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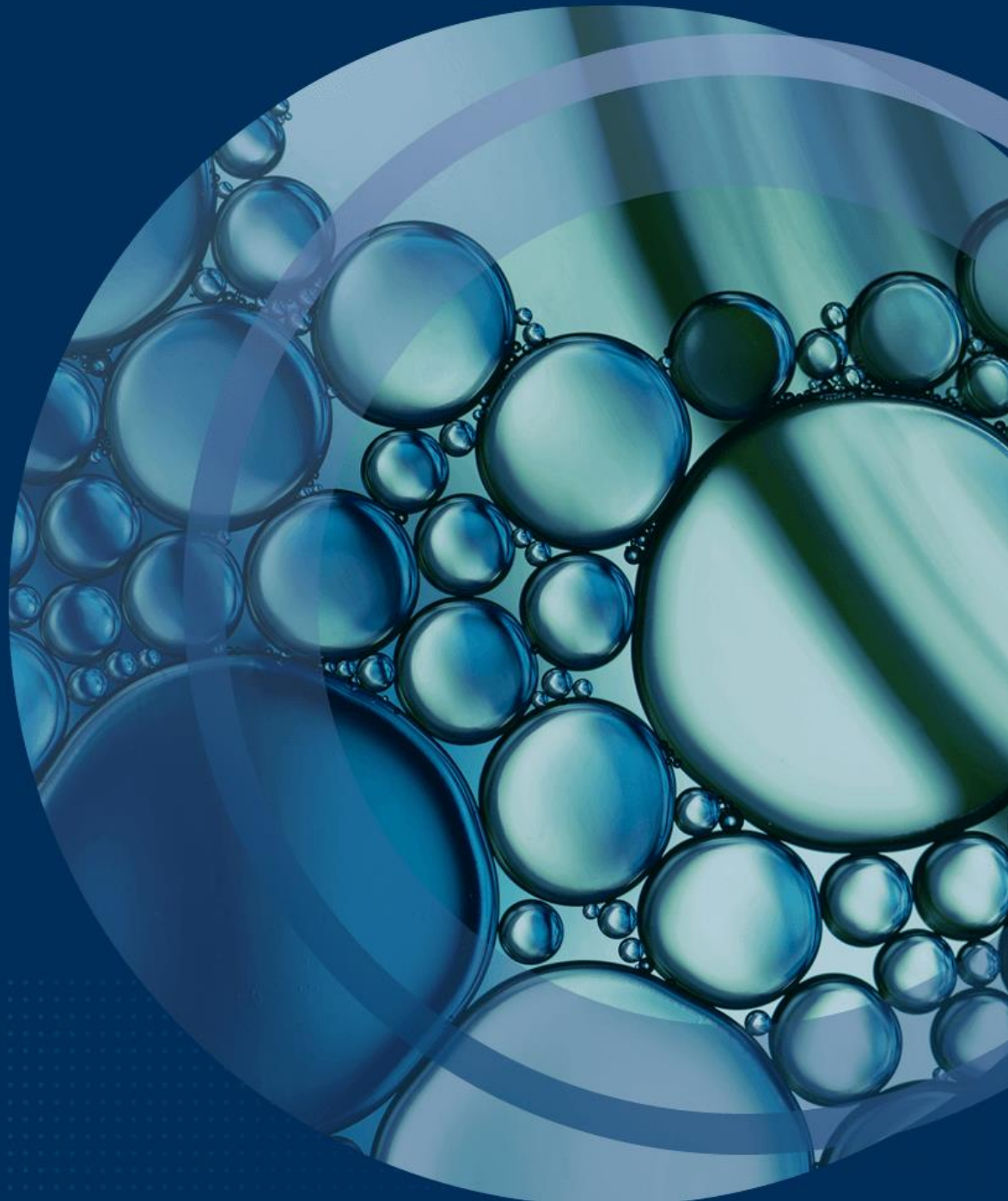
# Creating Lasting Value from Science

## Parliamentary & Scientific Committee

15 April 2024



# The policy interventions needed for the UK to build a targeted industrial strategy that unlocks growth, rivals international competitors and delivers skilled jobs

**Sharon Todd, CEO of SCI**

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# Science and Innovation : the Bedrock of British Industry

