ONE HEALTH CONFERENCE 2023

COLLABORATION TOWARDS A ONE HEALTH BUSINESS CLUSTER



Finding solutions to 'wicked' One Health problems

KEYNOTES: CONFERENCE WELCOME Cecilia Bufton



Chair:

Dorset Local Enterprise
 Partnership

Dorset Integrated Care
 Partnership



ONE HEALTH & WICKED PROBLEMS



ONE HEALTH: The UK sees One Health as referring to two related ideas: first, it is the concept that the health of humans, animals, plants and the environment we live in are inextricably linked and interdependent. Second, it refers to the collaborative and sustained effort of multiple disciplines working locally, nationally, regionally and globally to attain optimal health for all living things and the ecosystems in which they co-exist.

WICKED ONE HEALTH PROBLEMS: (see outer ring of diagram) Many organisations have declared 'One Health' as critical to addressing health threats in the animal, human and environment interface. Today, an increasingly interconnected world with heightened risks from zoonotic diseases, anti-microbial resistance and environmental change demonstrates how the One Health approach is more important than ever. Globally, governments must address health and food insecurity as populations rise rapidly and the climate changes, whilst still meeting the net zero agenda and protecting nature. The UK wants to lead the way in business-led, commercial green/clean solutions to these problems.





ONE HEALTH ENTERPRISE NETWORK



ONE HEALTH APPROACH: Supporting Interdisciplinary, business-led consortia to develop enterprise solutions to wicked one health problems.

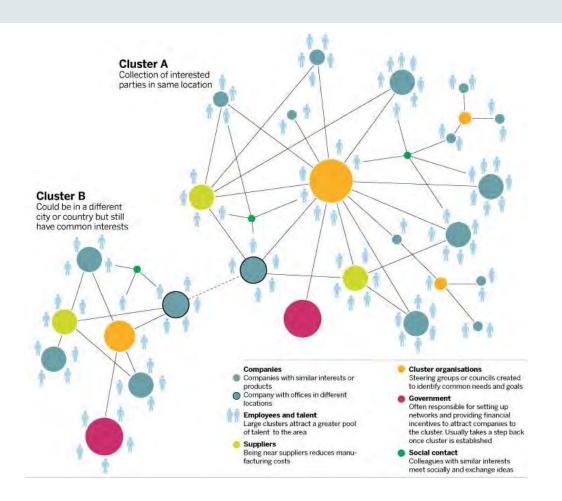
INFRASTRUCTURE: To accelerate the design, development and deployment of these solutions, the One Health Enterprise Network will support and facilitate the bringing together of the resources needed to make this happen. This to be done without duplicating existing support chain services, but by helping businesses/interdisciplinary consortia in the One Health space to navigate the existing landscape, and by identifying/filling service gaps.

PROCESS: OHEN programme priorities will be set by its steering board and OHEN steering board will be influenced by the identified support needs of the OHBC.





BUSINESS CLUSTER



What Is a Cluster?

Clusters are geographic concentrations of interconnected companies and institutions in a particular field. Clusters encompass an array of linked industries and other entities important to competition. They include, for example, suppliers of specialized inputs such as components, machinery, and services, and providers of specialized infrastructure.

Clusters also often extend downstream to channels and customers and laterally to manufacturers of complementary products and to companies in industries related by skills, technologies, or common inputs.

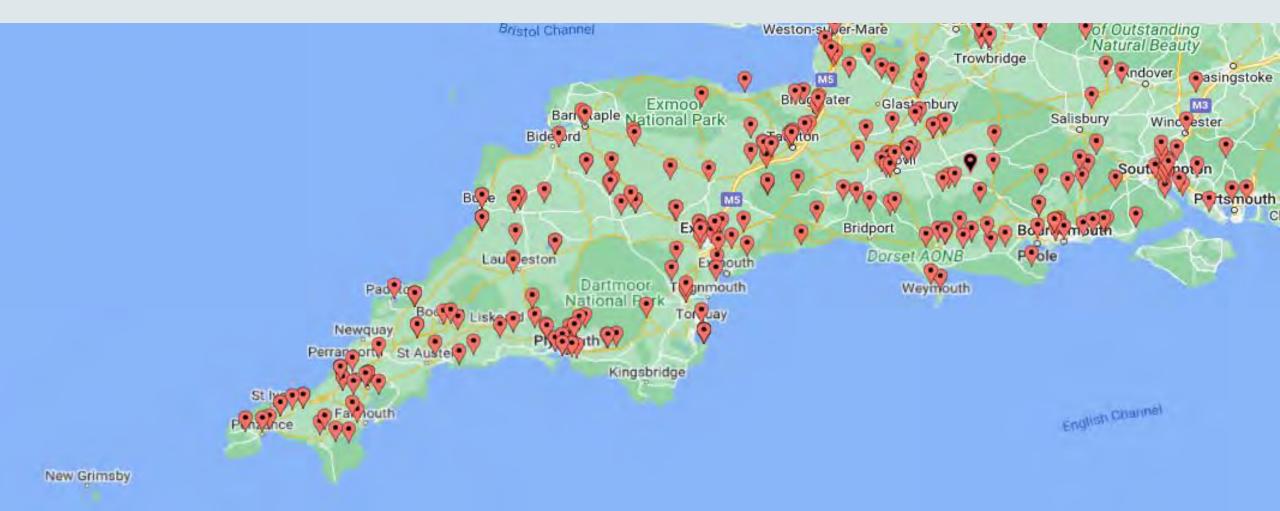
Finally, many clusters include governmental and other institutions—such as universities, standards-setting agencies, think tanks, vocational training providers, and trade associations—that provide specialized training, education, information, research, and technical support.

Michael Porter: Clusters and the New Economics of Competition





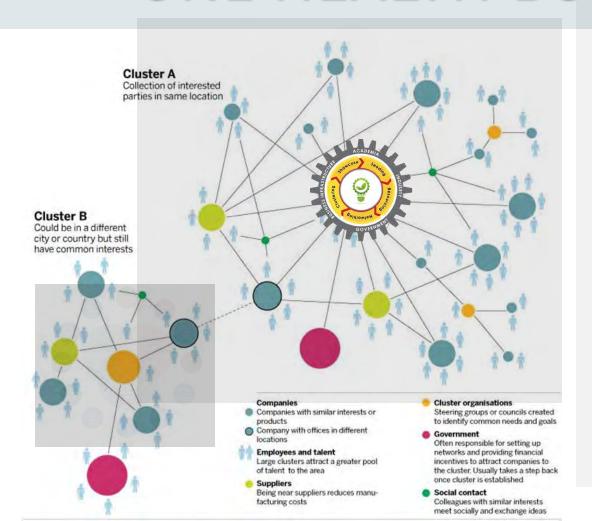
GREAT SOUTH WEST & WESSEX ONE HEALTH BUSINESS CLUSTER



ONE HEALTH ENTERPRISE NETWORK

SUPPORTING

ONE HEALTH BUSINESS CLUSTER



ONE HEALTH APPROACH: Supporting Interdisciplinary, business-led consortia to develop enterprise solutions to wicked one health problems.

INFRASTRUCTURE: To accelerate the design, development and deployment of these solutions, the One Health Enterprise Network will support and facilitate the bringing together of the resources needed to make this happen. This to be done without duplicating existing support chain services, but by helping businesses/interdisciplinary consortia in the One Health space to navigate the existing landscape and identify/fill service gaps.

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ONE HEALTH ENTERPRISE NETWORK POTENTIAL SERVICE OVERVIEW



OH CONNECT

Introductory service
to connect
businesses with the
'Support Chain'
(universities, Govt/
agencies, centres of
excellence, other
companies, etc)



OH FELLOWSHIP

Annual competition/
bootcamp to connect
high-growth
companies with pitch
training and
introduce them to
investors



OH KNOWLEDGE

An online Knowledge
Exchange to enable
OH companies to
keep in contact/work
together for mutual
benefit.



OH STARTUP

Championing an annual cohort of One Health focused start -ups by facilitating access to training and development opportunities.





