UK innovation and the future economy

The Corporate Finance Network
National Conference, October 2023

Nigel Walker - Deputy Director, Lending & Investor Partnerships





Introduction to Innovate UK and UKRI





UK Research and Innovation

We work with the government to invest over £7 billion a year in research and innovation by partnering with academia and industry to make the impossible, possible. Through the UK's nine leading academic and industrial funding councils, we create knowledge with impact.





Innovate UK

- We are the UK's innovation agency
- We support business-led innovation in all sectors, technologies and UK regions
- A key delivery body of the Government's Innovation Strategy

Our Mission

To help UK businesses grow through the development and commercialisation of new products, processes, and services, supported by an outstanding innovation ecosystem that is agile, inclusive, and easy to navigate.





Innovation Strategy









Our Priorities



Strategic Themes















Science & Research Strengths



Design Expertise



Societal Impact & Responsible Innovation



Innovation Talent & Skills



Equality
Diversity &
Inclusion



Place & Levelling Up





- Growing, innovating businesses are key to a strong, sustainable, and competitive UK economy
- The UK ranks 3rd in the world for start-ups, but only 13th for scaling businesses
- We will strengthen our ability to help businesses to grow and scale. We will think beyond projects
 and novel products to increase focus on the company and its growth journey

Global Market Access

Supporting SMEs to enter the supply chains of the future

Prepare for Growth

Developing leadership and commercial skills, IP, business models, and use of standards

Growth Capital and Resources

Increasing investment through Loans, Investor Partnerships, British Business Bank, etc.

Innovate UK EDGE

Providing businesses with bespoke innovation and growth support services





- The future economy will be very different as we improve the quality of life for all, protect the environment and conserve Earth's resources
- To help UK business realise the opportunities, we will deliver ambitious and purpose-driven programmes in 4 areas:



Net Zero

Innovations in energy, transport, agriculture, buildings, manufacturing and more



Health & Wellbeing

Innovation in diagnostics, medicines and novel therapies, connected health, diet and more



Technologies

Developing 7 technology families to help solve the world's biggest problems and grow the UK economy

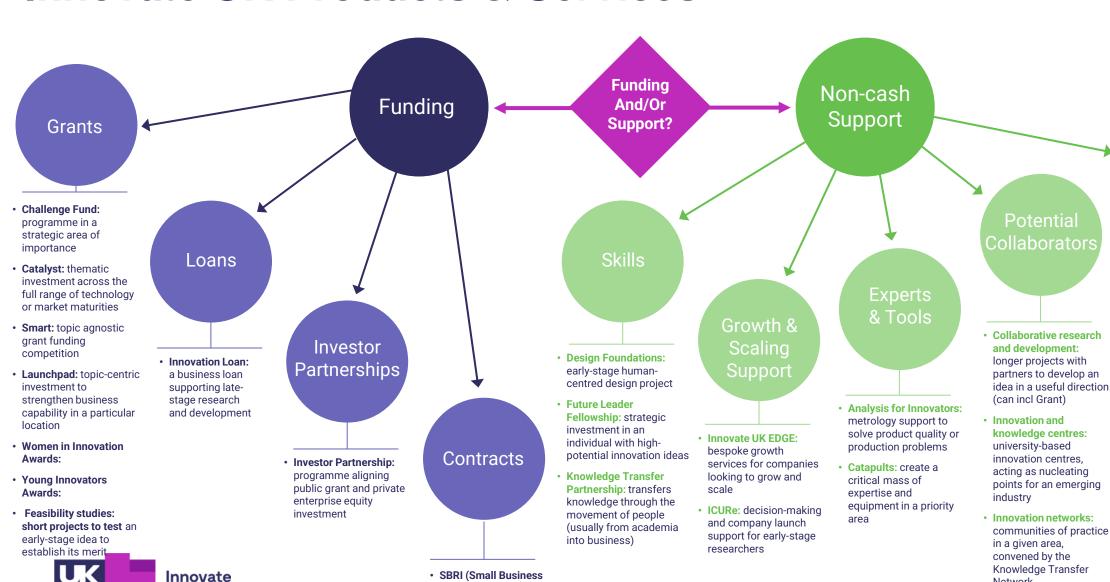


Foresight

Horizon scanning to enable an agile and intelligent respond to disruptive, emerging technologies