**FTSE 100**

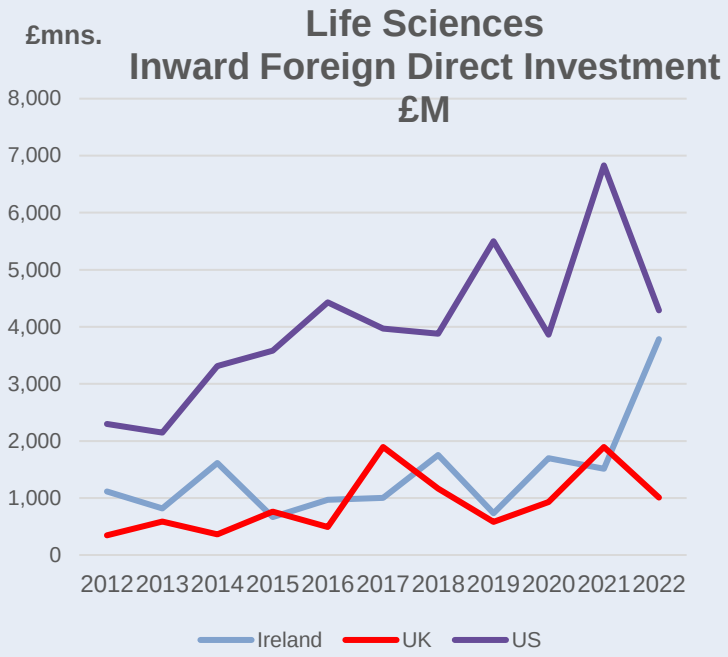
Not one top ten FTSE100 company built new manufacturing plant in the UK between 2003 and 2023.

AstraZeneca

The UK-based pharmaceuticals giant chose to invest $360bn in new manufacturing facilities in Ireland in 2023.

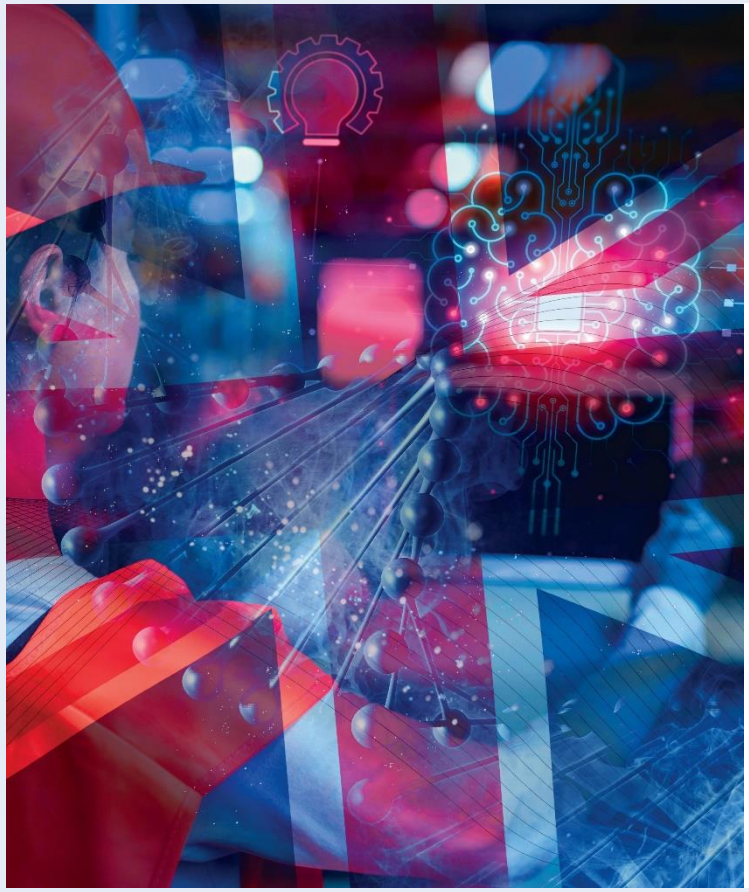
**UNICORNS**

Only 2 of the 10 UK life science start-ups worth $1bn to float in the decade to 2021 chose to list in the UK


*LEK Consulting identified £230Bn GVA and >240,000 jobs (direct and indirect)*

# 4 Steps to UK Science Business Growth



## 1. Innovation at the Heart of Government

Government leaders need the direct advice of a single united body that represents all innovation and science-based business in the UK to drive growth.

