investments were made over a ten-year period (2010/11 to 2020/21) in IB related initiatives.
- It revealed that the total investment over this period was roughly **£413 million, including £42.4 million in co-funding** from EPSRC and Innovate UK.
- The report outlined that **BBSRC’s IB investments have supported the generation of new knowledge across the breadth of the IB research area.**
- BBSRC’s investments in IB had contributed to an excellent level of IP generation and covered a good variety of potential applications.
- Furthermore, BBSRC’s IB investments had made very positive contributions to the establishment of spin-out companies.
- For example, **9% of grants with start dates between 2013 and 2017** reported a spin out arising from their grant.
- In total, IB investment had contributed to the establishment of **44 spin-out** companies with incorporation years between 2010 and 2021.
- **Today : the Bioeconomy added £153 billion in gross value added (GVA) to the UK economy in 2022 and supporting approximately 4 million jobs nationwide.**



Biorefining Timeline (2015 – 2025)





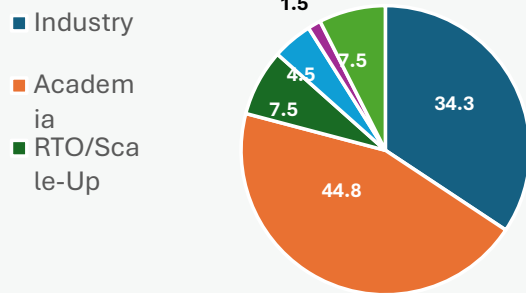
Stakeholder Perspectives

UK Biorefining: Past Lessons, Future Opportunities

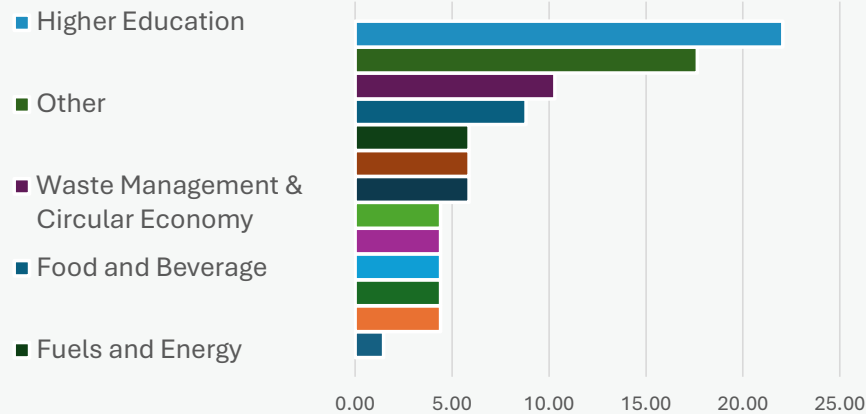


Stakeholder engagement

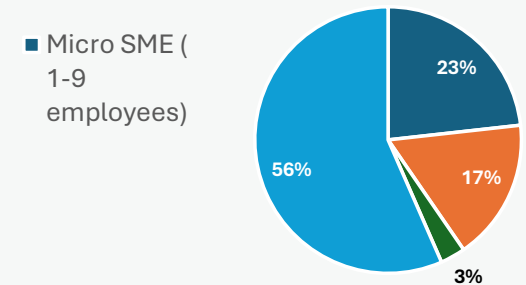
Survey Respondents by type



Survey respondents by sector



Survey respondents by size of organisation

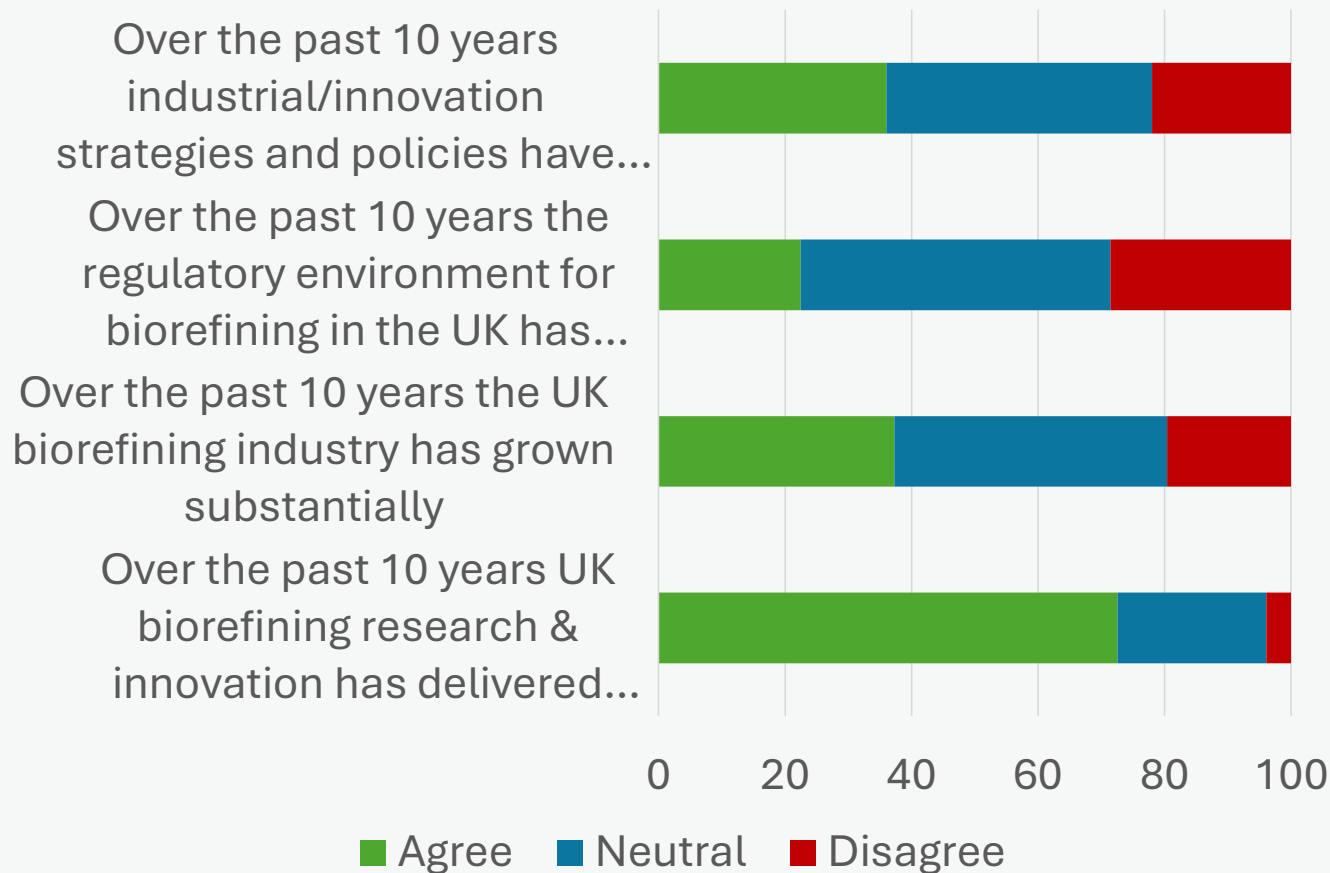


- In total 76 individuals responded to the online survey, from 70 different organisations.
- 40% of respondents were from academia, and 35% from industry.
- 41 individuals were interviewed, from 39 organisations. Of these organisation, 16 were from academia and 23 were from industry.

03 A Decade of Progress



How has UK biorefining developed in the past 10 years?



Strategy not turned into policy



“seek evidence on the demand, benefits and implications (for example the impact on recycling streams) of a standard for bio-based and biodegradable plastics areas to address the regulatory landscape that impacts on the bioeconomy.”

Withdrawn and replaced with



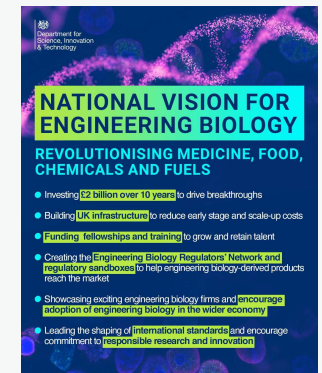
Where fossil-derived fuels or plastics are required, biomanufacturing will deliver bio-based and waste-derived alternatives in 80% of the cases by 2035”.



Focus on BECCS in short to medium term

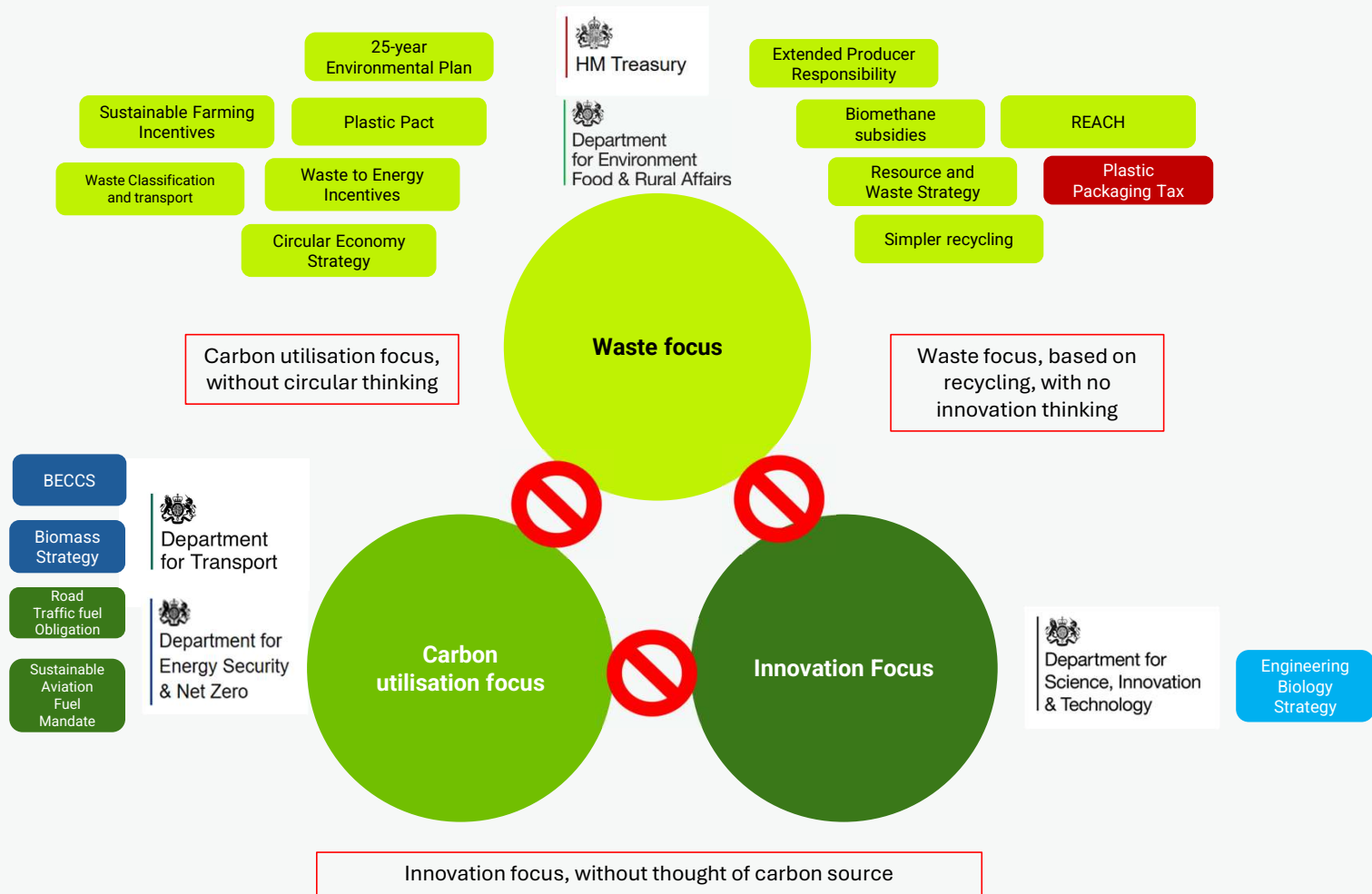


“we anticipate that bio-based polymers will produce significant savings of 498 ktCO₂e in the future”