Innovate UK Products & Services

UK



SBRI (Small Business

Research Initiative):

procurement driven by

government policy

research and

development

objectives

 Eureka: network supporting global research and development and

Going Global

 Global Business **Innovation Programmes:** help high growth businesses explore global

innovation opportunities

innovation collaboration (incl grants & non-cash)

· Global Expert Missions: deep dives to scope future global innovation opportunities

 Global Incubator **Programme:** immersion programme to equip high growth businesses for international markets

 Innovate UK Knowledge **Transfer Network:**

builds innovation communities and networks

Network

Innovation Loans: Overview, Scope and Eligibility





Innovation Loans





(to 30 Jun'23)

£205m

Committed

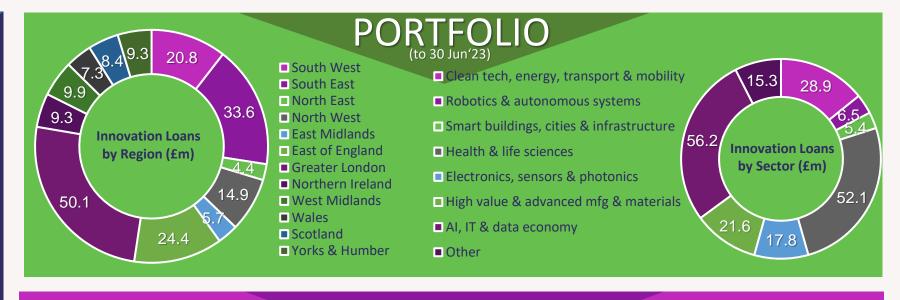
£169m

253

232

£13m **Early Repayments**

c1,700
Applications



Leveraging **Private Investment**

£172m

Total funding raised

Of portfolio

£2.7m

Average raise

Supporting Growth

pilot programme evaluation survey respondents*

346

Jobs Created

£44.7m

Increase in Turnover

Delivering Impacts

pilot programme evaluation survey respondents

investment in R&D

Progressed towards commercialisation

84%

Increased employment

Applied for IP protection

*the scaled up additional effected attributed to Innovation Loans

Innovation Loans

Innovate UK



Helping businesses to access funding at all stages of innovation

- Late stage R&D
- Clear route to commercial success
- Innovative and growth orientated

- 'Scaling' rather than 'starting'
- Credit Constrained



Single SME Applicants



Loan size £100k to £2m

7.4%

Below-market Interest rate

Partial deferral during project period

7 Years

Flexible & Patient

Up to 7 years Availability, Extension and Repayment



Up to 100% of Eligible Project Costs

Security

- Debenture
- No personal guarantees

Covenants

- Liquidity ratio of 1.1X throughout loan
- Debt Service Coverage Ratio of 1.2X throughout repayment period

Innovation Loan Structure

Maximum Loan Term	7 years		
Availability Period	Up to 3 years		
Extension Period	Up to 2 years		
Repayment period	Up to 5 years		

Example: 2 years for R&D (Availability)

1 year for Commercialisation (Extension)

4 years for repayment

7 years - Total





Availability period: (R&D Activity)

- Quarterly loan drawdowns in advance
- Interest payable quarterly in arrears on amount drawn down
- 3.7% payable and 3.7% deferred to repayment period
- Max period 3 years
- Monitoring by Monitoring Officer and Credit Team

Extension period: (Commercialisation)

- No further drawdowns permitted
- Ends on earlier of agreed date or first commercial sale from results of project
- Interest payable quarterly in arrears on amount borrowed
- 3.7% payable and 3.7% deferred to repayment period
- Max period 2 years
- Monitoring by Monitoring Officer and Credit Team

Repayment period: (Repayment of capital and interest)