## 2. Attracting large scale investments

Ensuring funding is available at all stages of the long scaling up process of a start-up from venture capital, pension fund and R&D funding.

## 3. Accelerating Start-ups to Scale Up

A globally competitive tax regime to attract large scale investments in manufacturing and large scale R&D centres to the UK, with access to green and competitive energy.

## 4. Introduce an Innovation Visa

Access to the UK and other countries for highly skilled UK and overseas industrial scientists and engineers working on global issues and projects.

# From Start-Up to Large Global Science Business

## Start-Up and Scale-Up Business

- Dr Natasha Boulding, CEO and Founder **Low Carbon Materials**

## Global Science Business

- Liz Rowsell, Chief Technology Officer **Johnson Matthey**
- Daphne Vlastari, Head of Communications and Government Relations, UK & Ireland **BASF**

# Start-Up Science Business

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# A Platform Technology for Motility Measurement

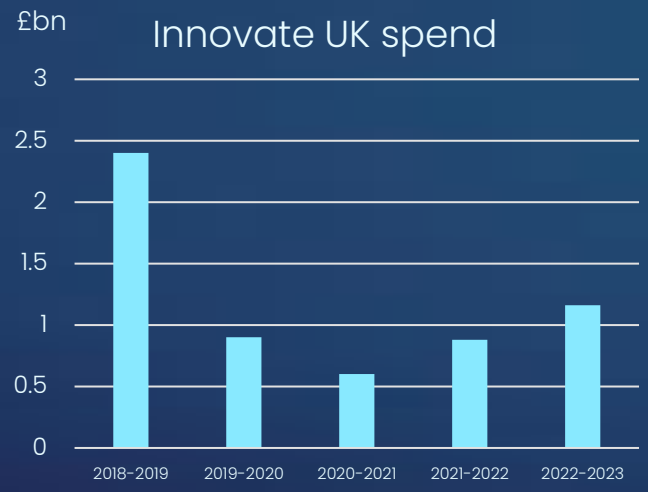
| Sector | Livestock | Human | Biotech |
|---|---|---|---|
| SAM (ARR) (male fertility) | £0.5bn | £5bn | £5bn |

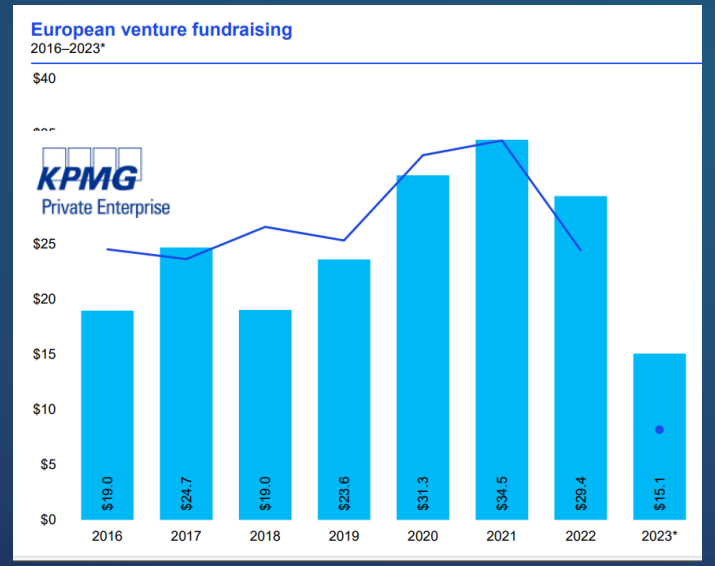
**How can we fund our opportunity?**

Capital need for R&D, facilitated by:

- Innovate UK funding – becoming more difficult
- Private investment (Angel, VC) - decreasing
- R&D tax credits – becoming less competitive