ONE HEALTH ENTERPRISE NETWORK POTENTIAL SERVICE OVERVIEW



OH SURGERY

Panel of experts
providing insight into
OH product
development /
market access /
access to networks



OH PROSPECTUS

An annual publication highlighting trading OH innovators



OH SHOWCASING

Opportunities to showcase products at annual conference and via OHN newsletter



OH FUNDING SUPPORT

R&D Bid Writing
Support and general
business funding
advice and guidance
service





KEYNOTES: CEO, Bill Gillespie



WESSEX AHSN





Building a multi-agency partnership

Insights from the establishment of Wessex Health Partners

Bill Gillespie, Chief Executive, Wessex AHSN
One Health Partnership, Kingston Maurward, 13 July 2023





The AHSN role in research and innovation ecosystems

Our core objectives from NHS England and the Office for Life Sciences (OLS) are to:

- Generate a rich pipeline of demonstrably useful evidence-based innovations.
- Support adoption & spread of proven evidence-based innovations across England.
- Identify need and communicate regional priorities.
- Signpost and support innovators.
- Validate in real-world settings.
- Support wealth creation across health and social care



Our capabilities and experience across the innovation continuum

















Discover

Develop

Deploy

Discov

Understanding and shaping Research and Innovation e

Innovator Selection (including horizon scanning)

Supporting the development of in

Capability building: improving research/innovators' a research / innovation to be adoption ready

Designing nat



Service Impact – Example

3,745 people in Wessex supported with a correct diagnosis of asthma through successful implementation of FeNO testing in primary care



Economic Impact – Wessex AHSN support

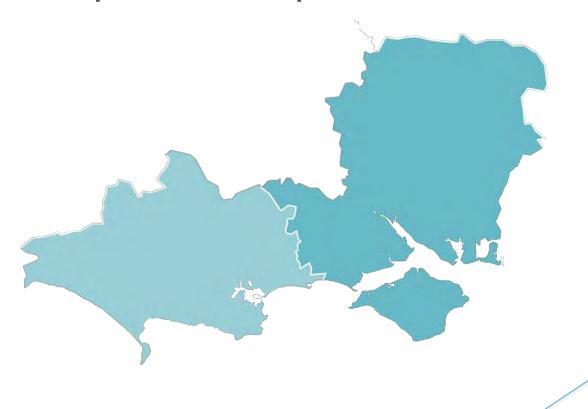
Company-reported data on economic growth with attribution of Wessex AHSN support (19/20

- £89m investment
- 347 jobs created/safeguarded

Undertaking e



Wessex Health Partners, the region's NHS and academic partnership





Bringing together world-leading expertise



Integrated Care Boards and Providers:

Dorset County Hospital NHS Foundation Trust
Dorset HealthCare University NHS Foundation Trust
NHS Dorset Integrated Care Board
University Hospitals Dorset NHS Foundation Trust
Hampshire Hospitals NHS Foundation Trust
Hampshire and Isle of Wight Integrated Care Board
Portsmouth Hospitals University NHS Trust
Solent NHS Trust
Southern Health NHS Foundation Trust
University Hospital Southampton NHS Foundation Trust









The National Assessment Framework for Academic Health Science Centres

NHSE/NIHR AHSC call

Wessex partners respond & bid

2019

WHP AHSC shortlisted

WHP not successful

NHS England/National Institute for Health and Care Research AHSC Criteria

Designated by NIHR and NHS England and NHS Improvement

Partnerships between **top universities** and **NHS organisations** that combine excellence in research, health and care education and care for patients, clients and populations

Harness the strategic alignment of the NHS and care organisations and their university partners

Improve health and care through increased translation of discoveries from early scientific research into benefits to patients.

Collaborate extensively with other organisations, including the local Academic Health Science Network (AHSN), Applied Research Collaborative (ARC), local government, NHS England, other AHSCs, NIHR infrastructure and the wider innovation landscape.

Support the NHS Long Term Plan, the Life Science Industrial Strategy and the goals of the expanded Accelerated Access Collaborative (AAC)

Accelerating the speed of innovation in health and care to the national population

Cambridge University Health Partners
Imperial College AHSC
King's Health Partners
Manchester AHSC

Oxford Academic Health Partners

UCL Partners

Bristol Health Partners

Newcastle Health Innovation Partners



WHP Steering Committee

FBC approved ers Boards

S: ch RC DE Formal Collaboration Agreement drafted

Chair, MD, Associate Director, Communications and business support in post



Professor William Rosenberg Chair

Christine McGrath Managing Director 2023

Strategic planning & implementation

Bids: NIHR HDRC UKRI Pop Health Clusters

WHP not

Where are we now?

possibile

Chair and MD appointed

TRE/SD



Formal Collaboration Agreement drafted

Chair, MD, Associate Director, Communications and business support in post

2023

Strategic planning & implementation

Bids: NIHR HDRC UKRI Pop Health Clusters



Where are we now? Collaboration Agreement drafted

(1) WESSEX ACADEMIC HEALTH SCIENCE NETWORK LIMITED

- (2) BOURNEMOUTH UNIVERSITY
- (3) UNIVERSITY OF PORTSMOUTH
- (4) UNIVERSITY OF SOUTHAMPTON
- - (5) NHS DORSET
- (6) HAMPSHIRE AND ISLE OF WIGHT ICB
- (7) DORSET COUNTY HOSPITAL NHS FOUNDATION TRUST
 - (8) HAMPSHIRE HOSPITALS NHS FOUNDATION TRUST
 - (9) PORTSMOUTH HOSPITALS UNIVERSITY NHS TRUST
 - (10) SOLENT NHS TRUST
 - (11) SOUTHERN HEALTH NHS FOUNDATION TRUST
- (12) UNIVERSITY HOSPITALS DORSET NHS FOUNDATION TRUST
- (13) UNIVERSITY HOSPITAL SOUTHAMPTON NHS FOUNDATION TRUST (14) DORSET HEALTHCARE NHS FOUNDATION TRUST

Formal Collaboration Agreement drafted

Chair, MD, Associate Director, Communications and business support in post

2023

Strategic planning & implementation

Bids: NIHR HDRC **UKRI** Pop Health Clusters

COLLABORATION AGREEMENT for the Wessex Health Partners



LOOLA HEALTH TARTHERO

Research (Discovery)

- New synergies between diverse and complementary research assets and health and care teams, increasing our competitiveness for funding bids.
- Greater and faster translation of research into impact – greater "pull" from services and systems and increased impact in society.
- More commercial partnerships increasing the value of research in the economy.
- Better scaling of research impact.
- Linking the needs of the community to focussed discovery/research

Health and care (Deployment)

- Supporting major inroads into critical system challenges.
- Faster and less costly adoption of innovation.
- Greater opportunities to be early adopters of transformative research and innovation.
- · A culture that values innovation.

Life sciences industry (Development)

- Reducing the barriers to market
- Strategic partnerships with research, education, and health systems
- Attracting venture capital and accelerator funds
- Streamlining arrangements for commercial partnerships

Education and training

- Recruitment and retention of high-quality researchers.
- Highly adaptive and skilled health and care workforce nurturing staff attuned to STEM advances.
- Wessex life sciences industry able to draw on a highly skilled graduate workforce.
- High quality implementation of innovation alongside

Where are we now? Broath value proposition signed off

Formal Collaboration Agreement drafted

Chair, MD, Associate Director, Communications and business support in post

2023

Strategic planning & implementation

Bids: NIHR HDRC UKRI Pop Health Clusters



Build trust

Back to the beginning

NHSE/NIHR AHSC call

Wessex partners respond & bid

2019

WHP AHSC shortlisted

WHP not successful

NHS England/National Institute for Health and Care Research Feedback

- Interested in a placed-based bid
- Some impressive case studies
- Not convinced these were the product of Wessex Health Partners

WHP reflection:

- There was "something" in a place-based partnership
- There were some existing constructive partnerships and networks
- A process was needed to enable partners/potential partners to have honest discussions about the "what? why? and "how?"

2023



COVID

Wessex partners continue to meet

2019

2020

Build trust; explore 'the art of the possible'

Trust-building

- AHSN commissions independent facilitator for WHP:
 - One-to-one discussions with key stakeholders
 - Three workshops
- Fears, hopes and ambitions surfaced; trust being built
- "Good enough" common purpose explored and agreed:

A Partnership that learns together and accelerates improvements to health and social care through innovation, research and training, for the benefit of patients and wider society.

- Recognition that partners could collaborate whilst still competing in some areas
- Who's in the room? The start-up stage does not have to be all-inclusive. If it were, it would never get beyond start-up.



WHP Steering Committee

Working groups

- Discover
- Develop/deploy
 - Governance

2019 >> 2020

2021

WHP Trusted Research Environment Bid TRE/SDE

Doing real work - 1

Model key principles:

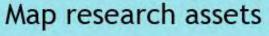
Parity of academic and service partners:

- Jointly chaired by University
 Dean & NHS Trust CEO from
 different parts of the Wessex
 geography
- Formalising programme and overseeing real work

Doing real work - 2

WHP Steering

Committee





Working groups

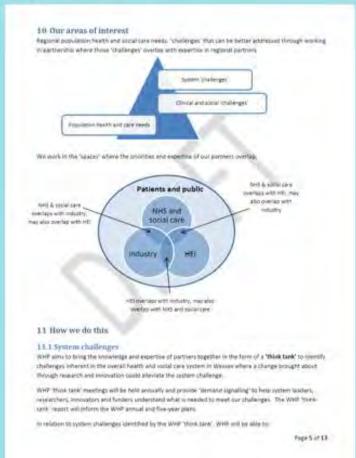
- Discover
- Develop/deploy
 - Governance

2021

Understand baseline perceptions of discover, de



Start testing ideas on governance



scientists



Map research assets

WHP Steering Committee

Working groups

Discover

Governance

- Develop/deploy
- Understand baseline perceptions of discover, develop, deploy pathway

22 doctors (21 specialist, 1 GP) 2 AHPs 2 Nurses 1 Psychologist

Start testing ideas on governance

2021

ional population health and social care needs. "Challenges" that can be better addressed through workin research and innovation could alleviate the system challenge. ers, innovators and funders understand what is needed to meet our studienges. The WHP fitten

WHP Trusted Research **Environment Bid** TRE/SDE

Building momentum -1

At this stage, an embryonic partnership needs "backbone".

People who can sustain the momentum of the practical work of establishing the partnership through commitment of time and energy.