- No further drawdowns permitted
- Repayment of principal and interest as well as deferred interest
- 7.4% quarterly level payments
- Max period 5 years
- Monitoring by Credit Team

Innovation Loans: Security, Covenants and Monitoring

- Security Debenture
 - Senior subordinated debt/priority
 - No personal guarantees
- Liquidity Ratio of 1.1x throughout the loan
 - Current assets exceed current liabilities by 10%
- Debt Service Coverage Ratio of 1.2x throughout the repayment period
 - Cash EBITDA exceeds interest and debt repayments on all debt by 20%
- Project monitoring
- Quarterly management accounts
- Annual accounts (within 6 months of year end)



What are we looking for?

We are looking for businesses who can demonstrate that their innovation activities have the best potential for future growth

Your application will be evaluated on:

- the quality of your project
- our judgement on the suitability of your business to receive a loan

We look for applications that show:

- an appropriate and evidenced borrowing proposal from a suitable business
- a high quality later-stage R&D project
- a clear route to commercial success
- a strong management team
- why you need additional public funding in order to be able to carry out your project
- why you are unable to fund the project from your own resources or other forms of private-sector funding







- What the UK and global economy will look like in future decades
- Driven by a desire to improve the quality of life for all, protect the environment and Earth's resources
- Described in the Innovate UK Plan for Action https://www.ukri.org/about-us/innovate-uk/our-plan-for-action/



Net Zero

Innovations in

- energy
- impact of industrial processes & use of materials
- agriculture & food and other sources of emissions
- capital intensity



Health & Wellbeing

Innovations in

- wellbeing
- tackling ill-health
- diet & food

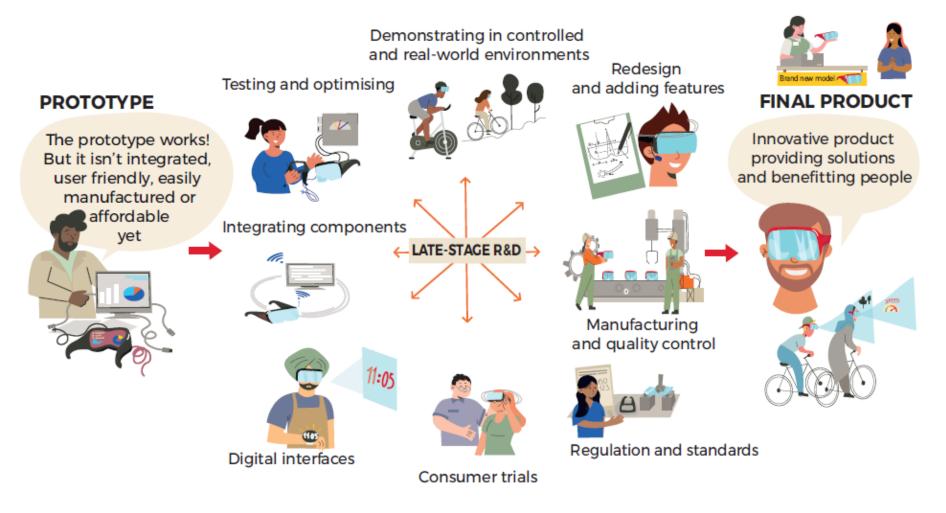


Technology Families

- · advanced materials & manufacturing
- AI, digital & advanced computing
- bioinformatics & genomics
- engineering biology
- electronics, photonics & quantum
- energy & environmental technologies
- robotics & smart machines