Unclear on next steps and if wider bioeconomy is considered in remit

Strategy not turned into policy





From Research to Revenue: The Case for Scaling UK Bio-based Innovation

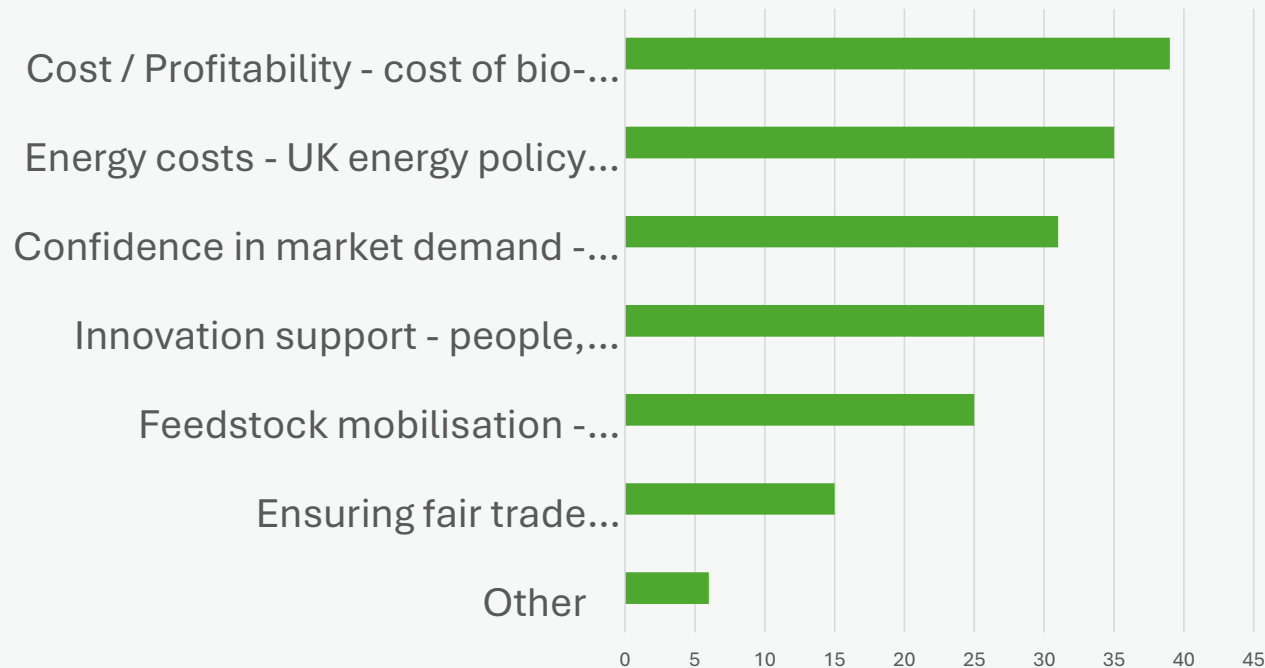
An analysis of the potential GVA and employment benefits of addressing UK scale-up market failures

- BB-REG-NET report evidences that UK bio-based research and innovation are not yet translating into economic growth at scale.
- This research has revealed that only 24% of UK bio-based companies operate internationally, yet these few account for nearly double the revenue and job creation compared to their UK-only peers.
- High-potential businesses are moving abroad to scale—seeking better infrastructure, investment, and regulatory environments.
- If we close the gaps in scale-up support, we could unlock over 4,000 new jobs £300–£500 million in additional GVA for the UK economy.

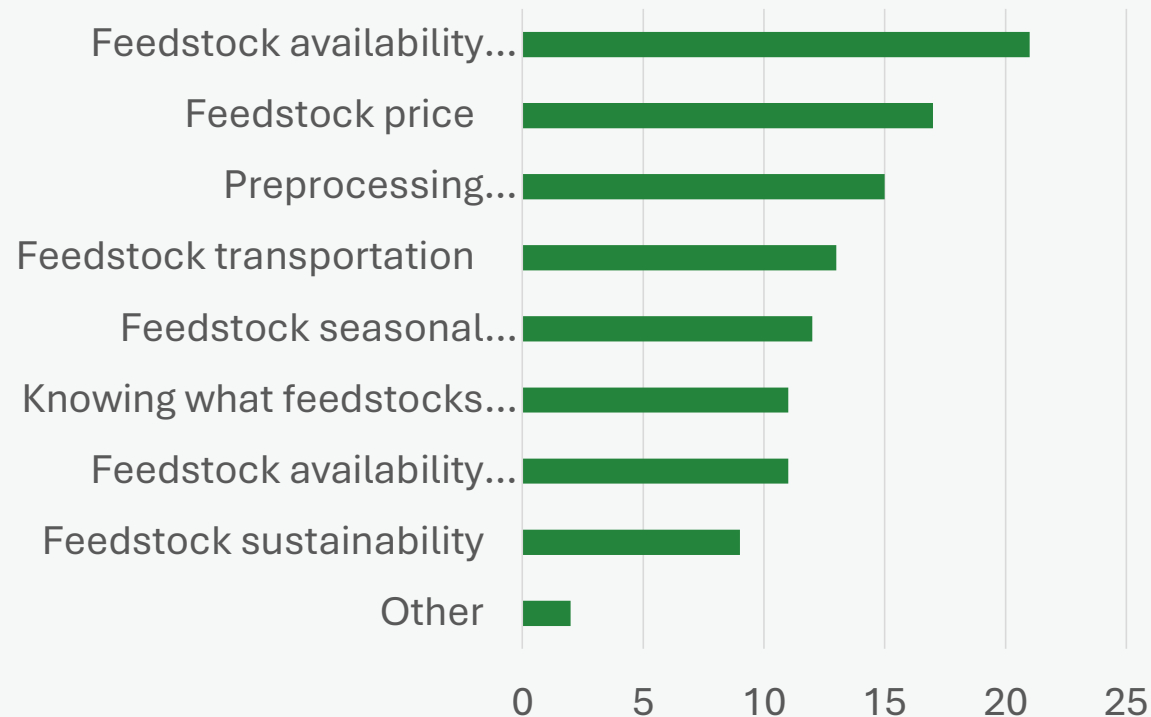
04 Current Landscape and Challenges



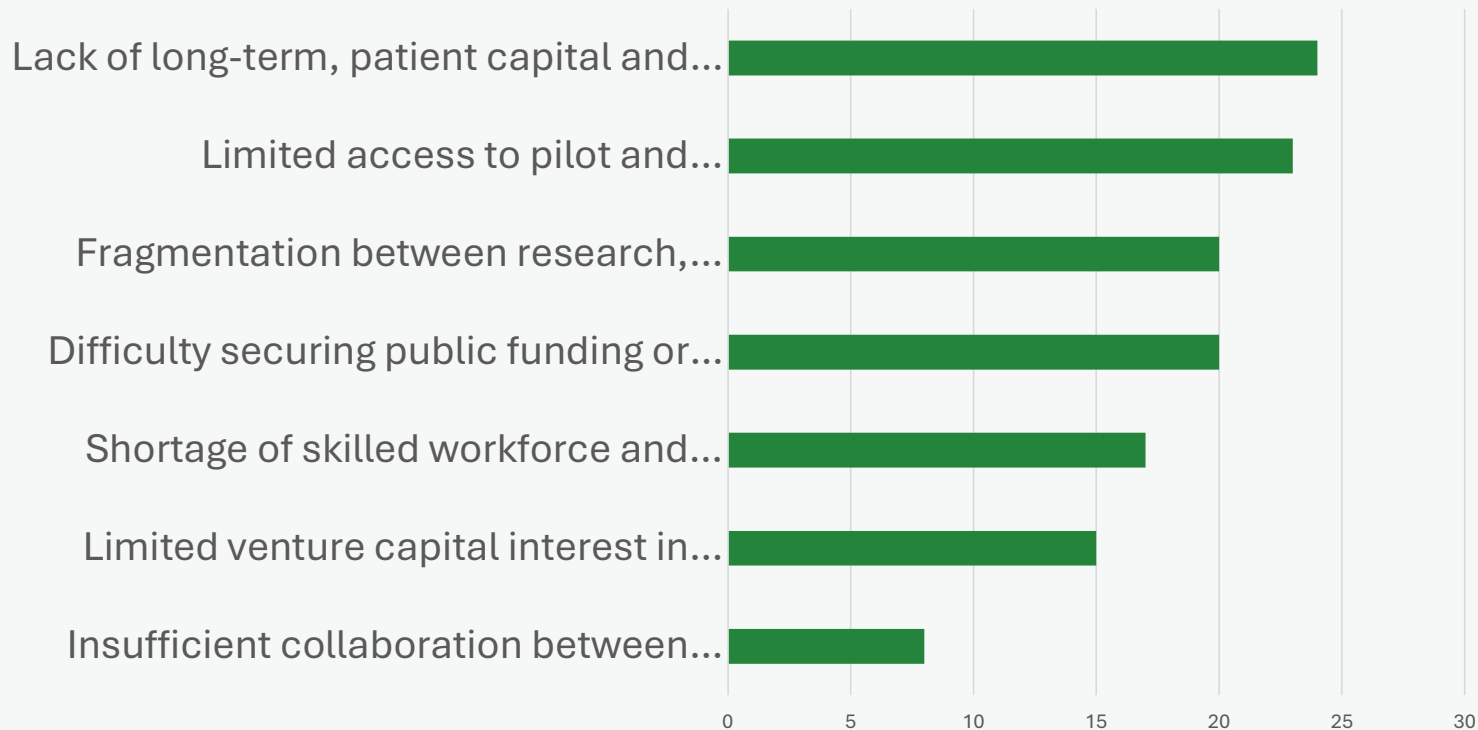
What are the main barriers to the adoption of biorefining in the UK?