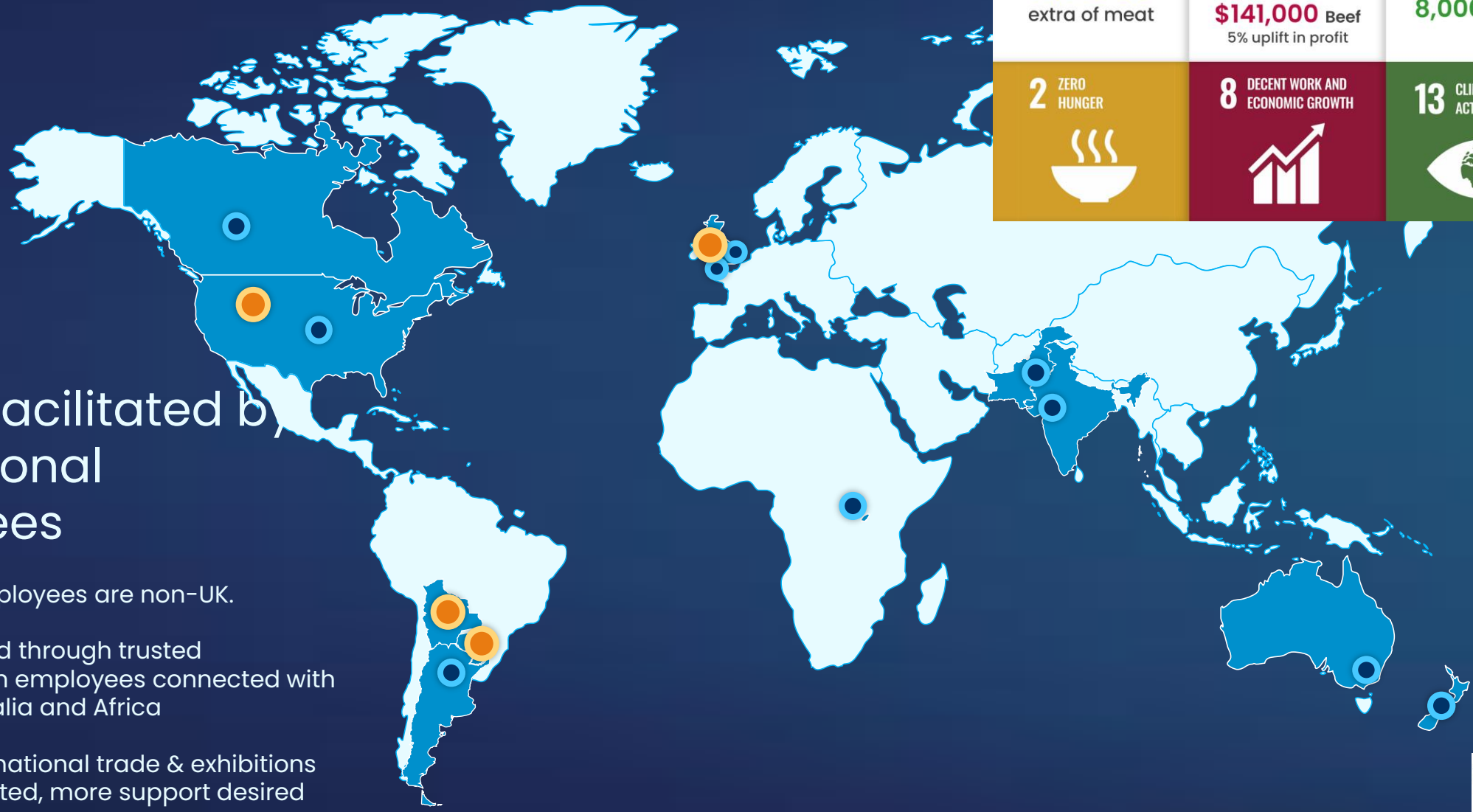
Cash availability declining, stymies innovation



# Global Exports

Dynescan launched 2022, now across 6 continents



**IMPACT** (on each farm of 1000 cows)

| | | |
|---|---|---|
| 16,000 KG extra of meat | Annual profits of $101,000 Dairy $141,000 Beef 5% uplift in profit | Equiv. to planting 8,000 trees |
| 2 ZERO HUNGER | 8 DECENT WORK AND ECONOMIC GROWTH | 13 CLIMATE ACTION |

## Growth facilitated by international employees

50% Dyneval employees are non-UK.