Next Generation Digital Technologies

Late-stage R&D: from prototype to commercialisation

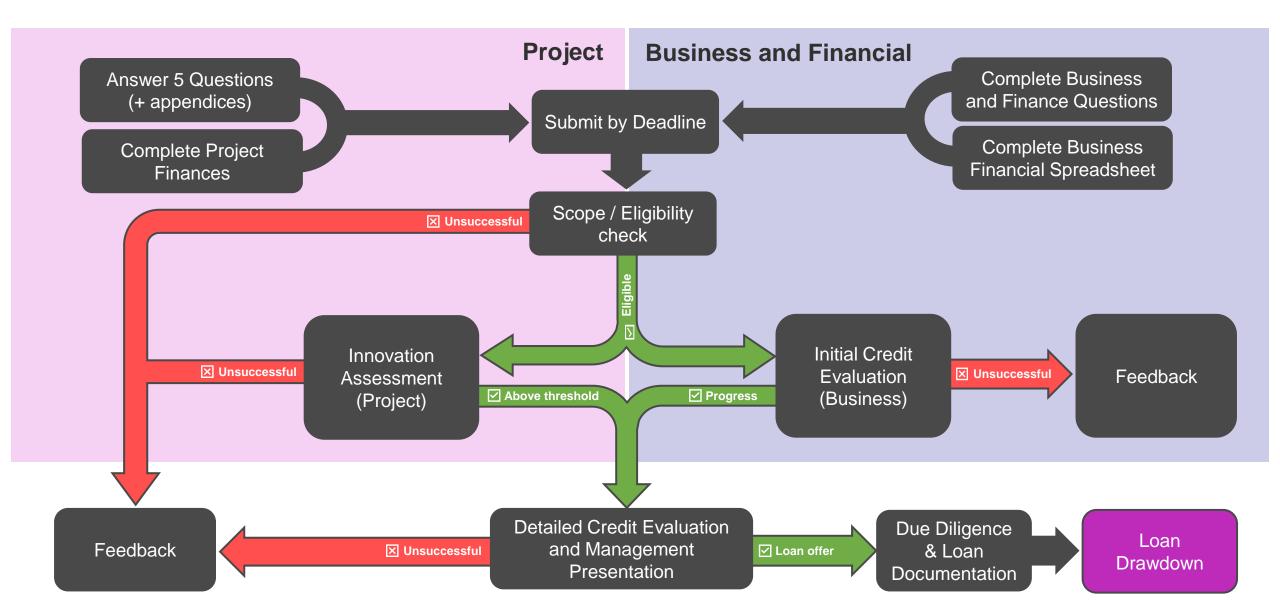




From "Late stage R&D: business perspectives" April 2021
National Engineering Policy Centre, led by the Royal Academy of Engineering
https://www.raeng.org.uk/publications/other/late-stage-r-and-d-business-perspectives

Application Process





How are successful applicants selected?



Project proposal

- Assessors will score each section of your project proposal.
- After the assessor process, Innovate UK will independently moderate assessor scores.
 Any outliers in scores may be removed and your total score will be updated.

Initial credit evaluation

Our Credit team will carry out an initial evaluation of your suitability to take on a loan

Progress Panel

- Your innovation score together with the credit evaluation will be used in deciding the next steps.
- You will receive email notification that your application is progressing to detailed credit evaluation or to inform you that your application has been unsuccessful on this occasion.

Detailed credit evaluation and final decision

 Our Credit team will carry out detailed credit evaluation and a final lending decision will be made by our Credit Committee Whether successful or unsuccessful in receiving loan funding, you will receive feedback on your application.

Feedback from assessors will be through IFS

Feedback from Credit will be sent by email

It is intended to be constructive in nature and to highlight both the strong as well as the weak areas of your application.



Innovation Loans – Credit Evaluation

Credit Process

- Evaluate on credit application alone
- External diligence systems

Initial Credit **Evaluation**

Detailed

- Contact is made with company
- More information requested

 Company presents to the Credit Committee

> Management Presentation

At each stage Credit Committee will provide the final decisions whether to progress or to decline. **Innovate**



Credit evaluation

Cannot prove ability to repay

Key questions to consider:

- Is there sufficient equity capitalisation to support the overall business?
- Is the funding strategy adequate?
- When does the business generate revenues and/or breakeven?
- Does the business maintain sufficient liquidity (cash)?