The most senior people in the partnership are likely to be either be too busy or too powerful to fulfil this role; and/or too constrained by the their own role to risk leading something inherently high-risk at this early stage.



WESSEX HEALTH PARTNERS

People seek sponsorship from the partnership...



Wessex Regional Trusted Research Environment PHASE 1 REPORT | DISCOVERY

25" July 2022

WHP Steering Committee

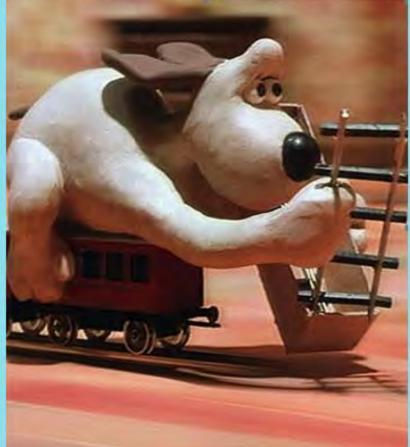
Working groups

- Discover
- Develop/deploy
 - Governance

20 > 2021

WHP Trusted Research Environment Bid TRE/SDE **Building momentum -2**

... before the partnership is in place. A good sign!

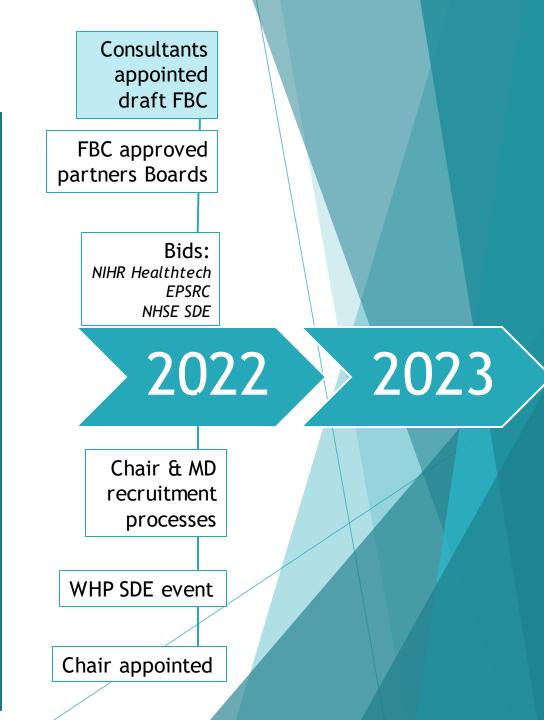


Chair a



Making it sustainable

- Consultants appointed early 2022 to develop a full business case for formal partner approval
- Inclusive process with scoping workshops
- WHP partners meet fortnightly for 30 minutes to oversee development of business case and next steps - critical to building relationships
- FBC proposes:
 - One member, one vote
 - Flat rate member subscription of £50k per annum for 3 years
 - Recruitment of Chair and MD
 - Intrinsic and extrinsic goals
 - We want to do this because it is the right thing to do
 - We want ultimately to get NHSE/NIHR accreditation as an AHSC
- A number of partners signal early support for the FBC

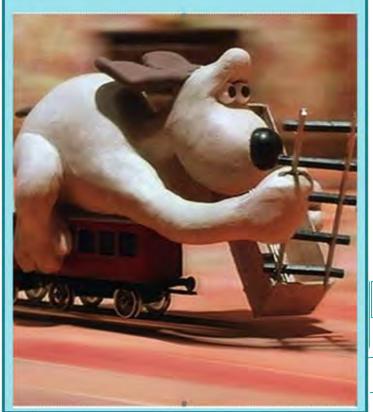




Bringing WHP into being

- March September 2022 13 founding partners sign up
- AHSN offer part-time Associate
 Director to maintain pace in set-up work
- Steering Group continues to strengthen as it considers what type of leadership it wants for WHP
- Recruitment process for Chair and MD begins

More multi-agency consortia seek WHP sponsorship for national research bids



Consultants appointed draft FBC

FBC approved partners Boards

Bids: NIHR Healthtech EPSRC NHSE SDE

2022

2023

Chair & MD recruitment processes

WHP SDE event

Chair appointed



Wessex Health Partners appoints Professor

William Rosenberg as Chair

Wessex Health Partners appoints Christine

McGrath as Managing Director

20 December

Wessex Healt education an

23 February 2023

Wessex Health Partners (WHP), a new learning partnership accelerating better health through research, education and innovation, has appointed Christine McGrath as its inaugural Managing Director.

Transition in leadership and governance

- Form of leadership changes between set-up and establishment phase: from informal authority and permission to act, to formal authority deriving from formal governance
- Balancing inclusivity and collaboration with ability to take and enact decisions

Consultants appointed draft FBC

FBC approved partners Boards

> Bids: NIHR Healthtech **EPSRC** NHSE SDE

> > 2022

2023

Chair & MD recruitment processes

WHP SDE event

Chair appointed

A Recap on Insights

- 1 Take time to build trust (some independent facilitation might help).
- 2 Exploring a common purpose is a good place to start. Test intrinsic/extrinsic drivers.
- Who's in the room? Start with those willing to commit time and energy. Others can come on board over time.
- 4 Do real work & engage the partners in overseeing and shaping real work.
- Seek "backbone" to maintain momentum: people trusted across partners and with a high-risk appetite.
- 6 Seize early opportunities to attest value of partnership.
- Make it sustainable: resource, leadership, governance.



Thank you

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Southampton Science Park
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wessexahsn.org.uk



KEYNOTES: Professor Lee Miles



Bournemouth University – Disaster Management Centre









The Future of a One Health Business Cluster?

Meta-Leadership and Clusters in Action







Presenter: Professor Lee Miles PhD
Professor of Crisis and Disaster
Management





Lessons of COVID-19? Determinants of Disasters are often Global?





Lessons of Covid-19? Disasters Instruments are National and Local?



COVID:

we all have a part to play









Disasters (even Pandemics) are Local?

COMMUNITY ACTION RESPONSE: COVID-19

5 things you can do to make a positive difference in your community







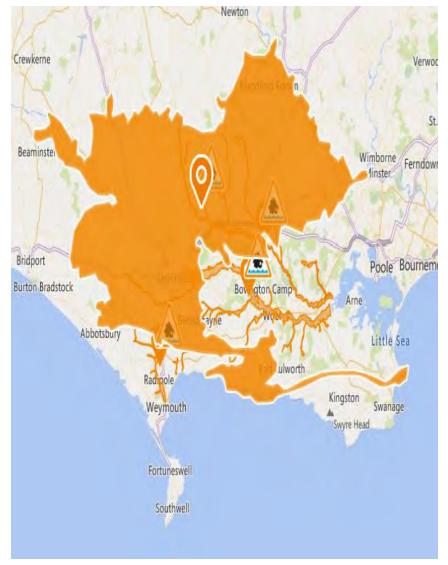








Increasing Vulnerabilities across Sectors?







Rising Business Responsiveness?















Part 1: Considering Meta-Leadership





Considering Meta-Leadership in One Health?



- Concept of Meta- Leadership? (Marcus et al., 2015):
 - 'To help leaders navigate complex situations'.
 - 'To generate a unity of action when many different constituencies must be focused into a broadly adopted strategy, plan, mission, even if their priorities and proclivities are conflicting (Marcus et al., 2006)'.
 - 'To best align mission, strategy, tactics, and success metrics with the problem or opportunity.'



A Need for Meta-Leadership?



- Three Key Components of Meta- Leadership? (Marcus et al., 2015):
 - **Built on 'People':** leaders/communicators know their strengths & limitations: what they can and cannot do alone.
 - Understanding 'Situations': Strategic Situational Awareness.
 - Creating 'Connectivity': Establishing cross-cutting organisational and communication channels and coordination structures. Managing the 'silos'. Understanding Single Points of Failure (SPOF).
 - = Apply 'Horizontally' as multi-(inter-member cooperation) and 'Vertically' within units (intra-member cooperation)





Part 2: Cluster in Action?





Clusters in Action

People:

- Pooling Human expertise, skills and resources
- Building innovation and resilience across local networks

Situations:

- Transforming Threat Prediction/Perception: Information Sharing
- Changing Scenarios/Trends: Dynamic Situational Awareness

Connectivity:

- Embedding One Health Adoption as Common Approach
- Enhancing Effective Resourcing and Facilities
- Coordinating Collective Action to build trust, reduce duplication and enhance impact

= Meta-Leadership in Action?