Exports facilitated through trusted relationships with employees connected with Argentina, Australia and Africa

Support for International trade & exhibitions greatly appreciated, more support desired



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# Scale-Up Science Business

**Dr Natasha Boulding**

CEO & Founder

Low Carbon Materials

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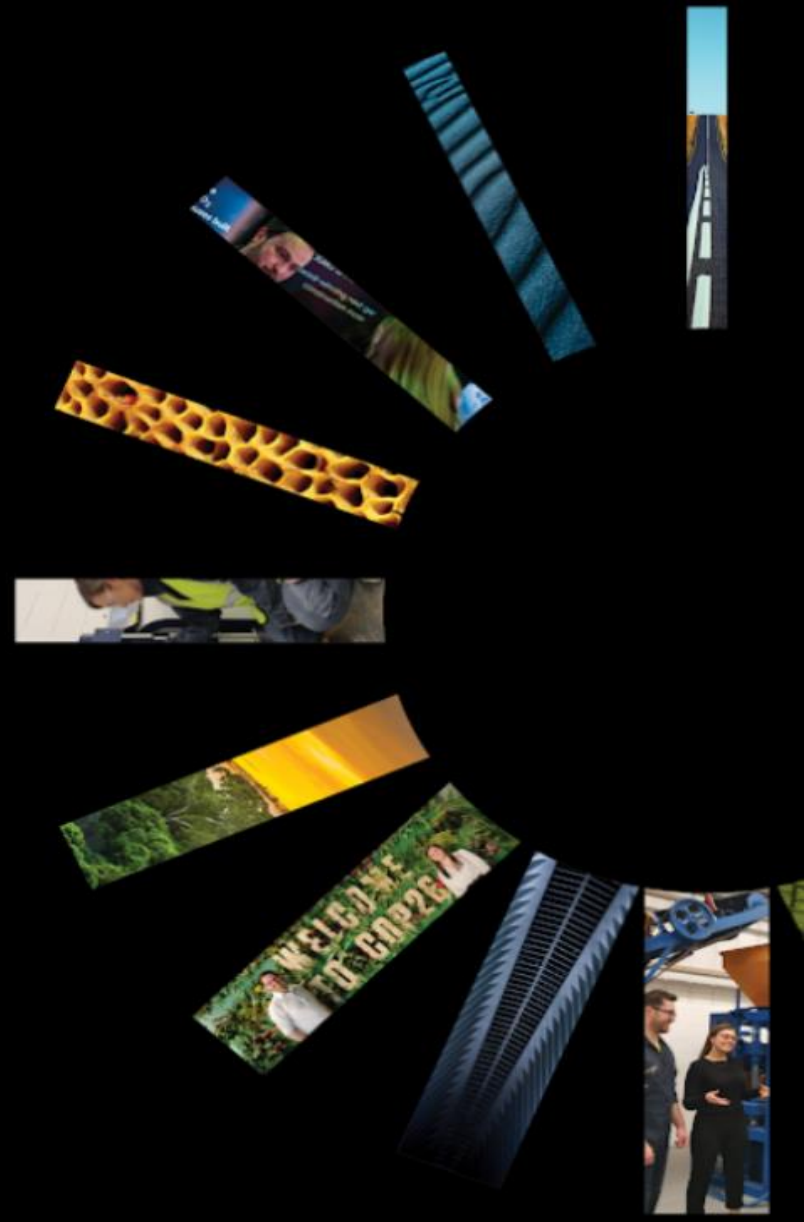
Combatting Climate Change
through Material Innovation.



# Large Science Business founded in UK

**Liz Rowsell**
Chief Technology Officer
Johnson Matthey

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# Catalysing the net zero transition for our customers, and for society

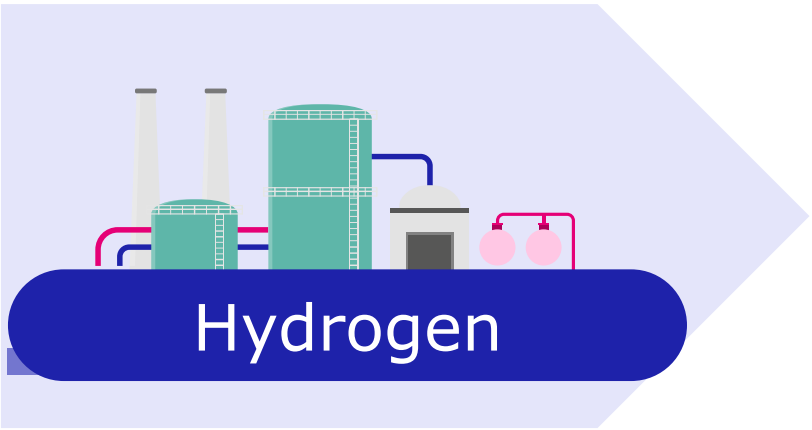
*Johnson Matthey: a global leader in sustainable technologies.*