Position of Company

Need and ability to repay are displayed

Credit Specialists are looking for you to show that you:

- ✓ will be able to pay interest each quarter
- will be able to repay the loan on time
- ✓ need public funding

Cannot prove need

Key questions to consider:

- Can the project be funded at this time from private market sources?
- Would the same level of R&D happen without the Innovation Loan?



Initial Credit Evaluation

All applications are reviewed by our Credit Team
An initial credit evaluation is undertaken, focusing on the **business** and **financial submission External credit models** are utilised based on the application responses
Diligence systems are used for company and director checks

From the initial analysis, the Credit Committee will decide on the following **four outcomes**:

Recommend	From initial analysis, credit concerns are manageable
Marginal Recommend	Credit concerns but more positive factors than negative
Marginal Decline	Credit concerns but more negative factors than positive
Decline	Credit concerns which will not likely be overcome



Progression to detailed credit analysis

Both:

- Innovation quality and
- Credit suitability required

Bias towards innovation

Risk appetite: Recommended Innovation: Above quality line

Risk appetite: Marginal Recommend Innovation: Top c75% above quality line

Risk appetite: Marginal Decline Innovation: Top c25% above quality line

Risk appetite: Marginal Recommend Innovation: Lower c25% above quality line

Risk appetite: Marginal Decline Innovation: Lower c75% above quality line

Risk appetite: Any Innovation: Below quality line

or

Risk appetite: Decline Innovation: Any score



Detailed Credit Analysis

The 5 Cs of Credit

- Character (credit history)
- Capacity to repay (the financial standing of the business)
- 3. Capital (the equity in the business)
- 4. Conditions (terms of the transaction)
- 5. Collateral (your security)



- Character:
 - Likely commitment of the business to repay
- Management team / people:
 - Capability / capacity of the business as a whole
 - Corporate governance
- Liquidity / affordability: suitability of business for proposed loan
 - Cashflow
 - Interest and debt service coverage
 - Leverage
 - Sources of additional capital
 - Balance sheet
- Market:
 - Route to market
 - Resilience
 - Competitor / market analysis
 - Innovation risk
 - Political / regulatory risk
- Control culture:
 - Awareness and management of risks
 - Project spend control environment



Innovation loans

Innovation Loans: Financial Advice Pilot

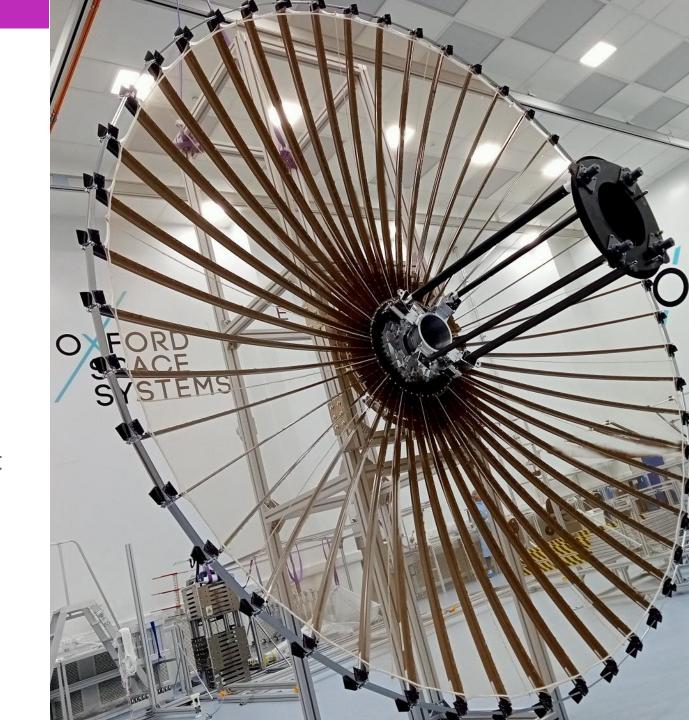
October 2023



"Suitability" challenge

- Over 1,700 applications since the programme went live.
- 250 loans committed
- In rounds 1 to 9, almost 30% of applications were ineligible due to inadequate financial information.
- Almost 80% of eligible applications did not progress beyond the innovation assessment and initial credit evaluation
- Suitability, not innovation, is the biggest challenge





Where do many applications fail to evidence their suitability for an innovation loan?