The End Thanks for Listening



KEYNOTES: CEO, Prof. Jo Slater-Jefferies



NBIC— National Biofilms Innovation Centre



National Biofilms Innovation Centre

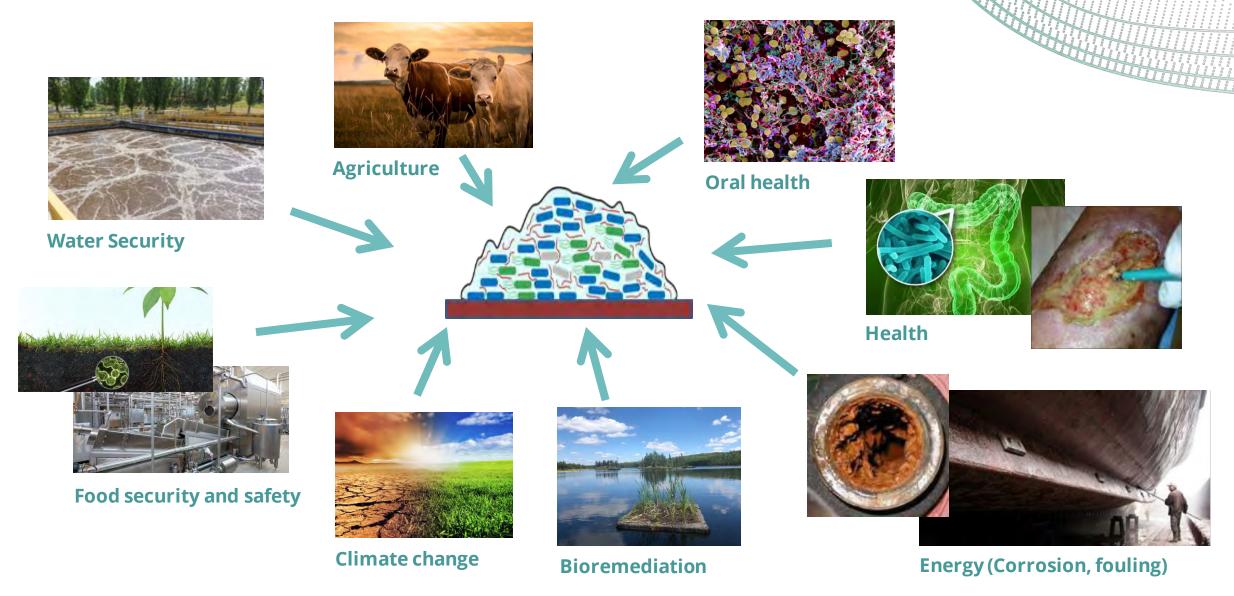
National Biofilms Innovation Centre: Leveraging Partnerships to Drive Innovation

13.07.2023 National Biofilms Innovation Centre @ukbiofilms biofilms.ac.uk Not to be circulated without permission of NBIC

- Biofilms and their impact on human, animal and environmental health
- The importance of NBIC's partnerships in:
 - Research
 - Innovation
 - Training
 - Outreach



Biofilms impact significant areas of the economy



NBIC Academic Co-Directors leading 4

interventional themes



Engineer

Control and direct complex microbial community processes in process applications





Prevent

Knowledge-based design of surfaces and materials



Manage

Kill, remove or control established biofilms from exploiting their life cycle dynamics



The University of Nottingham

UNITED KINGDOM - CHINA - MALAYSIA





Detect

Accurate, quantitative, actionable detection or sensing of biofilms





63 research organisations working across 4 interventional themes

Total economic impact = £204M

Benefit to cost ratio =12.8: 1



Engineer

Control and direct complex microbial community processes in process applications



THE UNIVERSITY of EDINBURGH



Prevent Knowledge-based design of surfaces and materials





Detect

Accurate, quantitative, actionable detection or sensing of biofilms





Manage

Kill, remove or control established biofilms from exploiting their life cycle dynamics



Nottingham

UNITED KINGDOM · CHINA · MALAYSIA

NBIC has built strong industry partnerships



































TATA STEEL







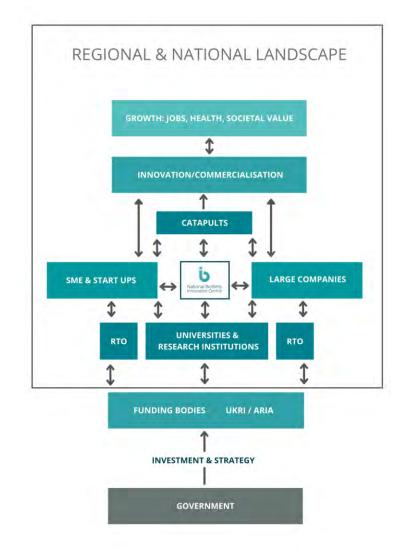






Innovation and Commercialisation

NBIC HAS SUCCESSFULLY ESTABLISHED ITSELF AS A KEY PART OF THE UK INNOVATION ECOSYSTEM





Intellectual Property

36 of the NBIC funded POC and FTMA projects have already reported intentions to explore applications for IP

81 NBIC Proof-of – Concept Projects funded and completed in 5 years





Examples of Proof-of-Concept projects

- Blue light treatment of biofilms under real environmental conditions Determining the impact of blue light treatment of Listeria monocytogenes biofilms under food factory conditions
- Novel hybrid biofilm technology to remove nutrients from wastewater.
- QuorumClean a project to develop a novel marine antifouling technology using novel Beta lactams that can outperform conventional approaches, but with a reduced environmental impact
- Development of novel biomimetic surfaces to prevent biofilm formation on catheters
- Detection of biofilms that give rise to wound infection. Development of a prototype point-of-care device based on rapid detection and analysis of microbial volatiles.













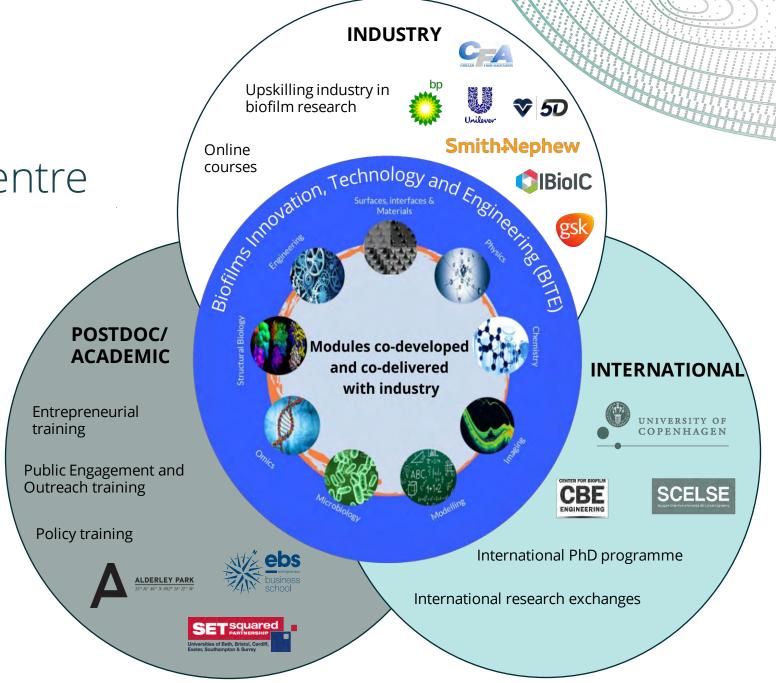






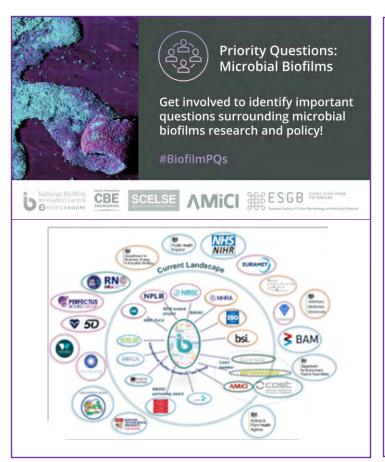
Biofilms Innovation, Technology and Engineering (BITE) Doctoral Training Centre

'delivering a trained R&D workforce for industry is a key component of how the UK academic and industry sectors must work together to address national innovation ambitions'



Outreach, Policy & Public Engagement

Outreach



Policy and Strategy



Public Engagement



BIOFILM WEEK 2023

18-24 November

PROMOTING THE ECONOMIC AND PHYSICAL IMPACT THAT BIOFILMS HAVE ON OUR WORLD



Biofilms present a significant challenge across the One Health approach

NBIC have created an ecosystem that facilitates the translation of research and innovation to deliver solutions to end-users











THANK YOU TO OUR FUNDERS:



Biotechnology and Biological Sciences Research Council



Innovate UK





Science and Technology Facilities Council

Hartree Centre

WE ARE NBIC



KEYNOTES: CHAIR, Karl Tucker



GSW-THE GREAT SOUTH WEST





The GSW Pan Regional Partnership

Karl Tucker Chair



What I will cover today:

- What is the GSW PRP
- What is the GSW looking to achieve



What is the GSW PRP?