The world's leading **energy**, **chemicals** and **automotive** companies depend on us, to help them:

- Decarbonise
- Reduce harmful emissions
- Achieve their sustainability goals

# We need policy to enable the transition to net zero

## Case study: the UK is well placed to build a hydrogen economy for the energy transition and decarbonisation of chemicals and fuels




Energy intensive industry

Heavy duty vehicles

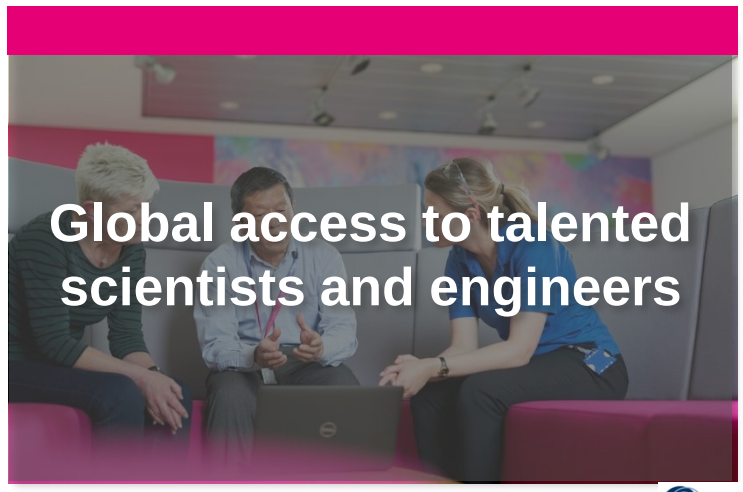
Marine

Aviation

Some rail applications

Light duty transport (larger and longer range)



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# Global Science Business domiciled outside of the UK

**Daphne Vlastari**

Head of Communications & Government Relations, UK & Ireland

BASF

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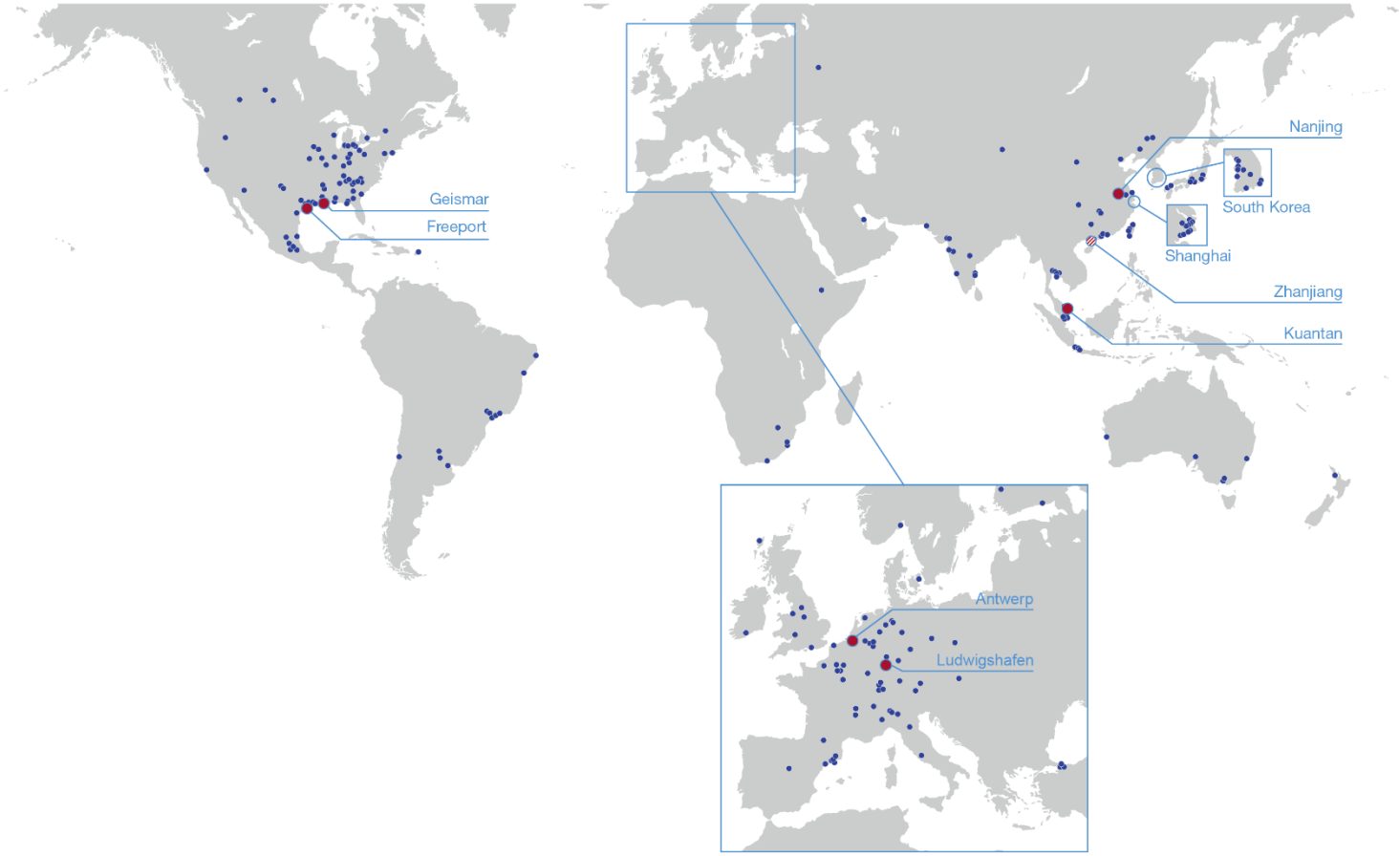
# Global Science Business Investment in the UK