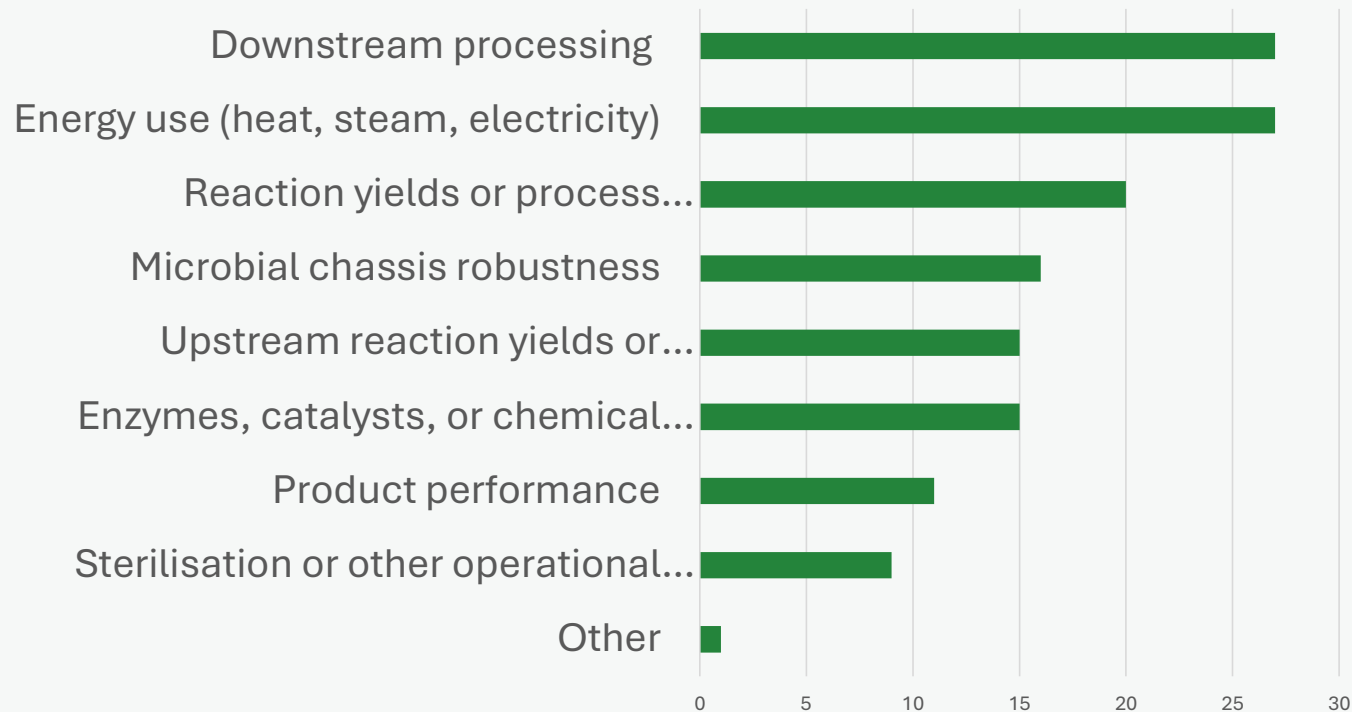
In terms of feedstock mobilisation, which aspects are barriers to biorefining in the UK?



In terms of innovation support, which are barriers to biorefining in the UK ?



In terms of cost/profitability, which are barriers to biorefining in the UK?



In terms of confidence in market demand, which are barriers to biorefining in the UK?



Market pull: Government procurement

Key findings:

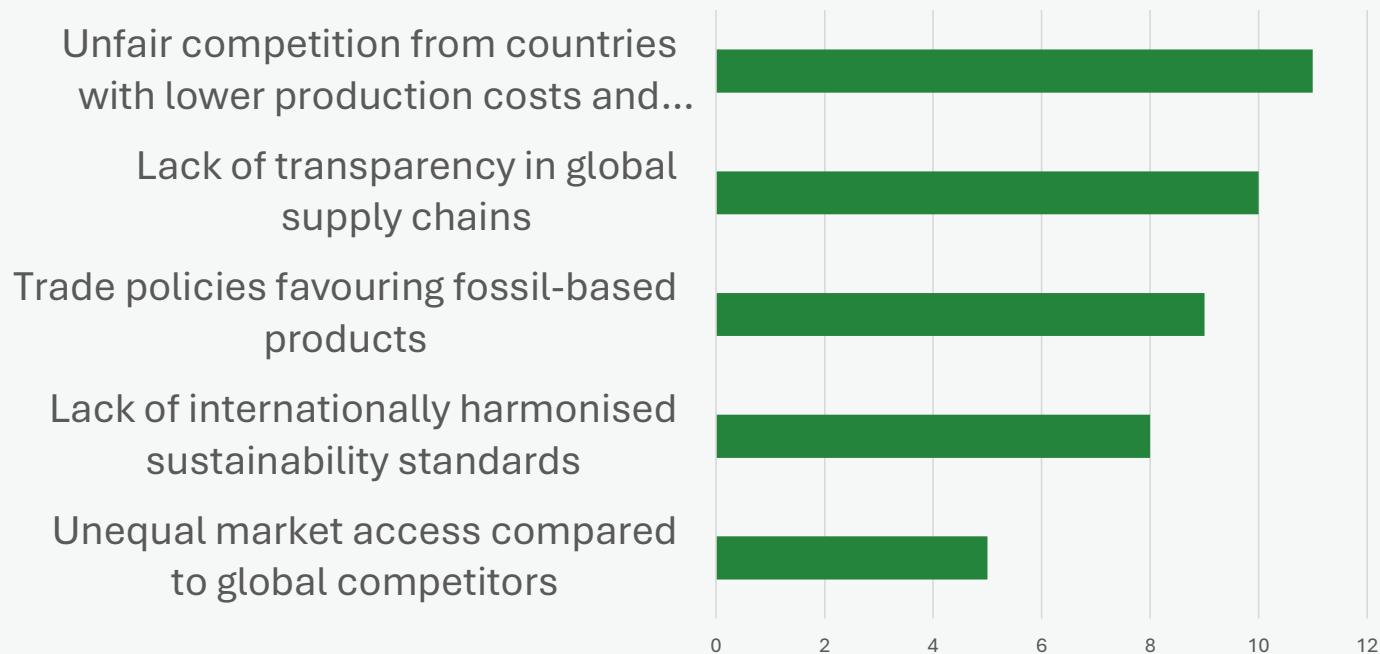
- Green public procurement can act as an immediate catalyst for UK-manufactured, biobased products.
- A search for NHS procurement of single-use products returned a total of 670 contracts, valued at £6.7bn.
- Of these, 407 contracts (60%) were assessed as having high bio-based potential.
- Based on scoped analysis, NHS procurement of bio-based plastic products could present a multi-million-pound opportunity, with average contract values of between £30m and £120m annually.
- Legally binding net zero targets and explicit acknowledgement of the role of bio-based polymers in achieving significant carbon savings within the NHS 'Delivering a 'Net Zero' National Health Service' report provide powerful legal and environmental incentives to switch to bio-based products.

Recommendations:

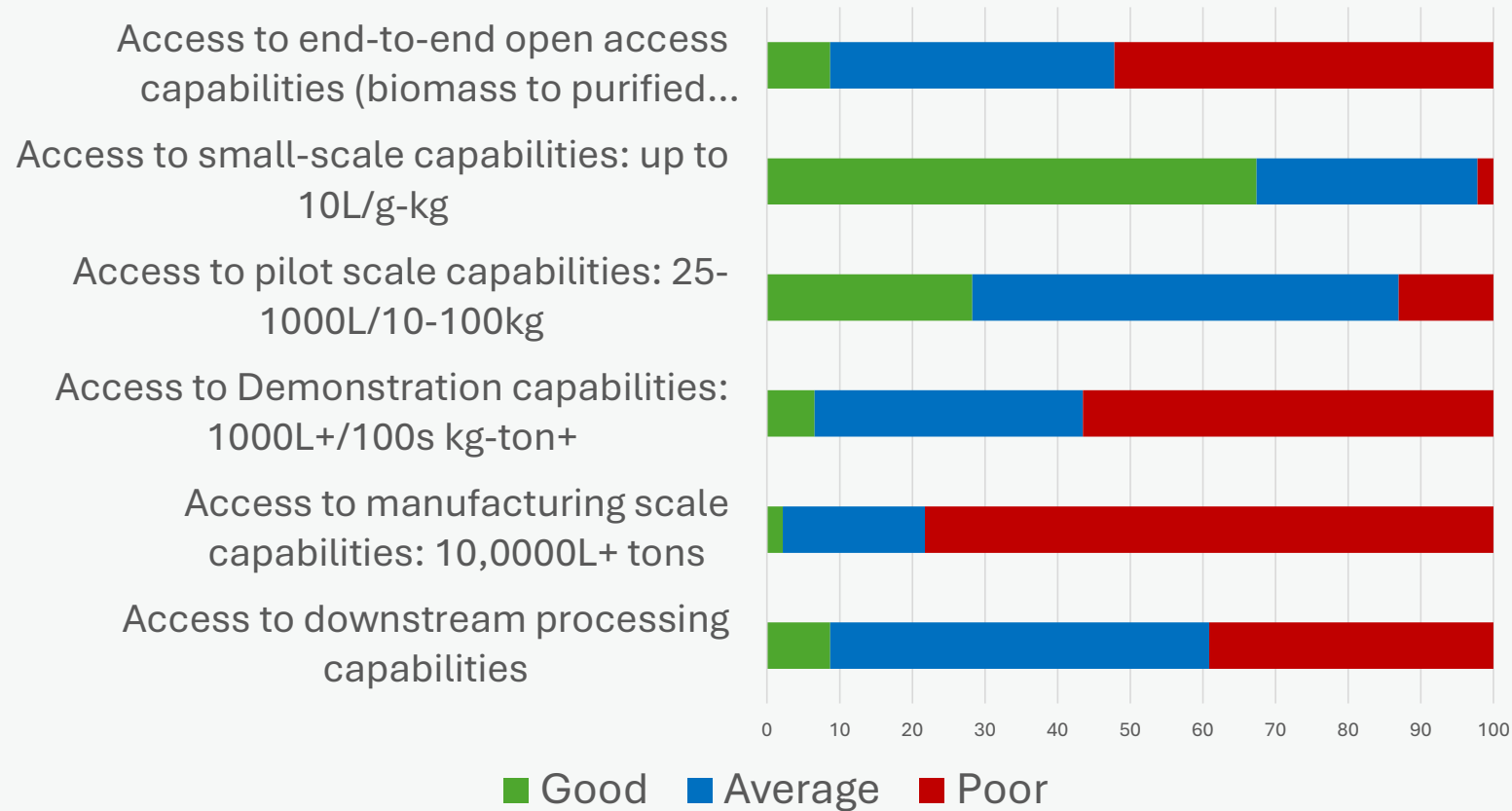
- A pilot NHS procurement programme aimed at substituting fossil-based single-use plastic products with UK-manufactured bio-based alternatives could help validate market feasibility and provide a blueprint for broader adoption across the NHS and other public services.
- A government-led bio-preferred procurement scheme could help to provide suppliers with predictable demand, enabling investment in UK manufacturing capacity and unlocking economies of scale.
- A Green Supply Transition Fund offering matched grants or tax credits to NHS suppliers could help to incentivise supply chain transformation, encouraging existing suppliers to introduce new bio-based product lines.



In terms of ensuring fair trade, which are barriers to biorefining in the UK?