- Established in December 2022
- A business led partnership of business, local authorities and academia
- Covering the geography covered by Cornwall & the Isles of Scilly, Devon, Somerset, Dorset and BCP
- Recognised and funded by the Government until March 2025
- Partnership Board consists of:
 - Chair
 - 3 LEP Chairs (HotSW, Cornwall & IoS, Dorset)
 - 4 University VC's (Falmouth, Plymouth, Exeter, Bournemouth)
 - 8 Upper Tier LA Leaders (Cornwall, Isles of Scilly, Devon, Plymouth, Torbay, Somerset, Dorset, BCP)
 - 5 independent business directors (Goonhilly, Princess Yachts, Leonardo, Atlas Elektronik, Vacancy)



A positive picture of the GSW

- Population over 3 Million
- 128,000+ businesses (95% + SME's)
- Economy worth over £64Bn p.a.
- 8 Universities with strong research capabilities and credentials
- 700 miles of coastline and beaches
- 2 National Parks (406,000 acres)
- 10 Areas of Outstanding Natural Beauty plus numerous SSI's



A positive picture of the GSW

- A solid tourism, agriculture and food manufacturing sector
- A strong defence sector
- The UK's newest nuclear generation plant being built
- A strong creative arts sector
- The UK's second largest financial sector



A less positive picture of the GSW

- Significantly lower Productivity than the country's average
- Some of the worse Social Mobility indicators in the country
- A significant housing challenge availability & affordability
- Significant pockets of deprivation and challenged communities
- A struggling energy grid not fit for the present or the future
- A significantly older demographic compared to the rest of the country
- An inadequate transport network Road and Rail
- An inadequate digital network mobile, internet



What is the GSW looking to achieve

- The role of GSW is to:
 - Convene businesses and other stakeholders to help develop proposals for investable transformational economic opportunities
 - Promote/Advocate/Lobby for transformational economic opportunities
 - Provide economic intelligence
 - Develop the international trade and investment proposition
- The GSW purpose is to:
 - Generate the investment in our blue and green economies to lead the UK's transition to net zero and so create fulfilling, well paid and sustainable employment in the south west



What is the GSW looking to achieve?

- The 5 missions of the GSW are to be:
 - The clean energy powerhouse for the UK
 - The environmental science capital of the UK
 - A world leader in clean propulsion and autonomous marine technologies
 - A centre of excellence and innovation for high value manufacturing across our blue and green economies
 - A beacon for rural productivity and tourism excellence



What the GSW PRP is not?

- It is not a super sized LEP
- It is not a funding body
- It is not a delivery body

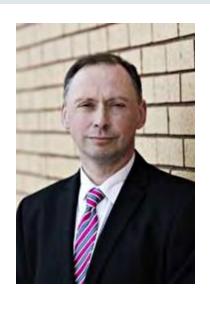


What will we be doing

- Convening stakeholders across the region to identify, develop and promote investable propositions to UK Government, UK and Foreign Investors
- Promoting investable transformational economic opportunities
- Providing economic intelligence
- Developing the internationalistion plan for the region
- Calling for the necessary 'enabling infrastructure investment' required in the region
 - Roads, Rail, Grid, Digital, Housing
- Providing a strategic overview of the GSW area to augment and shout about opportunities and challenges that span and cover a wider geography than one individual county or LEP area.

Q&A













ASK THE AUDIENCE THE RIGHT SERVICES?

ONE HEALTH ENTERPRISE NETWORK POTENTIAL SERVICE OVERVIEW



OH CONNECT

Introductory service to connect businesses with the 'Support Chain' (universities, Govt/ agencies, centres of excellence, other companies, etc)



OH FELLOWSHIP

Annual competition/
bootcamp to connect
high-growth
companies with pitch
training and
introduce them to
investors



OH KNOWLEDGE

An online Knowledge Exchange to enable OH companies to keep in contact/work together for mutual benefit.



OH STARTUP

Championing an annual cohort of One Health focused start -ups by facilitating access to training and development opportunities.



OH SURGERY

Panel of experts providing insight into OH product development / market access / access to networks



OH PROSPECTUS

An annual publication highlighting trading OH innovators



OH SHOWCASING

Opportunities to showcase products at annual conference and via OHN newsletter



OH FUNDING SUPPORT

R&D Bid Writing Support and general business funding advice and guidance service





SHOWCASE 1: The Power of Partnership



Local Nature Partnership

Maria Clarke –
Dorset LNP Manager





Dorset Local Nature Partnership: Maximising the benefits of our natural environment for people, wildlife and businesses

13 July 2023

Maria Clarke

Dorset LNP Manager



What is an LNP?

Sustainable Development – LEP, HWB, LNP

Drive positive change in the local natural environment.

Taking a strategic view of the challenges and opportunities involved.

Identifying ways to manage it as a system for the benefit of nature, people and the economy.

Contribute to achieving the Government's national environmental objectives locally.

Become local champions influencing decisionmaking relating to the natural environment and its value to social and economic outcomes.



The Challenge

The Climate Emergency

The Ecological Emergency

The Health and Wellbeing Emergency

And cost of living crisis

One Health



Strategic Priorities

Natural capital – increasing investment

Natural Economy – adding value

 Naturally health – developing Dorset's 'natural health service'

- Natural resilience improving environmental and community resilience
- Natural understanding improving engagement in Dorset's environment
- Natural influence embedding natural value in policy and decision-making



Governance

Board

9 independent members

2 elected members (DC & BCP Council)

1 LEP rep (LNP Chair)

1 HWB rep

3 co-opted members

Plus: Officer supports (inc. Defra family

and I.5 FTE LNP Staff - Manager and

Assistant)

Forum

350+ members



Natural Capital

Ecological Network Mapping: DERC (2018 & 2020)







Natural Economy

















NATU!

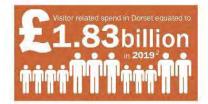
NATURAL

VALUE



OF LOCAL COMMUNITY INVESTMENT RAISED BY DORSET COMMUNITY ENERGY IN 2015 1









References: 1. Darset Community Energy (2016) 2. South West Research Company (2020) 3. Ash Futures (2015) 4. REIS (2019)

Naturally Healthy





Give Nature a Go: Nordic Walking

Join Helen Gilchrist for a lesson in the technique of Nordic Walking to enhance fitness and wellbeing.

HEALTH AND NATURE DORSET

Working together to connect people with nature for health and wellbeing



Dorset



Natural Understanding







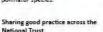
Case Study: Dorset's Natural Capital at its best

Growing for Pollinators: tenant farmer engagement for the benefit of pollinators

Dorset * Local Partnership

How partnership working benefited

The project has enabled future partnership working between the National Trust and Bournemouth University. This includes setting up student placements for summer 2018, when BU students will work on projects at National Trust grassland sites, monitoring the progress of habitat restoration and the impact on pollinator species.



An article about the project was included in a tenant farmer newsletter during the year to share good practice.



The National Trust team hand-broadcast meadow seed at Burton Bradstock in 2017 © National Trust

More Information: West and North Dorset Countryside Team westdorset/finationaltrust om int

www.gorseting.ore.uk/case_studies

2017 @ National Trust **Future** monitoring

The follow up monitoring will be undertaken in the Spring/summer 2018 and subsequent years, and the results will feed into future habitat restoration plans.

Harrowing a field at Burton Bradstock in preparation for re-seeding in

"Our tenant has started the restoration process by removing dock and thistle from the fields in 2017, both of which have reduced in abundance this year. Later this summer he will be sowing strips of locally sourced green hay to help increase the diversity of the sward and introduce some wildflower seed which will provide a pollen and nector source for pollinators in future years. He manages the land in a low intensity way, cutting and grazing with belted Galloway cattle and sheep, and this management will help to maintain the restored grassland into the future." Ecology Officer, National Trust



Case Study: Dorset's Natural Influence at its best Biodiversity Net Gains from the Weymouth Relief Road

Dorset 4

Lead Partner: Natural England and Dorset County Council (project completed prior to local government

Other Partners: DWT, RSPB, Dorset ADNB

Project Summary

construction

The Weymouth Relief Road is a single carriageway route improving the A3S4 and bypassing the communities of Broadway, Littlemoor and Upwey. A relief road had been included in Eggal Plans since 1949.

Over the course of the planning process, the original route which would have crossed the Lorton Valley, dividing the Lordmonr Ste of Special Scientific Interest (SSSI) was changed to a less ecologically damaging one, alongside a railway line. The revised route left the valley with an intact, and over time enhanced, network of high quality habitats including nationally important grasslands, woodlands and wetlands.



One of the four green bridges © John Stobart (ME)



significant loss to Dorset Wildlife Trust's (DWT) Lorton Meadows Nature Reserve, as well as the Woodland Trust's Two Mile Coopice, which forms part of the Lorton SSSI. The scheme also impacted on the Dorset AONB landscape.

Summary of ecological losses associated with the new road

- . 0.6 hectares (ha) of the western edge of Two Mile Coppice, part of the Lorton SSSI. Of this 0.25ha was considered to be ancient woodland though later found not to be and 0.35ha was secondary woodland.
- · 0.5ha of other woodland.
- 20.8ha of semi-improved neutral grassland, including 5.5ha approaching Local Wildlife Site (SNCI) quality, 3.1ha of which was in DWT's Lorton Meadows Nature Reserve.
- 1.5ha of semi-improved calcareous grassland.
- . 2 9km of mature hedgerow.





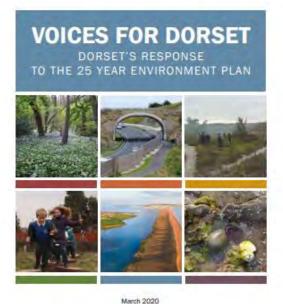
nampwed with flowe rich limestone spoil © John

road cutting on skyline @ John Stobart (NE)

Natural Influence







Overview

On 27 June, Defra's Secretary of State commissioned conduct an independent review to help the government National Food Strategy for 75 years.

National Food Strategy - Call for Evi

The Board, officers and partners of the Dorset Local Nature Partnership



umm

WeA

ery Stra establish

requirement for mere to be and how they should gener Bill once it completes its current passage through Parliament.