- Our chemistry is used in almost all industries.
- BASF is present in 93 countries. We operate 234 production sites worldwide.
- Science and innovation integral to meeting our business and climate commitments; approx. 10,000 patents in 2023 & over €2bn investment.
- Operating six sites in the UK, presence in the UK market since 1880.



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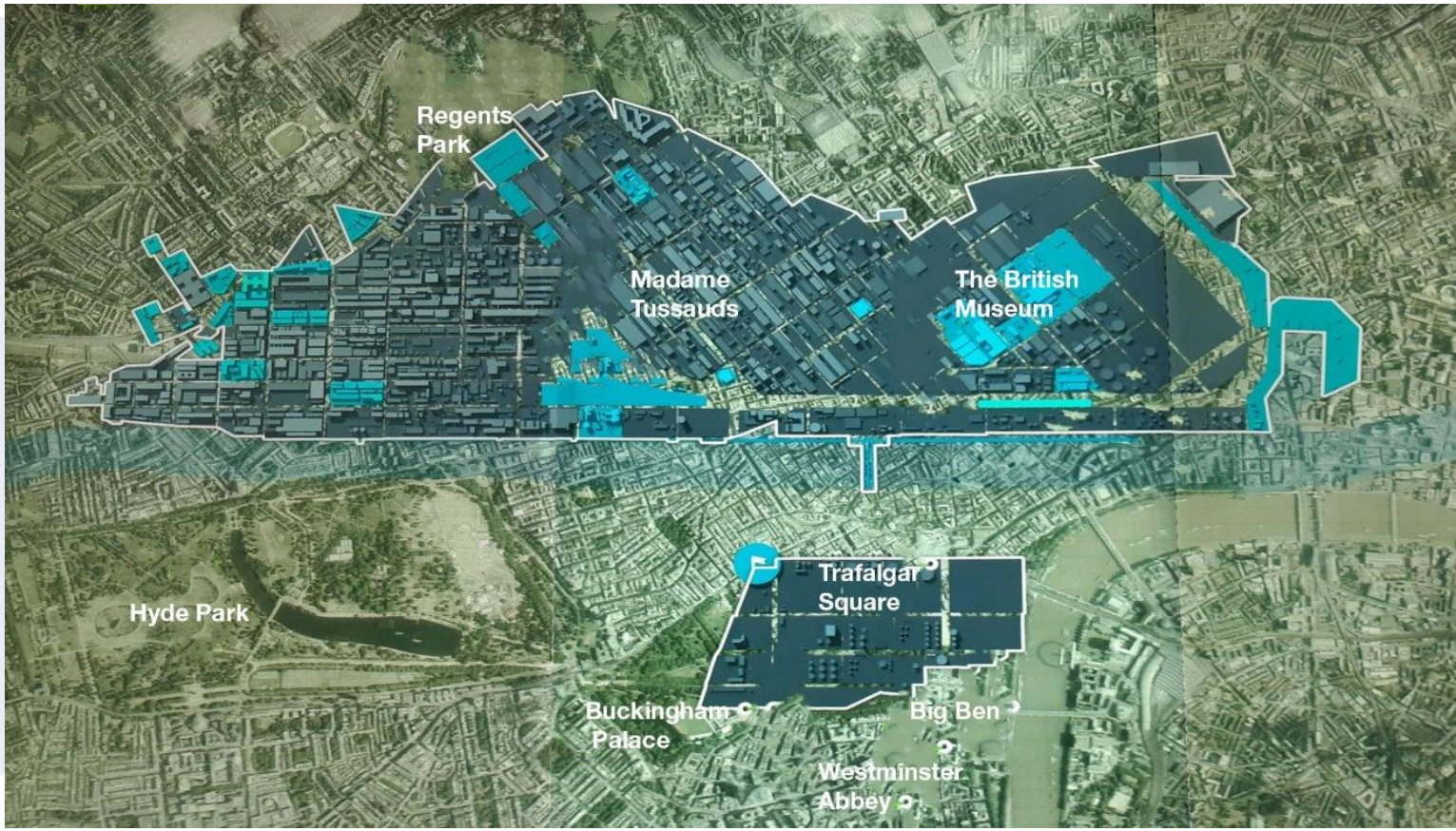