Access to UK Scale-up Capabilities



Other challenges and opportunities



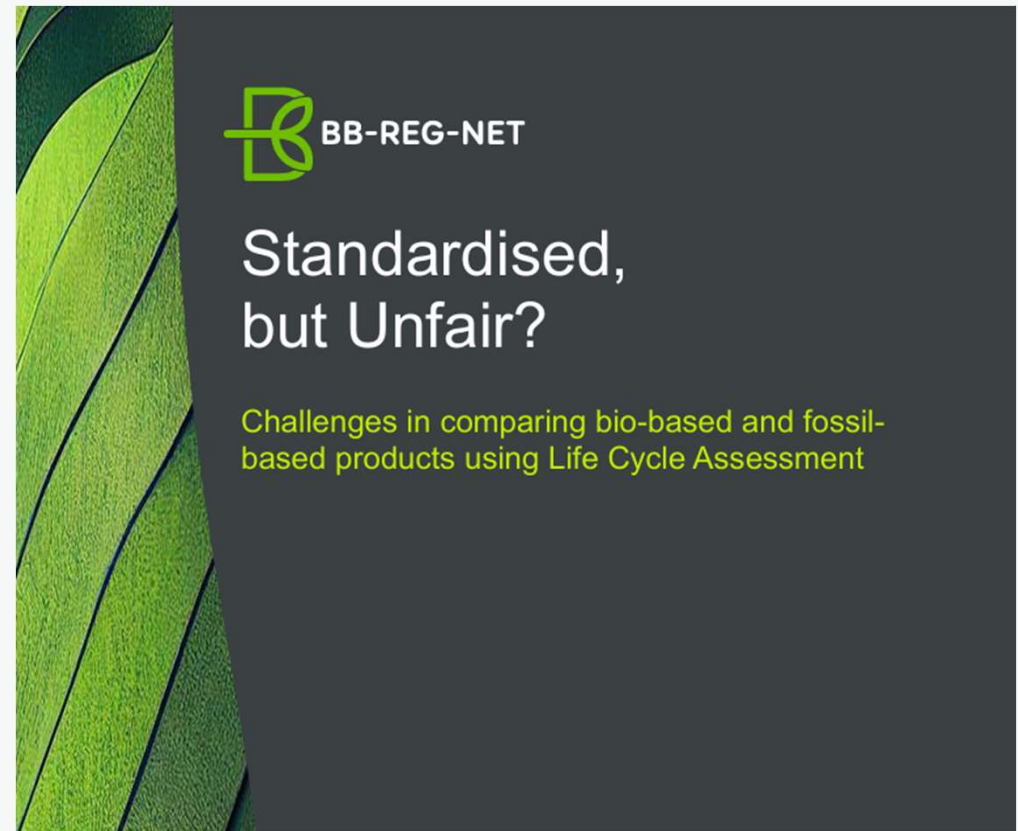
- Incinerating UK plastic waste generates an estimated 3 million tonnes of fossil CO₂ annually - equivalent to the carbon footprint of major cities like Manchester or Glasgow.
- With recovery rates for plastic packaging stagnant at ~50%
- Bio-based raw materials cost 2-3 times more to produce than fossil-based equivalents, with some stakeholders reporting cost ratios as high as 7:1.
- Analysis of the impact of the Emissions Trading Scheme (ETS), Extended Producer Responsibility (EPR), and the Plastic Packaging Tax (PPT) schemes points to a policy misalignment with stated environmental goals:
 - The EPR scheme actually penalises bio-based alternatives by classifying materials like PLA as "hard to recycle". Under current plans this will result in a doubling of base EPR fees to ~£520 per tonne, effectively increasing production costs by ~20%.
 - The PPT treats bio-based plastics in exactly the same way as virgin fossil plastics, while exempting fossil plastics with 30% recycled content - creating a perverse incentive against pure bio-based solutions.
 - The proposed ETS extension to waste incineration offers the only meaningful advantage for bio-based plastic products, but makes little inroad into increasing cost competitiveness, particularly when EPR and PPT costs are applied to bio-based alternatives.
 - Even if bio-based products were exempted from all fees and charges (EPR, ETS, PPT) they would still be twice as expensive to produce on average than their fossil-based counterparts.

Other challenges and opportunities

- For nascent sectors such as bio-based materials, LCA can present significant challenges. Existing standards were often developed with mature, fossil-based systems in mind, resulting in frameworks that may inadvertently disadvantage newer technologies.
- As a result, LCA can sometimes misrepresent the true environmental potential of emerging solutions, impeding their development and acceptance in markets and policy.

Main Findings:

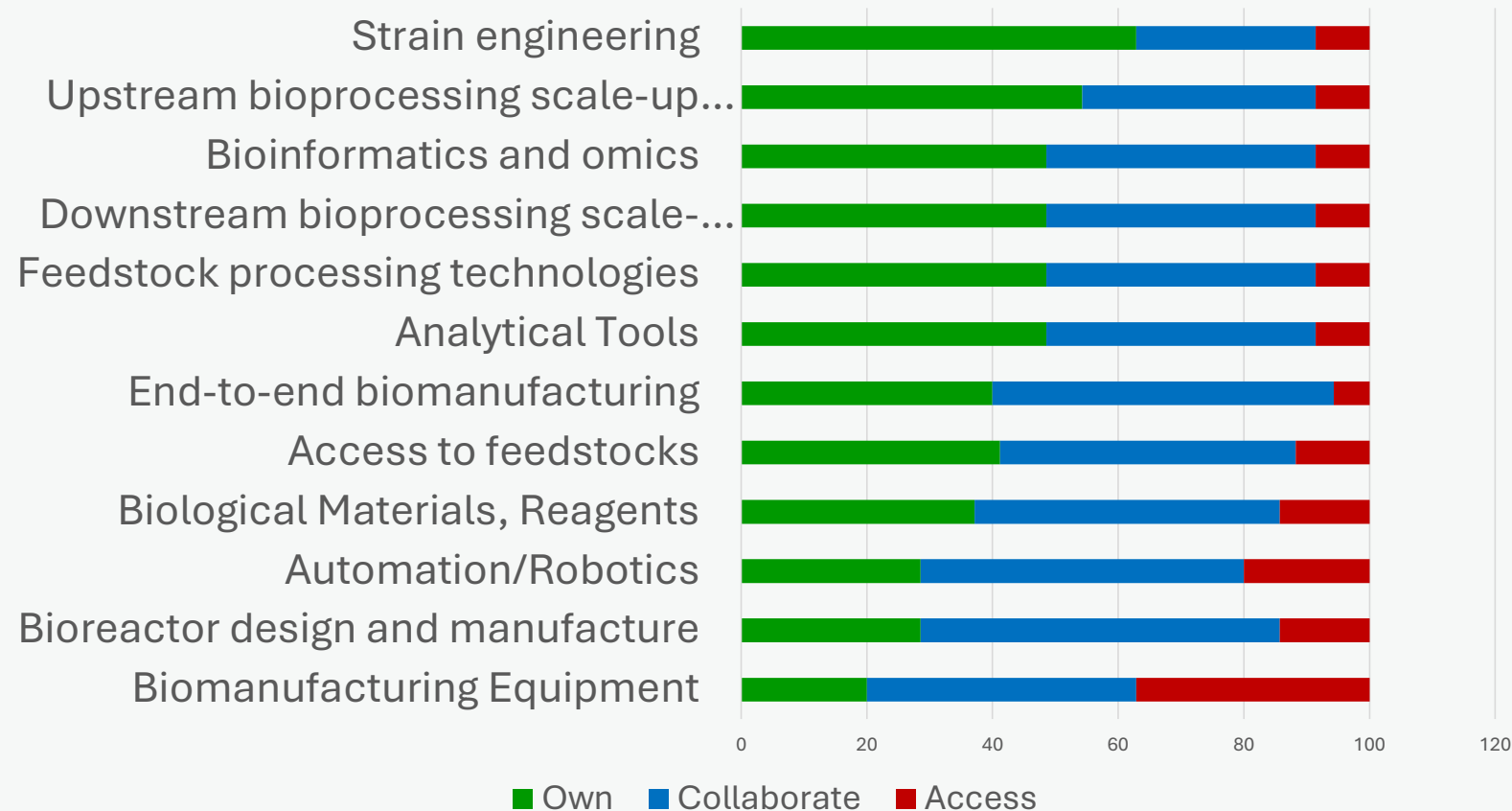
- Biogenic carbon treatment frequently has a negative impact on fair comparison
- End-of-life treatment emerges as the largest barrier to comparability
- Method consistency, while not often actively disabling, is rarely supportive. Among the three issues, end-of-life treatment had the most significant negative impact on comparability, followed by implicit bias in methodology or rules, and incomparability between material types.
- On average, ISO standards were slightly disabling, while EN standards were generally more enabling, with most enabling standards coming from the EN set.
- Urgent Recommendation: The adoption of EN 18027:2025 Bio-based products - Life Cycle Assessment - published in April 2025 —is a crucial step towards enabling fair and consistent comparison between fossil and bio-based materials.



05 Future of UK Biorefining

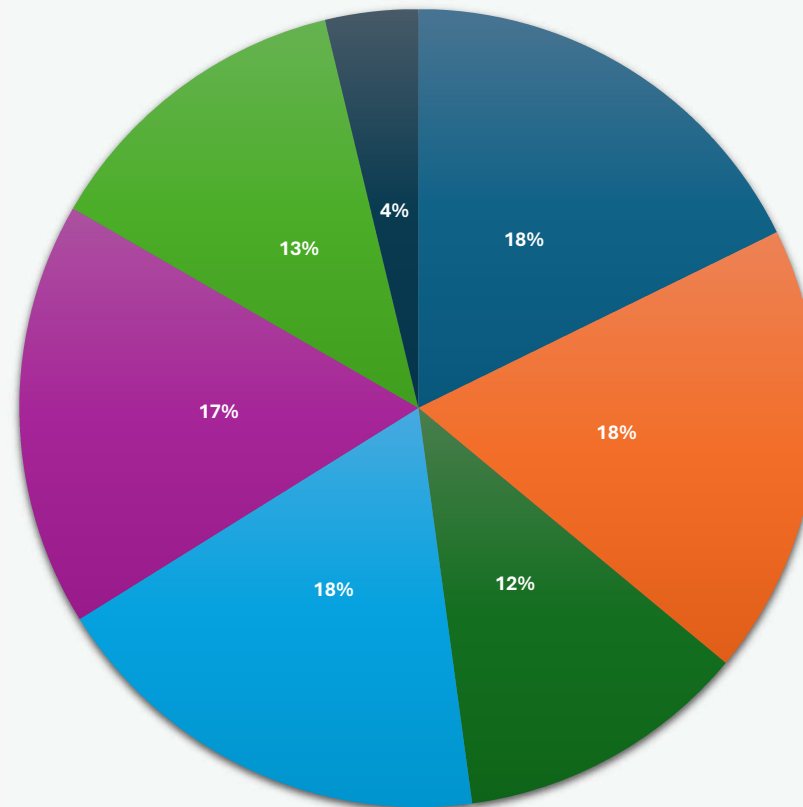


Future of UK Biorefining



How can the UK differentiate itself from other countries

- Valorisation of waste/feedstock streams
- Integration of biorefining with engineering biology, AI, or automation
- Sustainability standards and certification



DISCUSSION

What measures could accelerate UK biorefining?

- Strategy
- Policy/Regulations
- Funding (UKRI)
- Investment
- Entrepreneurship and Skills
- Infrastructure and Technology Integration

14 | 10 | 2025

BBNet Opportunities Research

Preliminary Economic Analysis



Agenda

01 Approach

02 Market Profile

03 Growth

04 Questions

01. Approach

Approach & Methodology

Overview of Approach



02. Profile

Market Profile

Headline Economic Metrics



- ~1,200 companies involved in activities relevant to BBNet
 - Sustainable Feedstock Supply (15%)
 - Biotechnology Equipment & Services (22%)
 - Biomaterials & Bioplastics (22%)
 - Biocatalysis & Fermentation (9%)
 - Food Waste Biorefining (9%)



- ~1,100 SMEs (93%)



- ~£12.5bn in revenues (2024)



- 20,300 employees



- ~£5.1bn in GVA

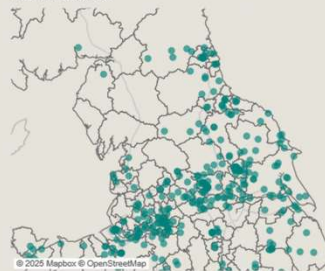
Geographic Profile

- BBNet relevant companies throughout the UK
- Clusters in London, the Yorkshire and the Humber, the North West, the North East and in Scotland