They DON'T:

- 1. Present credible forecasts for future revenues and costs
- 2. Demonstrate effective management of liquidity and working capital
- 3. Evidence adequate capitalisation



Objectives

- to understand whether it is possible to encourage applicants to use expert financial advice (as a supplement to the guidance and briefings already provided by Innovate UK as part of its application process)
- to understand the appetite of qualified accountants with corporate finance expertise and a focus on SMEs / early-stage innovative businesses to offer specialist advice
- to identify whether high-level strategic financial advice prior to applications results in improved quality of financial submissions or discourages unsuitable applicants from making an application
- to consider the value-for-money of Innovate UK paying for this expert financial advice





In Scope

- High-level review of funding strategy
- Advice on development of revenue and cost assumptions
- Advice on liquidity and working capital management
- Advice on adequacy of capitalisation balancing founders' funds, external equity investment, grant funding, cashflow from operations and debt finance through innovation loans and commercial debt finance

Out of Scope

- Completion of the innovation loans business & financial submission, including the financial spreadsheet
- Development of the applicant's own financial model
- Financial promotions and engagement with investors to raise capital



Process

- 1. Potential suppliers identified through Corporate Finance Network
- 2. Suppliers submit quotation for services in pilot for approval and set-up by Innovate UK:
 - Total cost per business to provide advice to approximately 3 to 5 recipient businesses, through approximately one day of engagement per business by a senior professional advisor
- 3. Applicants invited to participate in pilot:
 - Unsuccessful applicants from recent rounds with innovation score above quality threshold
- 4. Applicants and Suppliers matched through CFN, with Purchase Order issued by Innovate UK
- 5. Advice engagement completed and confirmed for Supplier to invoice Innovate UK
- 6. Payment made direct by Innovate UK to supplier



Evaluation

- scale of take-up of this advice by applicants, based on referrals made by Innovate UK of previously unsuccessful applicants
- appetite of advisors to engage with early-stage innovative SMEs
- ability to match applicants and advisors, including by sector, region and stage
- benefits to applicants of this advice, including measures of satisfaction (including net promoter score), the short-term impact on quality of application resubmissions and longer-term impacts on growth at scale
- value for money
- through mandatory completion of surveys by applicants and advisors









Investor Partnerships



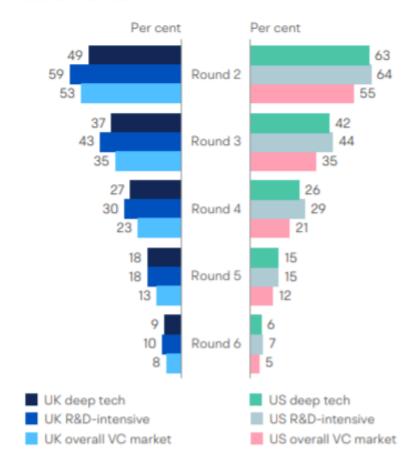


The 'capitalisation challenge'



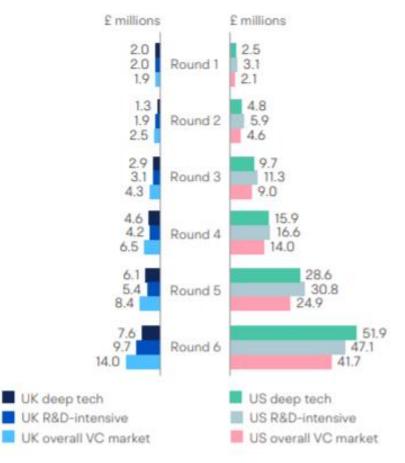
Proportion of companies raising first VC round in 2012-13 raising subsequent rounds