Water Management in Dorset

A Dorset Local Nature Partnership Position Paper



Dorset Local Nature Partnership wants to see Dorset boasting some of Europe's best drinking water, the highest quality river, estuarine and bathing water and healthy, wildlife-rich and resilient wetland habitats benefitting both local communities and nature.

Dorset Local Nature Partnership therefore makes the following recommendations:

dations for water management in Dorset

1) Progress already made should be continued and best practice measures trialled and then widely adopted, for example those already in place in the Poole Harbour catchment and through soft engineering solutions as outlined below. Greater awareness raising of integrated catchment partnership approaches are needed (e.g. through the development of case studies and a cost/benefit analysis to demonstrate the advantages).

2) An holistic ecosystem services approach is needed in decision making and Dorset Local Nature Partnership would like to see the following principles utilised when judging proposals:

- · Water management should be integrated into all development plans.
- Flood defences should be designed and managed to work with nature, and, wherever possible, should take all opportunities to enhance the natural environment.
- Soft engineering solutions should be adopted as a first and preferred option.
- Development should not result in upstream or downstream problems such as increased nutrient
- Water quality and quantity both for humans and the natural environment should be maintained and enhanced, without compromising future ability to meet Water Framework Directive good
- Ensure that the essential food supplies produced in Dorset do not damage the water cycle, either directly or through the aquifers, and ensure that the true cost of sustainable food is understood

3) A public engagement and education programme is needed to raise awareness about water















Cross Cutting





Local nature recovery strategy statutory guidance

What a local nature recovery strategy should contain

Presented to Parliament pursuant to Section 106(5) of the Environment Act 2021

March 2023





How everything fits together to deliver nature recovery for

Dorset





Dorset **Future Work** Local Nature Partnership Local **Health and** Green **Nature Nature Finance** Recovery Dorset **Strategy Stour Valley** Youth Climate **Local Plans** Park **Engagement** Change

Thank you

info@dorsetInp.org.uk

www.dorsetlnp.orguk



SHOWCASE 1: The Power of Partnership



CIEL -

Centre for Innovation Excellence in Livestock

Martin Sutcliffe— Aquaculture Specialist







13 JULY 2023

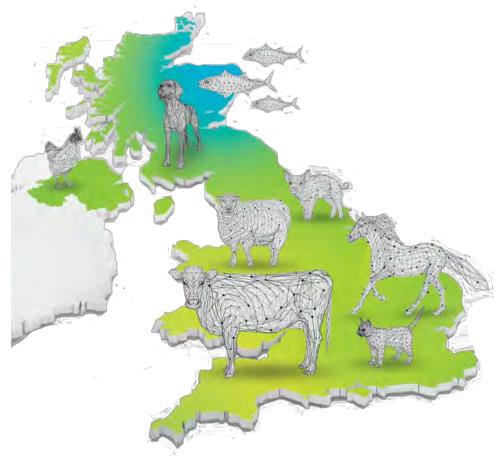
It's More Than Just Fish

Martin Sutcliffe
Aquaculture Specialist





- What is CIEL?
- UK Aquaculture
- Funded projects
- Animal (One) health
- Collaborate, Collaborate, Collaborate



World-leading research alliance

Bringing new technologies and processes to livestock and aquatic food production

- Improve research infrastructure& expertise
- Create valuable collaborations
- Advocacy & thought leadership
- Support & deliver innovative research



National Research Network

Working in partnership with leading livestock and aquatic research institutions



Multi-Departmental Government Partners

Working across UK Government including BEIS, UKRI, Innovate UK, Defra, DHSC, DIT and devolved administrations



>30,000 Livestock

Multiple research populations



≈900 Researchers

Collaborative network tackling the grand challenges facing the agrifood and aquaculture industry



£70M Investment

Greatest joint investment in livestock research capability in a generation



≈90 Industry Members

Covering all aspects of the food supply chain from pre-farmgate, processors and retailers to animal health and SME innovators



26 Facilities

Capital investment in new or enhanced research facilities nationwide, spanning all livestock species



£££Ms Projects

Projects managed and in the pipeline



World-leading research alliance



2022/2023 Achievements



£8.5M

Project funding won in partnership with CIEL Members



£8.6M

Value of research across CIELsupported research capability



=40

40%

Businesses working in partnership with CIEL on livestock innovation projects



Industry-led projects directly supported by CIEL



1000

Downloads of CIEL 'Net Zero & Livestock' reports





Increase in membership spanning businesses across the livestock supply chain





CIEL Research Members

Founding Research Members:





























Open access

New research partnerships welcome



















Industry Members

Retail / Suppliers





























Antleribio





Quantech Solutions

Livestock Health & Welfare

SMa) (tec

FOLIUM Science

Zoetis Chordata





aga nanotech

Greengage



Norbrook

HYNEVAL

Boehringer Ingelheim



NATURE METRICS



Biotechnology and **Biological Sciences**







dunbia

CRANSWICK



KARRO





TEgg







ZEO-CONCEPT ECE



On Farm Innovation













٨ AgriWebb





innovis



Peacock







Associations & Societies

























































MAP OF AC





N2 — Applied

Shearwell

Data

Grand Challenges & Solutions

Animal health is engaged with:

- **Food security** ensuring access to high value protein within a sustainable human diet globally
- **Antimicrobial resistance** significantly reduced & responsible use of medicines for animals (RUMA)
- **Environmental Impact** focus for CIEL reports contributing to achieving net zero by 2050
- Contributing to **UN sustainable development goals**
- **One Health One Medicine paradigm** recognising the interdependence of people, animals and the environment































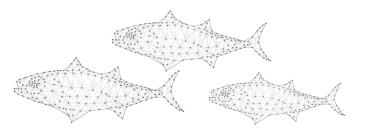


Fin Fish Key challenges

- UK a top 5 global producer for salmon, mainly through large integrated companies
- Rapid growth & generally perceived as high quality & value by public
- ► Feed represents 50%-60% of costs move to reduce fishmeal & oils
- Intensive production implies susceptibility to disease:-
 - Notifiable e.g. ISA, IHN, VHS
 - Endemic & preventable via vaccine e.g. pancreas disease, enteric redmouth
 - Other syndromes e.g. PKD & complex gill disease
 - Sea Lice









- Shellfish sector has similar pressures
- Seaweeds are emerging (still!) but not a silver bullet
- Competition for space on land and at sea
- Catchment area processes affect aquaculture and fisheries
- Contributions to food security
- Ecosystem services often overlooked







- Q3 2022 Aquaculture Seed Funding Programme
- 2 x IUK CR&D funded projects won
- Competition for space on land and at sea
- Catchment area processes affect aquaculture and fisheries – SWEEP
- Contributions to food security and ecosystem services



















Investing in Animal Health Report



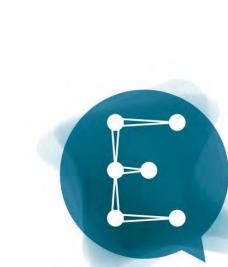
The report will:

- Highlight the importance of animal health for our agri-food industry and for wider society
- Demonstrate the opportunities and high potential return on investment in animal health
- Emphasise the cross-cutting nature of this opportunity e.g. precision medicine, digital technologies and AI
- Facilitate initiatives between industry, academia and Government to fulfil these opportunities

Therefore, we hope this report will be of value to everyone engaged in Animal Health

"There is a clear and multifaceted opportunity for
investment in animal health
based on challenges across the
livestock, aquaculture, equine
and companion animal
sectors. The UK has a
collaborative and innovative
ecosystem that can deliver the
solutions needed to address
these challenges."





ENGAGE

Powered by citi















Martin Sutcliffe
martin.sutcliffe@cielivestock.co.uk



SHOWCASE 1: The Power of Partnership



SIGHT Project – University of Portsmouth

Prof. Gordon Blunn













Supporting Innovation and Growth in Healthcare Technologies



Gordon Blunn Professor of Bioengineering Director of Health and Well-being University of Portsmouth





Dr Phil Jewell
Director and CEO of the SIGHT program
University of Portsmouth







Supporting Innovation and Growth in Healthcare Technologies



- ERDF grant awarded in June 2019 to the University of Portsmouth, Portsmouth Hospitals University NHS Trust, NIHR Wessex Clinical Research Network.
- Just finished
- Designed to enhance SME competitiveness in the UK healthcare and medtech sectors.
- Seeks to provide SMEs with access to clinicians, patients and academics to ensure their products/service meet real-world need.
- Three stages of support for SME members; business development webinar series, one to one engagement, and a grant funding scheme.







Output Progress Summary

• 500 companies engaged, 277 fully signed up members



Over 3500 hours of direct SME engagement

| | Target | Signed off | In draft/progress | Est.Total |
|---|---------|------------|-------------------|-----------|
| enterprises receiving support | 120 | 107 | 30 | 137 |
| enterprises receiving grants of at least £1,000 | 30 | 25 | 12 | 37 |
| enterprises receiving non-financial support | 90 | 98 | 20 | 118 |
| new enterprises supported | 5 | 11 | 2 | 13 |
| private investment matching public support to enterprises | £547.5k | £622.4k | £22k | £644.4k |
| enterprises supported to introduce new to the firm products | 10 | 11 | 1? | 12? |
| enterprises receiving information, diagnostic and brokerage support | 25 | 40 | 21 | 61 |











Grants overview



- 48 grant awards made in total throughout the programme
- 41 complete, 1 in progress, 6 withdrawn

| | Project total | Grant total |
|-----------------------------------|---------------|-------------|
| Total Budget | £880k | £220k |
| Awarded (minus underclaim/return) | £910.7k | £227.6k |
| Paid in full | £829.9k | £207.4k |
| Claims submitted/in progress | £29.4k | £7.4k |
| Total | £859.3k | 214.8k |











Success

Majority of the EU funded SIGHT programme focused on supporting SME business development.