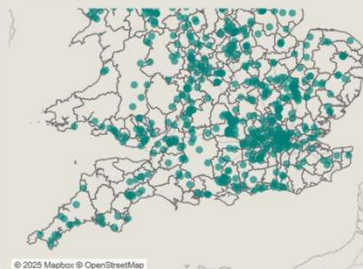
Scotland



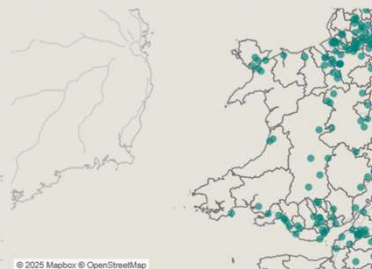
North England



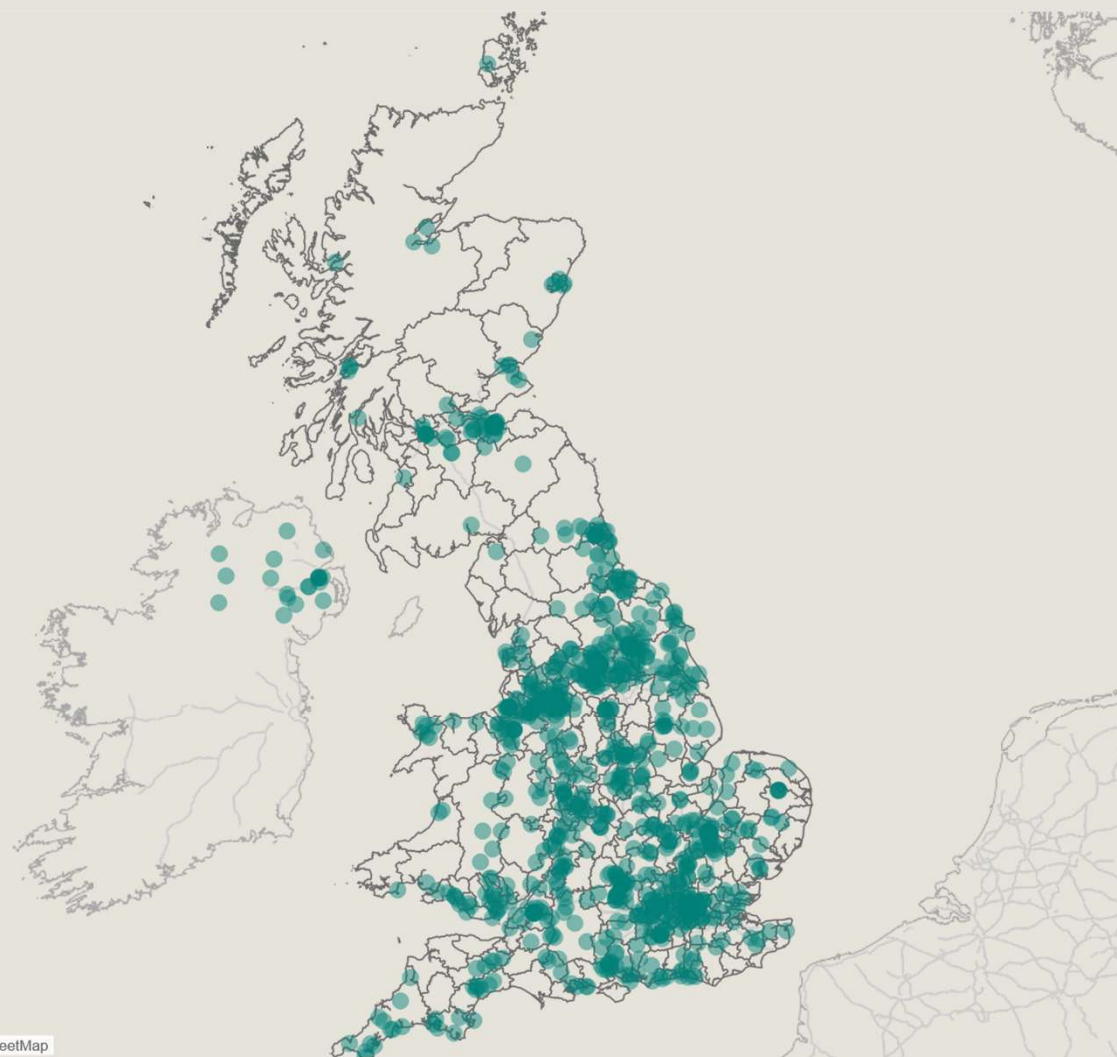
South England



Wales



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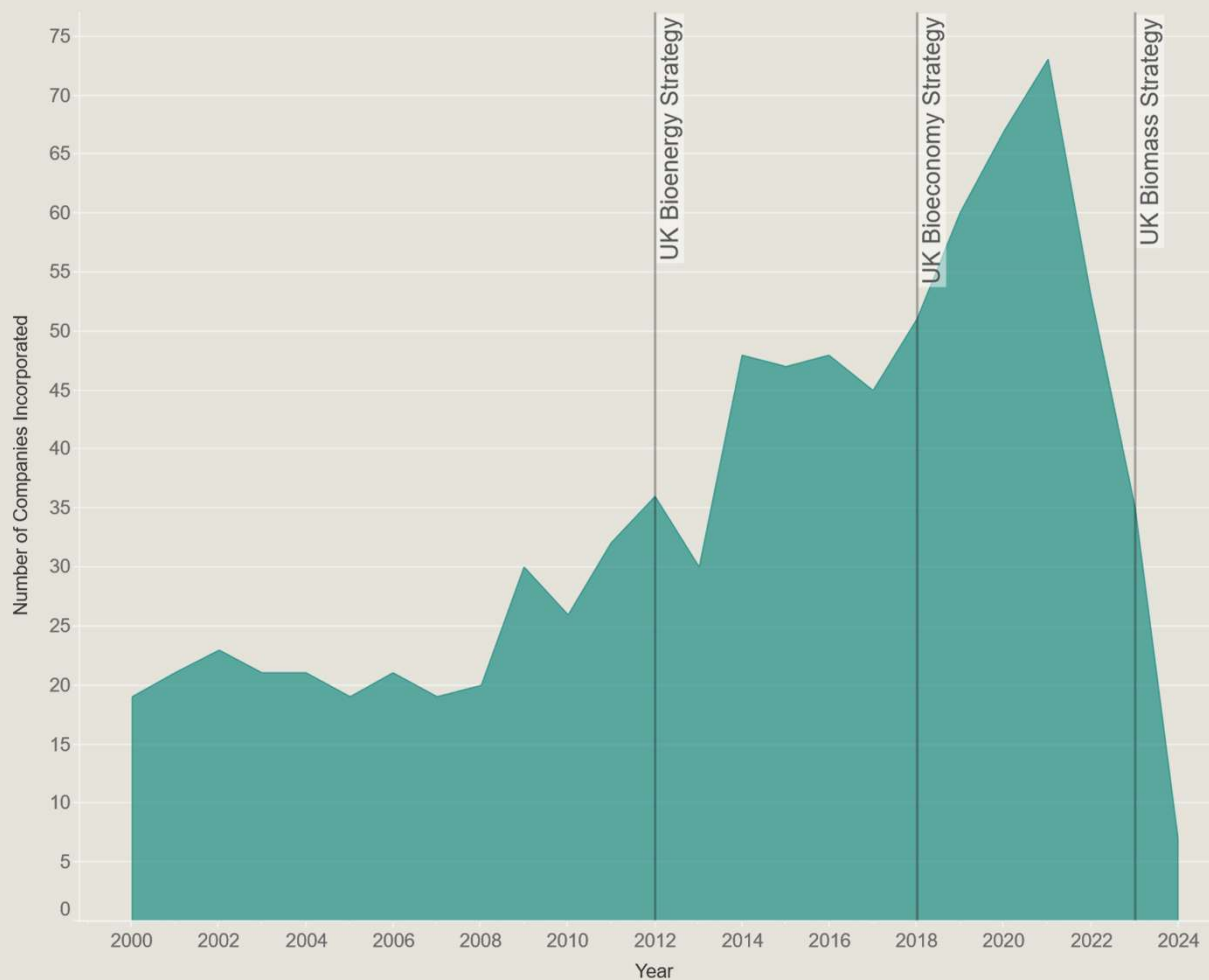
Company Size by Segment

- Greater share of large companies involved in chemicals and food waste biorefining.
- Synthetic biology and biorefinery optimisation segments comprise greater shares of smaller companies.

	Micro	Small	Medium	Large
Advanced Biofuels	42.5%	27.5%	22.5%	7.5%
Anaerobic Digestion Systems	47.7%	31.4%	12.8%	8.1%
Bio-based Platform Chemicals	40.0%	15.6%	31.1%	13.3%
Biocatalysis and Fermentation	55.4%	25.7%	10.9%	7.9%
Biomass Pretreatment Technologies	46.2%	46.2%	7.7%	
Biomaterials and Bioplastics	49.6%	28.1%	15.4%	6.9%
Biorefinery Analytics and Optimisation	62.5%	37.5%		
Biorefinery Process Integration	66.7%	20.0%	6.7%	6.7%
Biotechnology Equipment and Services	51.9%	26.5%	15.4%	6.2%
Food Waste Biorefining	49.4%	24.7%	14.6%	11.2%
Sustainable Feedstock Supply & Processing	50.0%	28.7%	14.6%	6.7%
Synthetic Biology Applications	52.6%	39.7%	5.1%	2.6%

New Company Incorporations

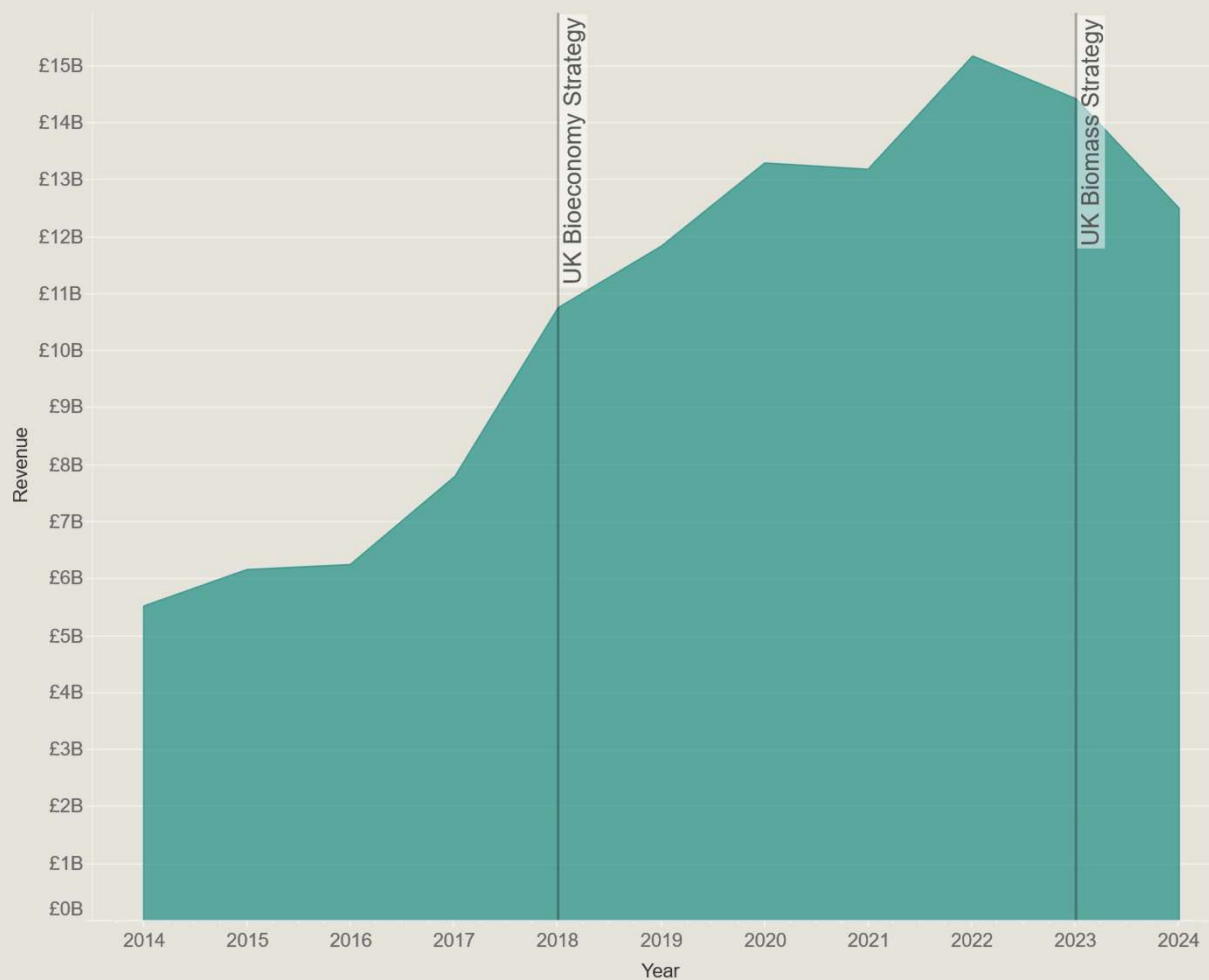
- Steady increase in new company incorporations between 2008 and 2020.
- Peak new company incorporations in 2021.
- Fewer new companies incorporated since 2021*.