Source: PitchBook

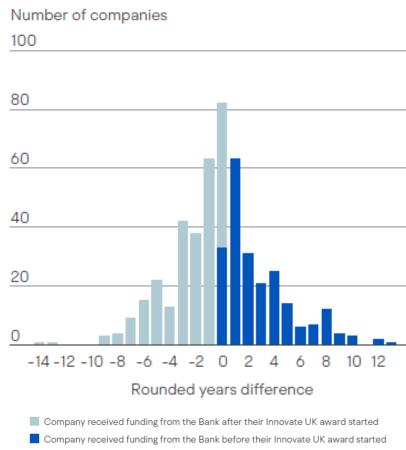


Average deal sizes of companies raising first VC round in 2012-13 by subsequent VC round number

Source: PitchBook



Matched Innovate UK / British Business Bank companies in the Bank's **Equity** portfolio



The 'inclusion challenge'

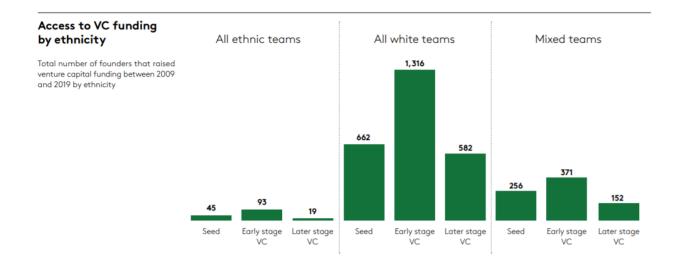


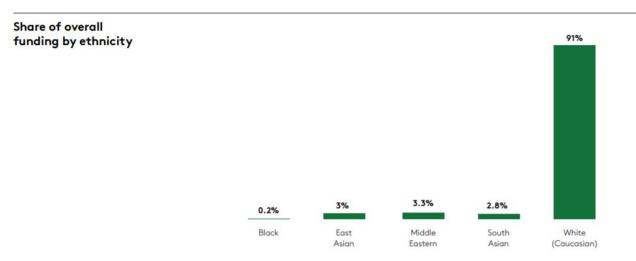
Proportion of equity deals and investment received by all-male teams and teams with at least one female founder (combining all-female and mixed gender teams)

Source: British Business Bank analysis of Beauhurst data









Sources: BBB 2020 & 2022 / Diversity VC 2019 / Extend VC 2020

Investor Partnerships: accelerating investment

Addressing challenge of innovative SMEs that need:

- support for innovation <u>and</u>
- access to capital

Bringing together:

- grant funding
- innovative R&D projects in future economy areas
- aligned VC and Angel equity investment

Delivering:

- accelerated investment (11x to date)
- growth at scale through innovation



Innovate UK

- Validate quality early-stage R&D projects via independent assessment
- Non-dilutive finance via grant funding
- Access to UK wide companies
- Monitoring of projects



Investor Partner

- Identification of investible company
- Equity finance to capitaliser the business
- Access to markets, contacts and experience
- Commercial influence on company

Portfolio of businesses

- Funded to develop IP and capitalised for growth
- Strong, commercially exploitable asset
- · Good team with aptitude for growth
- Structure to support scale

Investor partnerships between 2017 and 2025:

- £85.5m budgets to date + £80m future commitment
- £76m grants committed
- £38m grants deployed
- 222 SMEs supported
- £204m aligned investment (>2.5x)
- 42 lead investor partners
- £831m in follow-on funding (>10x)

Summary

- Up to £80m of grant funding to businesses over next 3 years
- Aligned investment of at least £100m led by our investor partners, with expectation of over £400m follow-on investment
- Supporting companies with R&D projects within the scope of:
 - Specific focus areas in the future economy
 - Equality, diversity and inclusion
- Supporting early stage R&D projects with sizes from £50k to £1m and later stage projects up to £2m
- Grant funding will only be offered if the aligned investment from or led by one or more of our investor partners completes
- Regular SME funding rounds starting in March 2023 and running until summer 2024