HEIF injection in Feb 22 opened up capability to discuss research and innovation. Led to 42 bids being submitted with SIGHT companies in 2022, bid value c.£22.5m, award value c.£6m, income to UoP c.£600k, PHU c.£1m.

Number of webinar and on line events including
Marketing in the medtech sector, Developing and managing Intellectual Property
Understanding the CE Marking process; Exploring international business opportunities
Meet the buyer workshops GDPR and cyber security for medtech SMEs
Designing and sponsoring clinical and patient trials; Importance of PPIE

Ran a joint event with Innovate UK (co-funder) on 30th March 2023, including speakers from NIHR, WAHSN, Roke, BSI, Barclays, Menzies, DIT etc which attracted over 170 attendees.





Company membership



- Sectors range from genome sequencing, prosthetics to mental health support and dementia care.
- Includes regional medtech design and development companies (Maddison, Morgan Innovation, etc).
- 20% of members are involved in digital medical/health technologies.
- 25% of members are within 20 miles of Portsmouth.
- Remainder from all over England (Newcastle, Sheffield, Bristol, Exeter etc).
- 30% have less than five employees.







NTL Biologica

The COVID-19 pandemic caused cessation of the company's normal daily activities (stem cell harvesting kits). They subsequently developed a process of testing humans for Covid 19 in a testing units (housed in a converted bus).

Due to their expertise in manufacturing kits, they have designed a process which allows them run antibody tests for between 500 & 1,000 people per day.

NTL have an office in Korea, which Is where the production is done and their contacts list for components is wide – they are thus able to purchase the highest reliability test kits and the latest immunoassay equipment.

The test is completed with a result obtained within 20 minutes.











Airway Medical Ltd



The company has invented a 3D printable airway suction device in response to the Government's Covid-19 Call.

This new technology is 95% cheaper, 95% smaller and 99% lighter than the current technology. It can be rapidly scaled and manufactured at a rate of 2000 units to 1 of the current technology. It is just as effective and meets ISO 10079, the international standard for Laryngeal Suction.

Airway Medical Ltd have assembled a team of experts working probono or at cost to deliver the project in a timely manner. This includes SIGHT and the University of Portsmouth, with whom they have won an Innovate UK award to continue the development of both the portable and wall-mounted versions of the technology.











Radii Devices

European Union
European Regional
Development Fund

Postgraduate student Joshua Steer from the University of Southampton has built upon an undergraduate project in prosthetics to forge a research pathway and resultant spinout company that will provide life-changing benefits for people with limb loss.

His business, Radii Devices, is applying state-of-the-art biomechanical modelling to give clinicians real-time prediction of fit during the socket design process.

Beyond prosthetics, there is additional potential for Joshua to explore adjacent markets, such as orthotics, footwear and generic external medical devices.











Earswitch

A revolutionary assistive technology being developed by GP Dr Nick Gompertz hopes to offer people with conditions such as Motor Neurone Disease (MND) new ways of communicating via a computer.

Earswitch Ltd. has developed a prototype that allows people to communicate by tensing a tiny muscle to operate an assistive keyboard.

The device is linked to the tensor tympani muscle, which for some can be controlled voluntarily.

control of this muscle might be preserved in people 'locked-in' due to stroke, and in late-stage MND. This is important because current existing assistive devices can become unusable as neurological conditions such as MND worsen over time









End of Program Summative Assessment



72.4% of SMEs reported making progress towards bringing to market a new-to-firm product or service as a result of the SIGHT intervention with an increase in TRL of + 1.85.

The value for money was particularly good with every £1 invested in delivering this project, £22.71 was created.

The majority of companies that benefited from SIGHT (88.3%) are micro-companies with fewer than 9 FTE employees

The main themes of interest mentioned by the beneficiaries for future activities are: grant funding and grant writing support, market expansion, scaling up, collaboration with research institutions, contacts with the NHS, product innovation, medical certifications, artificial intelligence.















SHOWCASE 1: The Power of Partnership



Efeca –
Emily Fripp
Founding Director





From Global to Local: Strategic Partnerships Creating impact beyond individual

concerns

One Health conference

July 2023

Certified



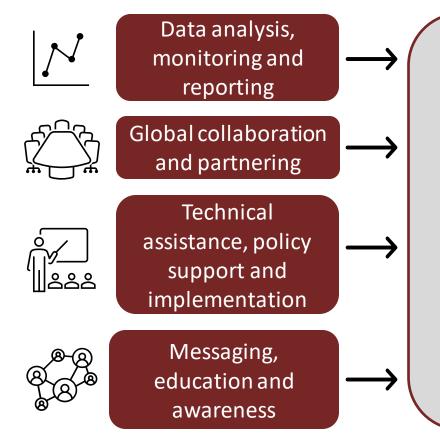
Corporation

118

Efeca – who we are



We provide advice and technical support to public and private sectors on policies, regulations and commitments, for responsible sourcing of forest risk commodities



UK Sustainable Commodities
Initiative (palm oil and soya
industry Roundtables)

Accountability Framework initiative support

Tropical Forest Alliance COP 26 FACT Dialogue - Global Multistakeholder Taskforce

Global Resource Initiative

Technical support and guidance on certification and assurance to private and public sector

Dorset Sustainable Palm Oil Community



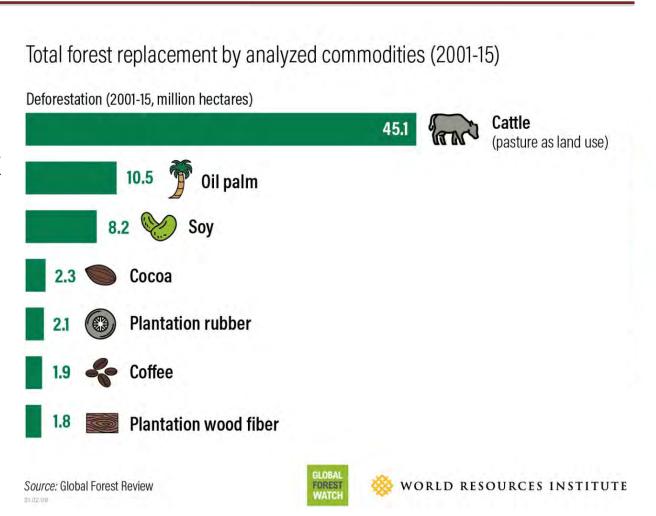
Driving meaningful impact on the ground

Deforestation



Global deforestation rates

- The tropics lost 10% more primary rainforest in 2022 than in 2021
- Tree cover loss globally hit record highs in 2016 -2018 – area was larger than UK
- Tropical primary forest loss in 2022 totaled 4.1 million hectares, the equivalent of losing 11 football fields of forest per minute.
- All this forest loss produced 2.7
 gigatonnes (Gt) of carbon dioxide
 emissions, equivalent to India's annual
 fossil fuel emissions.
- 7 commodities are largely responsible for commodity driven deforestation



Power of Collective Action



Strategic partnerships centre on the need for collective action - the goal is bigger than individual action whether acting at a local, national or global level

- At a global level
 - UK market as a small player in a global market, collective action at a consumer country level is needed – across Europe and globally eg China, India
 - Enabling dialogue e.g. Global Resources Initiative (GRI), Forest, Agriculture and Commodity Trade (FACT) Dialogue
- At a **national** level, the UK Sustainable Commodities Initiative brings companies together to find solutions with their own supply chains buyers and suppliers
- At the **local** level, our Dorset Sustainable Palm Oil Community encourages companies to talk to their suppliers about sustainable palm oil in food supply chains

The convening power and ability to work with others creates space for global influence and impact -

> Driving market change from local to global



Global: FACT Dialogue, TFA, COP26 support



Engagement and participation from a diverse range of stakeholders from civil society, public and private sectors, covering commodities such as palm oil, soy and cocoa across global supply chains.







Collective Action: Mobilising multistakeholder action and facilitating global partnerships and collaboration to support on halting deforestation

Organising the FACT Retreat – 20+ countries in the UK

Multistakeholder tract deep dives in preparation for COP26

Research and report writing on global transparency and traceability



UK: Sustainable Commodities Initiative TOCO economics climate environment



Facilitator of the UK Roundtables on sustainable soya (2017) and palm oil (2015), providing a pre- Forests competitive space for companies and industry associations to get technical support and to learn from each other.

We also provide advice and support to UK gov't on national and international policies, regulations and private sector commitments









Collective Action: Working together to achieve a shared goal of a secure, resilient, sustainable supplies of soya and palm oil to the UK.

UK Roundtable on Sustainable Soya

Global Resource **Initiative**

UK Roundtable on Sustainable Palm Oil

Who is involved?