* low number in 2024 in part due to a lag in company data records.

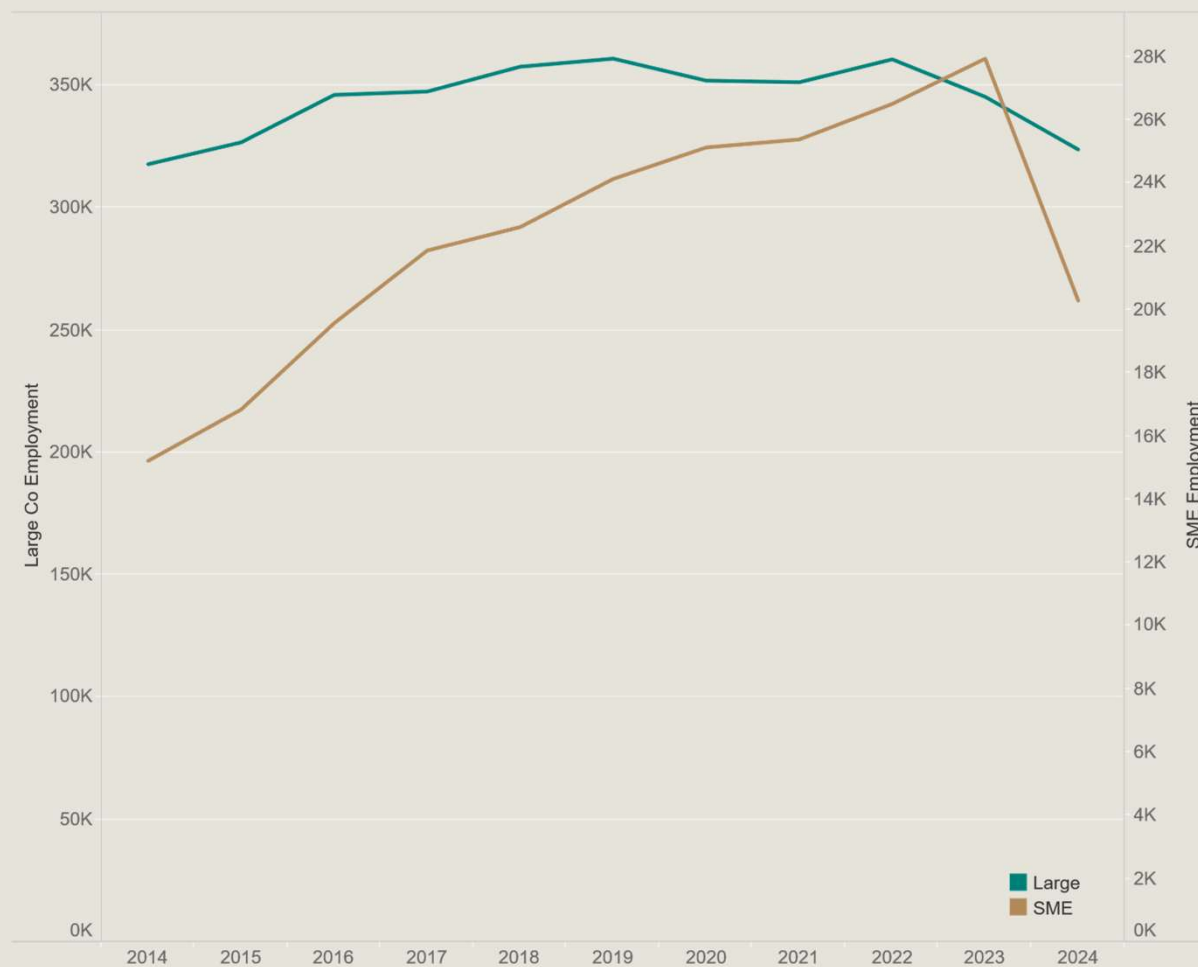
Annual Revenues

- Steady growth in **SME revenues** over the past decade.
- **SME revenue** growth slowed / reversed since 2022.
- **Large company** revenues follow a similar trend:
 - grew steadily between 2014 and 2022 before flatlining between 2022 and 2023 and declining by ~10% in 2024.



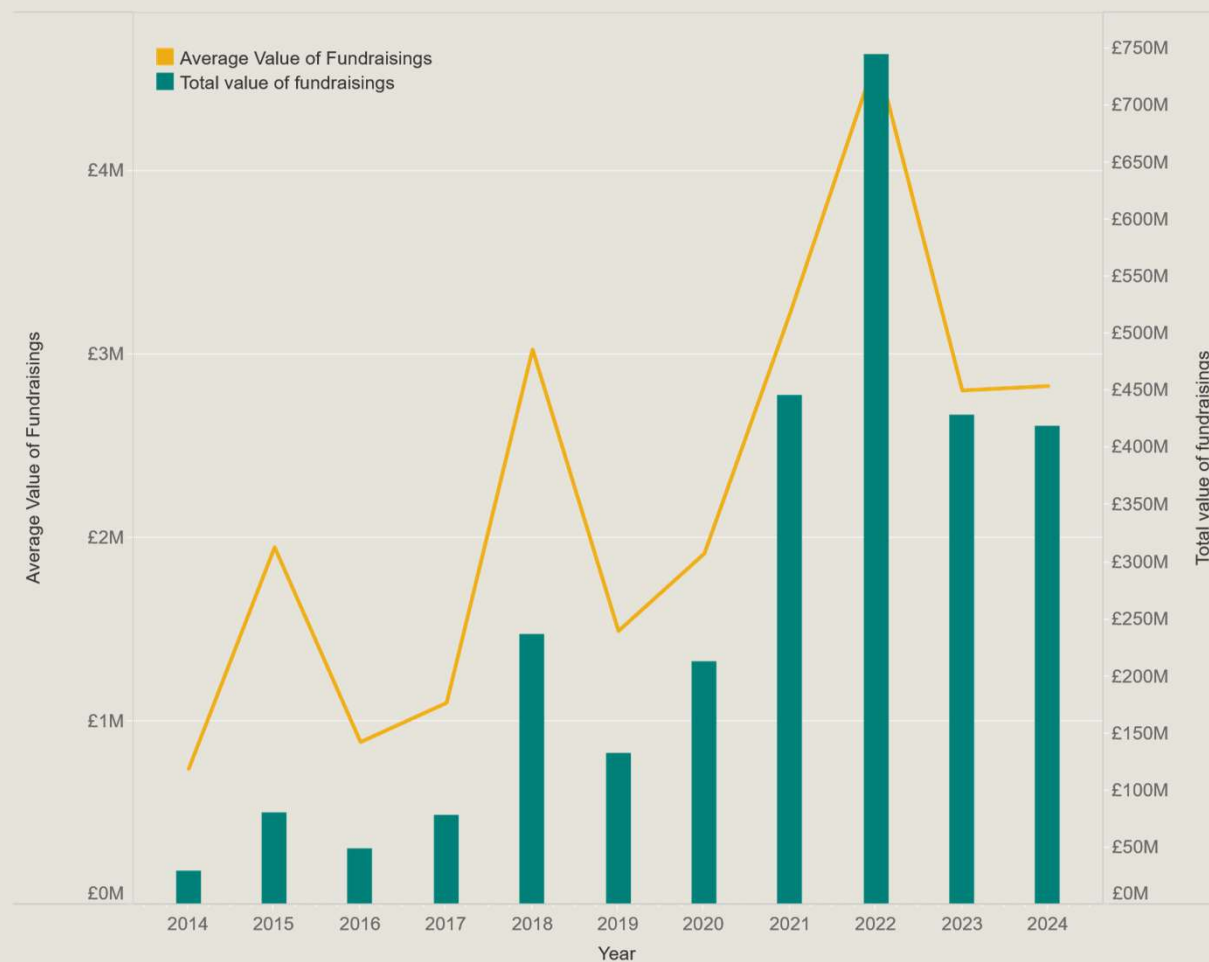
Annual Employment

- Strong growth in **SME employment** between 2014 and 2023 – notable dip in 2024 (~25%).
- **Large company employment** relatively flat since 2017 and declining since 2022.



Fundraising Metrics

- Secured 1,260 fundraisings totalling £3.2bn since 2007 (chart shows from 2014 only).
- Overall upward trajectory in both number and value of fundraisings over time, until 2022.
- Total value of fundraising and average value per raise fell in 2023 and remained flat in 2024.



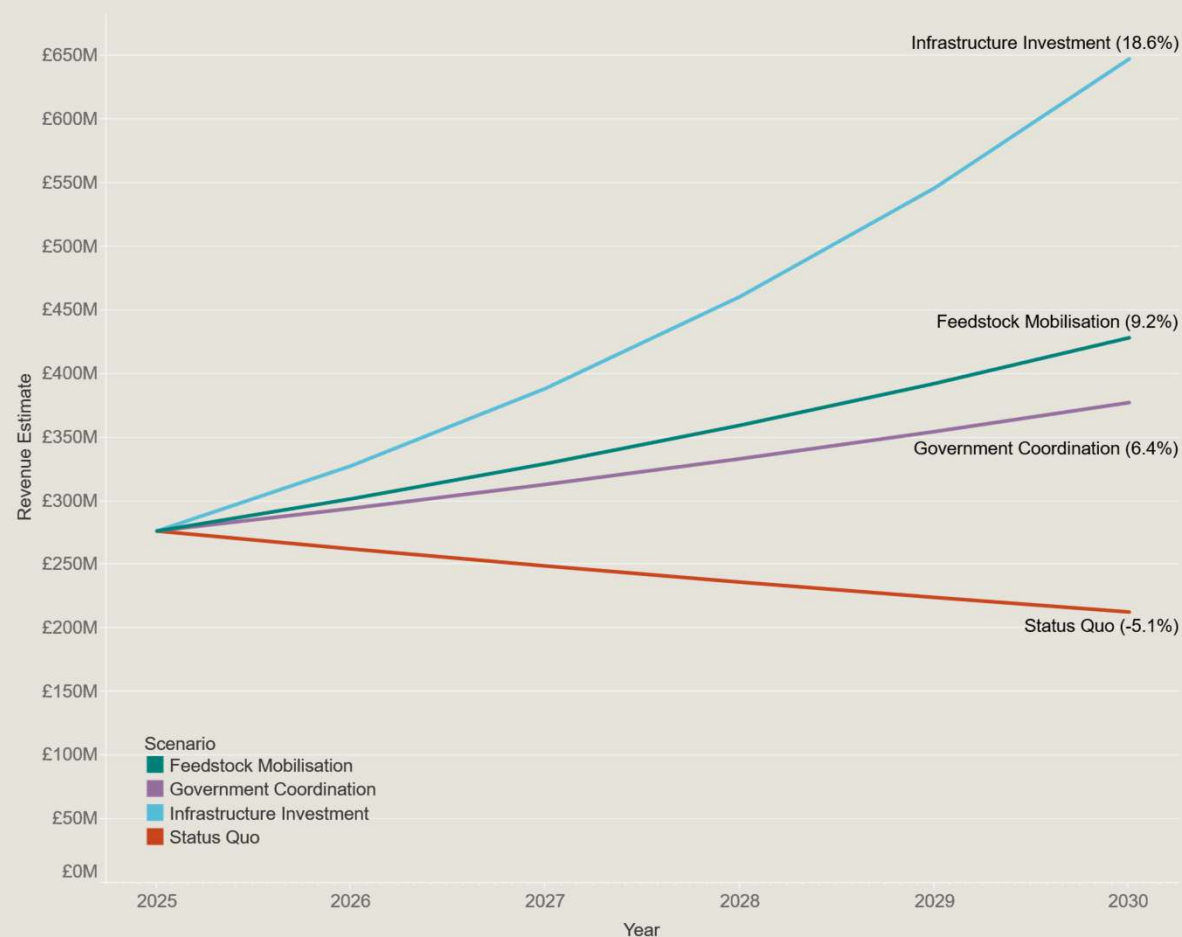
Funding by Segment

- Highest total fundraising value among biomaterials and bioplastics companies (£707m).
- Highest 'per fundraise' value among synthetic biology companies (£8.2m).