Specific areas of focus

Net Zero

- capital intensive technologies
- power particularly offshore wind, civil nuclear, hydrogen, carbon capture and storage, and whole systems integration
- critical circular materials
- heating and retrofit
- battery technologies for transport and energy storage (Faraday Battery Challenge)
- mobility (no longer in scope as budget fully committed)
- resource efficiency for materials and manufacturing (no longer in scope as budget fully committed)

Next generation digital technologies

- projects within the creative industries which are underpinned by innovative digital technology as well as sustainable innovations, such as circular fashion (Creative Catalyst)
- adoption of artificial intelligence and machine learning technologies in targeted industries (Bridge AI)

Health and Wellbeing

- innovative solutions to health and healthcare challenges (Biomedical Catalyst)
- advancing life-changing cancer therapeutics, focused on immunotherapies and paediatric oncology (Cancer Therapeutics)
- the application of extended reality for digital mental health, including immersive content that could be delivered as a digital mental health therapeutic in formal healthcare settings (Mindset)

Equality, diversity & inclusion (No Limits)

- innovations from diverse founders or senior decision-makers that are from under-represented groups and are role models
- innovations outside of the future economy theme areas, including those that support under-served communities and groups



Investor partners

What sort of investors do we partner with?

- Venture capital
- Corporate VC
- Angel investor partners
- UK-based... International... Regional
- Specialists, deep tech, sector specific and generalist
- Financial investors, strategic investors, impact investors, charities

What sort of investments do they make?

- Equity
- Quasi-equity (convertible loan notes)

What sort of stage do they invest at?

- Seed / post seed
- Pre-series A / Series A
- Leading or significant role in syndicate





SME Projects - eligibility and funding

Research category	Project size	Grant available (as a % of total project costs)	Project duration	Aligned investment
Feasibility study	£50K to £300K	70%	6 to 12 months	The investment must be at least equal to the grant funding
Industrial research	£100K to £1M	70%	6 to 24 months	The investment must be at least equal to the grant funding
Experimental development	£250K to £2M*	45%	12 to 24 months	The investment must be at least twice the grant funding

Research category definitions



^{*} Novel low emission production systems specific funding opportunity projects may be up to £3m

Additionality and traction

Additionality factors

- Investment amount vs grant
- Existing portfolio company
- Proportion of investment from investor partner
- Diversity
- Region
- Alignment to specified areas of focus

Traction factors

- Stage of completion
- Level of commitment
- Level of support
- Number of investors involved



Contact

Customer Support Services

0300 321 4357 (Mon - Fri 9-5pm)

support@iuk.ukri.org

Nigel Walker Deputy Director, Lending & Investor Partnerships

Innovation Loans Origination & Credit Team:

Amanda Freeland
Andrew Wade
Pamela Bal
Hemaxi Bhatt
Sandra Gonzalez
Adam Barrass
Phil Morgan
Alan Wilson
Maggie Kariuki



Useful Links

- Innovation Loans Future Economy Competition Round 11: https://apply-for-innovation-funding.service.gov.uk/competition/1717/overview/4b1d658f-9679-4563-96bd-758a18b74116
- Investor Partnerships SME Round 4: https://apply-for-innovation-funding.service.gov.uk/competition/1706/overview/14931cfe-149a-48e1-b4ea-2c3da45fc6fe
- Competition Process Videos (including Project Costs): <u>Competition briefing:</u> <u>applicant information - YouTube</u>
- Link to Webinars and Blogs Financial Submission Webinar and Answering the Assessors' Prayer: https://iuk.ktn-uk.org/programme/innovation-loans-future-economy/resources/
- Innovation Loans: Guidance for Applicants
 https://www.ukri.org/councils/innovate-uk/guidance-for-applicants/guidance-for-applicants/guidance-for-applicants/guidance-for-applicants/
- Innovate UK: General Guidance for Applicants
 https://www.ukri.org/councils/innovate-uk/guidance-for-applicants/general-guidance/
- Innovate UK https://www.gov.uk/government/organisations/innovate-uk
- Innovate UK KTN www.ktn-uk.co.uk
- Innovate UK EDGE https://www.innovateukedge.ukri.org/



Thank You