# Global Science Business Investment in the UK

- Resource-efficient solutions and business models to decouple growth from the consumption of finite resources.
- Our global research and development presence – and its effectiveness – is vital to our long-term success.
- Examples of R&D work:
  - BASF's Academic Research Alliances (e.g. British Alliance for Research and Innovation)
  - Partnership work with peers and value chain (e.g. Flue2Chem)
  - Customer focus (e.g. Pulpex)


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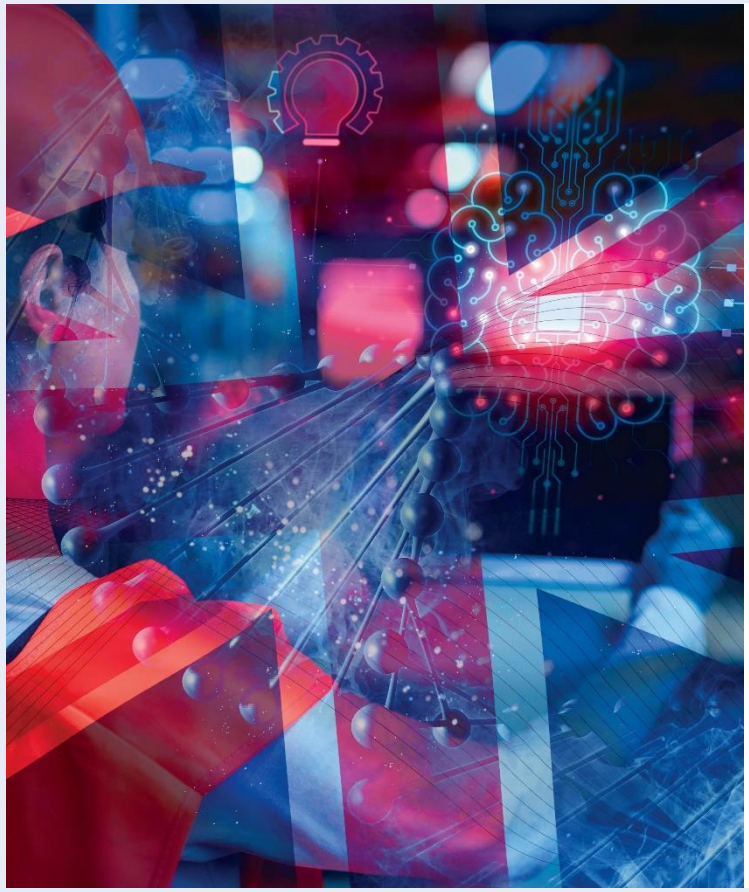

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# THANK YOU


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