Future Growth Scenarios

- Respondents believe investment in scale up infrastructure would have the most positive impact on growth (+18%) followed by feedstock mobilisation and government coordination (+9% and +6% respectively).
- Results also suggest that any of the proposed actions are better than doing – reflected in overall negative growth estimates (-5%) returned under that scenario.
- Gap between future revenue under the status quo and highest impact scenarios is wide – amounting to almost £0.5bn in lost revenues to bio-based SMEs.



14 | 10 | 2025



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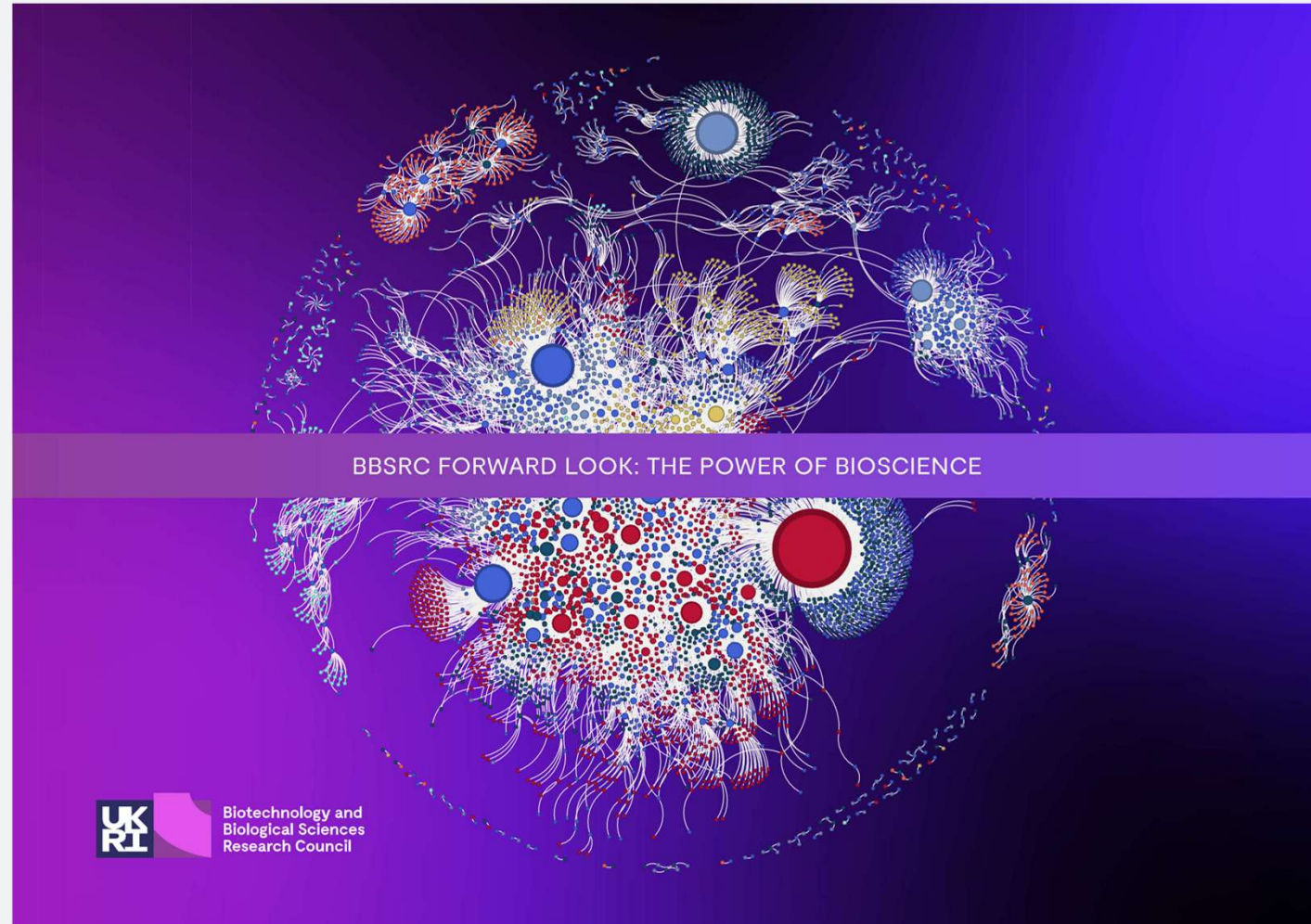
BBSRC Forward Look and funding opportunities

Stephen Webb



BBSRC Forward Look for UK Bioscience

- BBSRC has launched a refreshed Forward Look for UK Bioscience
- Developed through broad and deep consultation with stakeholders across the landscape
- Long-term and high-level vision, ambition and commitments
- Underpins Strategic Delivery Plans (SDP) and provides a foundation for our input to Spending Reviews and allocations processes.



BBSRC Forward Look: The Power of Bioscience

Our vision is to harness the power of bioscience to deliver a healthy, sustainable and resilient future

Our ambition is to deliver three high-level and interconnected impacts

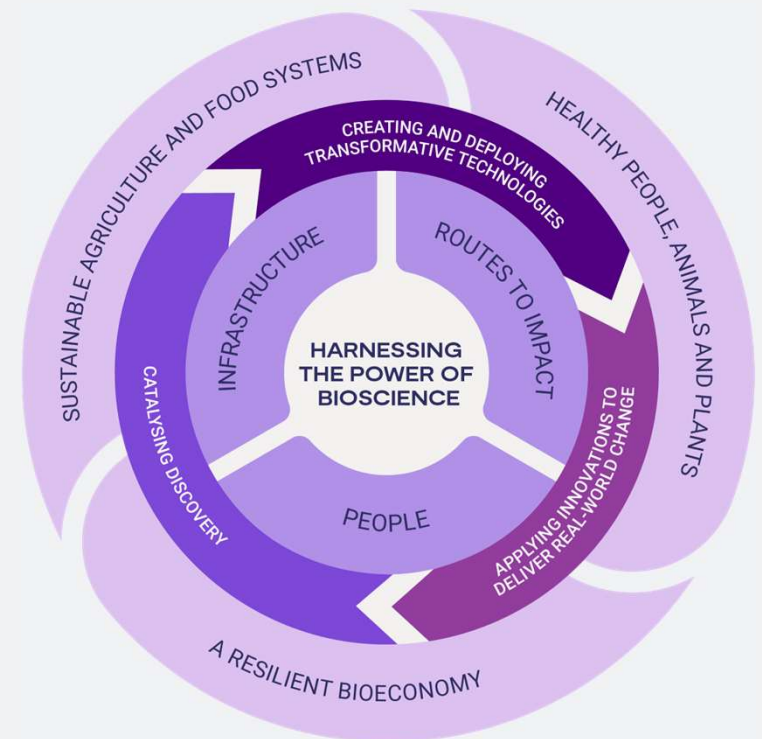
- Healthy people, animals and plants
- Sustainable agriculture and food systems
- A resilient bioeconomy

We will achieve our ambition through

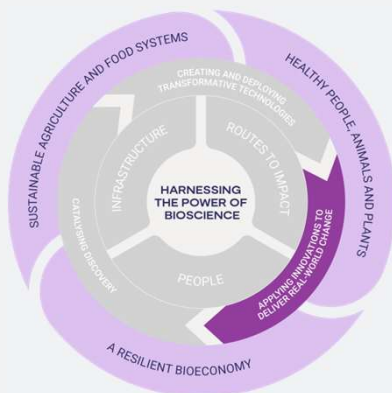
- Catalysing discovery
- Creating and deploying transformative technologies
- Applying innovations to deliver real-world change

Our commitment

- To provide leadership and catalyse collaborative working to support the people, infrastructure and routes to impact that will deliver progress.

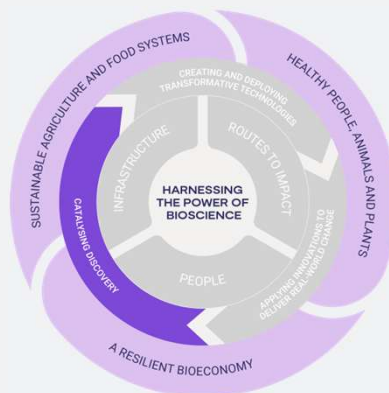


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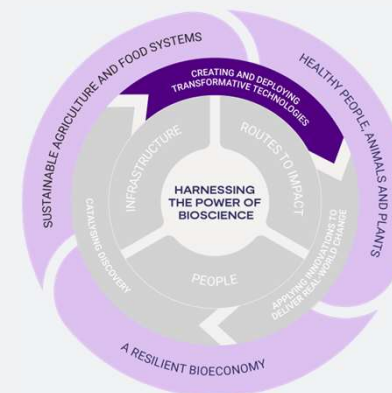
We will invest and partner to unlock biosolutions to key challenges facing the world, and new possibilities for shared prosperity:

- Advancing an integrated understanding of health
- Enhancing preparedness for future disease outbreaks
- Safe and nutritious food
- Productive and sustainable agriculture and food systems
- Transitioning to a circular economy



We will deliver conceptual advances and fundamental understanding across bioscience to lay the foundation for progress through

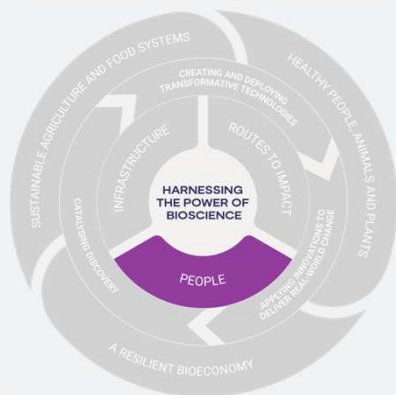
- Recognising and championing the transformative potential of fundamental bioscience
- Providing broad and long-term support for bioscience discovery
- Empowering researchers to follow their ideas wherever they lead
- Providing sustained support for advanced disciplinary expertise and national capabilities



A toolkit to drive the acceleration of scientific progress and innovation, delivering lasting societal and economic impact through

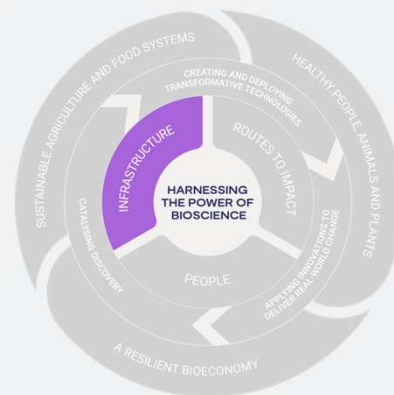
- Ensuring the responsible creation and deployment of tools
- Supporting the convergence of bioscience with data accumulation, engineering and AI
- Future proofing our research and innovation ecosystem and opening new opportunities for economic growth

BBSRC Forward Look: **Our ambition**



People are at the heart of research and innovation. To maintain the UK's position as a bioscience leader, we will

- Strategically invest to develop a highly skilled, versatile workforce across all roles and career stages
- Build capacity in core bioscience disciplines and cross-cutting skills
- Advocate for our workforce in the wider system
- Foster a more porous and inclusive research environment.



BBSRC plays a central role in shaping a bioscience ecosystem that is world-class and fit for the future, through

- Integrated and agile national capabilities and infrastructures
- Broadly supporting research needs, from individual labs to large-scale multi-user facilities
- Fostering the integration of data, disciplines, technologies & resources
- Seeking co-investment and sharing opportunities across the UK and internationally to maximise value.



BBSRC is committed to enabling and accelerating the journey from knowledge to societal benefit and economic growth. We will

- Foster connectivity: from discovery to application and adoption
- Ensure early engagement with stakeholders to co-create solutions
- Champion innovation that promotes regional growth and equitable access to bioscience benefits
- Support trusted research aligned with societal values, with a culture of integrity, openness, and FAIR data.



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BBSRC Forward Look: **Our commitment**

Current funding opportunities

BBSRC

Green ERA-Hub: biomass production and utilisation (pre-proposal)

Closing date 27th November, £2 million

Must involve partners from at least three countries

BBSRC Pioneer Awards 2025 to 26: bioscience discovery research

Closing date 19th November, £5 million, max £350k/grant

Innovate UK

Resource efficiency for resilience and sustainability FS

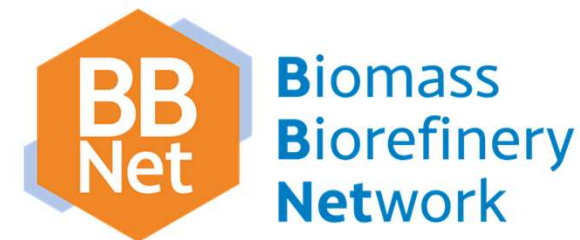
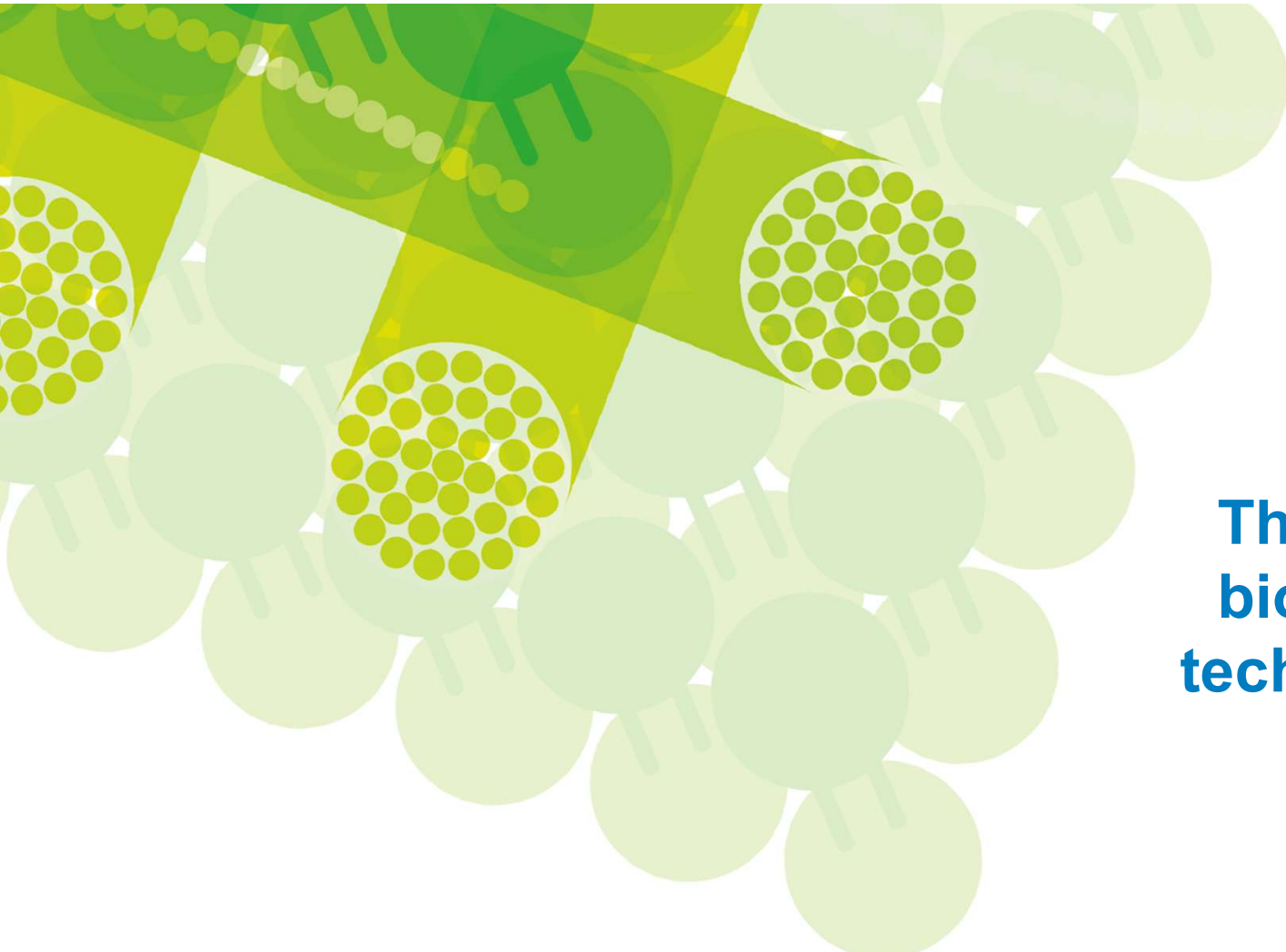
Theme 1: Resource efficient and sustainable materials and manufacturing

Theme 2: Seaweed processing

Closing date 3rd November, £1.1 million, £10-25k/grant. Businesses only



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BBNet

The future prospects for biorefining: Feedstocks, technologies and products

15-17 October 2025

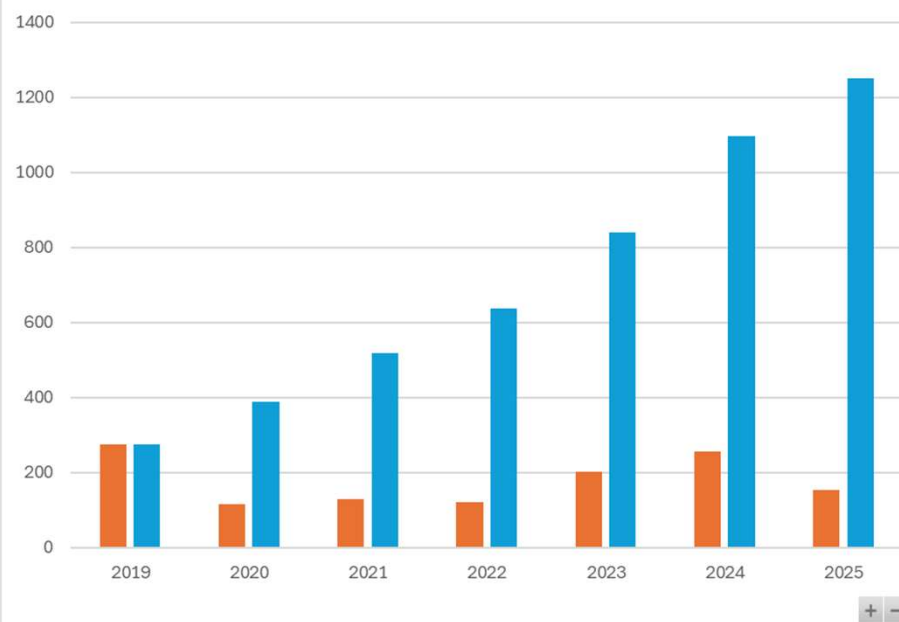
Mercure Sheffield St Paul's Hotel & Spa Sheffield

bbnet-nibb.co.uk

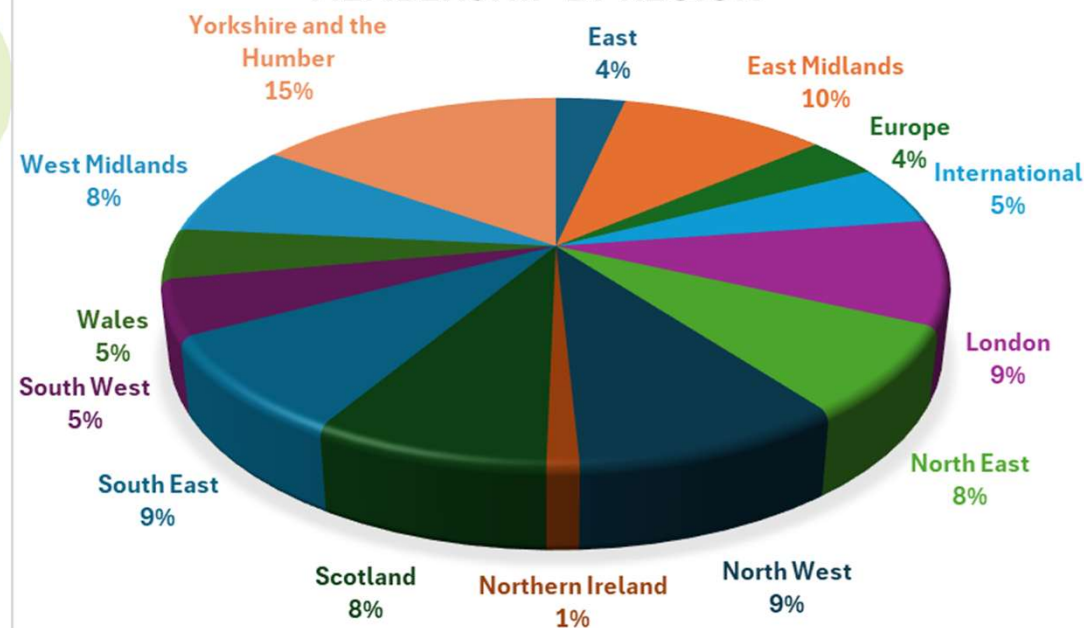


Membership

BBNet membership growth



MEMBERSHIP BY REGION



Funding

£940k

**Proof of
concept
funding**

- 21 projects
- 3 specifically awarded to ECRs

£200k

**Business
interaction
vouchers**

- 20 projects
- £215k industry contribution

£80k

**Scale-up
funds**

- 2 projects
- Unspent funds directed to POCs

Funding - known impact

2/3
Advanced
TRL

21
new jobs

8
new
processes

£4.66m

Leveraged funding:

£4.28m - research grants
£60k - fellowships
£287k - studentships
£20k - capital/
infrastructure funding
£12k - smaller grants

12
new research
tools

5
new
databases

209
new
relationship
s



BBNet Evaluation survey