Retailers* Meat, Eggs, Dairy Manufacturers + **Producers + Ass.** Tesco, Marks and **Associations:** 2 Sisters, Moy Park, Spencer, Asda, Co-op, **Soya Traders** Cranswick, NFU, NPA, Sainsbury's, Aldi, Lidl, Cargill, Cefetra, **Animal Feed** BPC, Tulip **Morrisons** AB Agri, ForFarmers, ADM, Viterra AIC, FEFAC Palm oil Refiners AAK, Sime Darby, Food/oleochemical **Food Service** ADM, Olam FDF, CFA, Nestlé, Wholesalers + Ass. Compass, McDonald's Premier Foods, Ferrero, NEODA, Bidfood, Nando's, Whitbread, Croda, Reckitt Booker, Brakes TUCO, SRA

WHOLE OF THE UK SUPPLY CHAIN

Outreach and engagement







- European and global national initiative networks
- Embassy engagement connecting industry to policy/trade dialogue
- Key mechanism for impact beyond the UK
 - → Sharing learnings with other (major) demand-side market platforms
 - → Aligning efforts to amplify positive, balanced messaging
 - → Engaging collaboratively with producer platforms





Local: Dorset Sustainable Palm Oil



Community

Collective Action Aim: Making Dorset the world's first Sustainable Palm Oil County





It's all about Trust



Working in partnership, through collective action at all levels, requires

Trust

- Trust that action by one will be accompanied by action by others.
 Overcoming the fear that whilst one will change, others will not and you are at a loss cost and market share
- Trust that positive change will be recognized and rewarded if not

financially then reputationally

- *Trust* to overcome the difficult conversations eg who will pay/shared responsibility
- *Trust* in the convenor we are often seen at the trusted partner, as part of the wider team





Thank you!

For more information please contact:

Emily Fripp, Director – emily.fripp@efeca.com

Lucy Cullinane, Operations Director-lucy.cullinane@efeca.com

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Corporation

Q&A













ASK THE AUDIENCE 2 The Power of Partnership NEXT STEPS?

1. What should be the next steps in developing the One Health Enterprise Network (OHEN)?:

Should we have a sandpit (a deep-dive meeting which explores an idea in detail) in Autumn 2023 with all the key players? Y/N

If no, what do you think should be the next steps?

- 2. Which 'key sectors' do you think should be involved in the development of the OHEN beyond those specifically focused on environmental, animal and human innovation/health? Below are a list of potential sectors:
- a. Energy Production: The energy sector, particularly the production of electricity and heat through fossil fuels, is a major contributor to pollution. Y / N
- b. Transportation: The transportation sector, including road, air, rail, and maritime transportation, is a significant contributor to pollution. Vehicles powered by fossil fuels, such as gasoline and diesel, emit greenhouse gases, particulate matter, and other pollutants. Y/N
- c. Manufacturing: The manufacturing sector encompasses a wide range of industries, including chemicals, metals, textiles, and electronics. The production processes involved in manufacturing often release pollutants into the air, water, and soil, contributing to pollution. Y/N
- d. Construction: The construction industry, responsible for building infrastructure and structures, can generate significant pollution. Construction activities often involve the emission of dust, pollutants from heavy machinery, and the production of construction materials, such as cement and steel, which have a high carbon footprint. Y/N
- e. Please describe others/other specific sectors?

3. Would you like to know more about getting involved in the development of the OHEN? If yes, please put your details below:

Name:

Organisation:

Email:

If no, can you please say why?





TAKE A BREAK





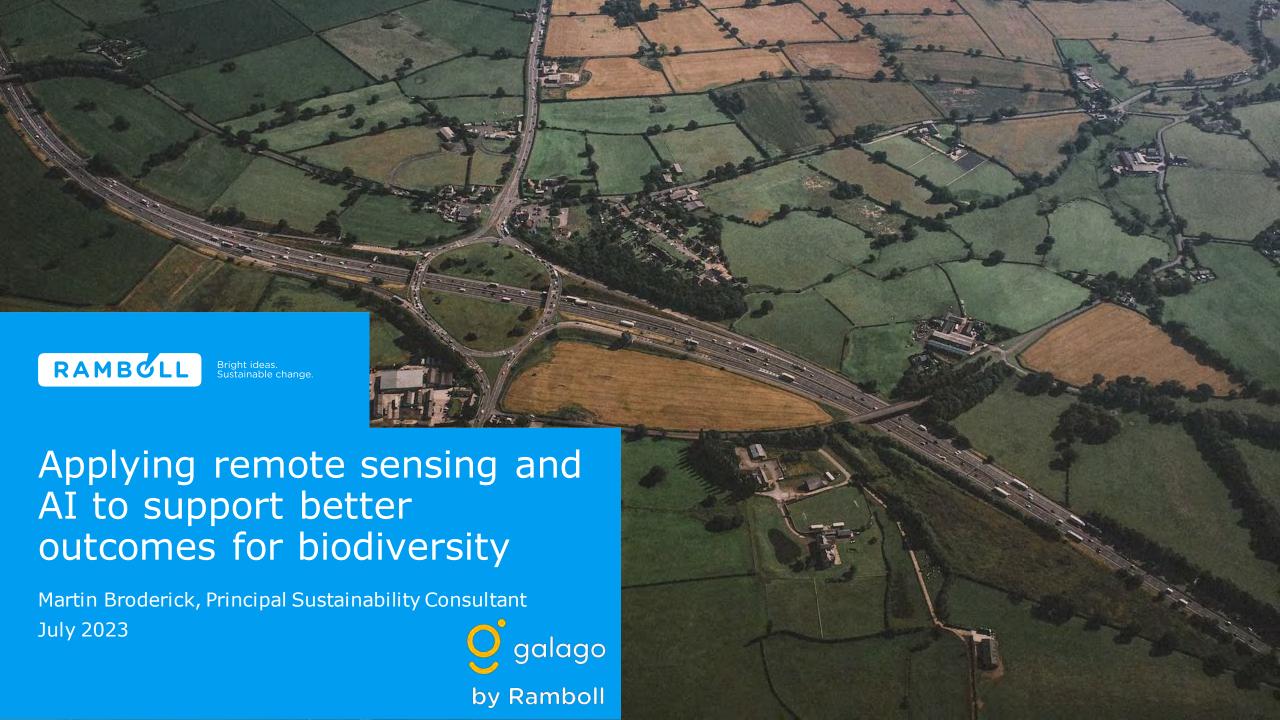


SHOWCASE 2: Industry & Innovation



Ramboll/Galago –
Martin Broderick
Principal Sustainability Consultant







Ramboll in brief

- Independent architecture, engineering and consultancy company
- Founded 1945 in Denmark
- Present in 35 countries
- 17,500 experts
- Creating sustainable solutions across Buildings, Transport, Energy, Environment & Health, Water, Management Consulting and Architecture & Landscape.
- Owned by Rambøll Fonden The Ramboll Foundation



RAMBOLL

INNOVATION ACCELERATOR 2019

DISCOVERY LAB: MARCH 4 - MARCH 29

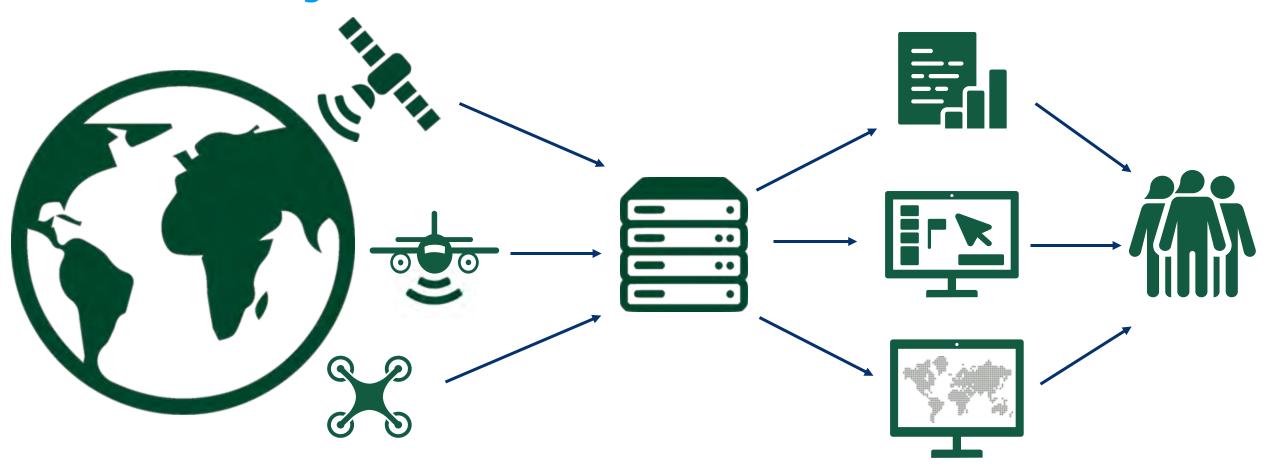
Galago by Ramboll

- Launched from Ramboll's Innovation Accelerator
- Funded internally by Ramboll's Innovation Program
- Geospatial intelligence and AI consulting



Generating environmental insights through remote sensing and AI





Remote sensing data

Analysis

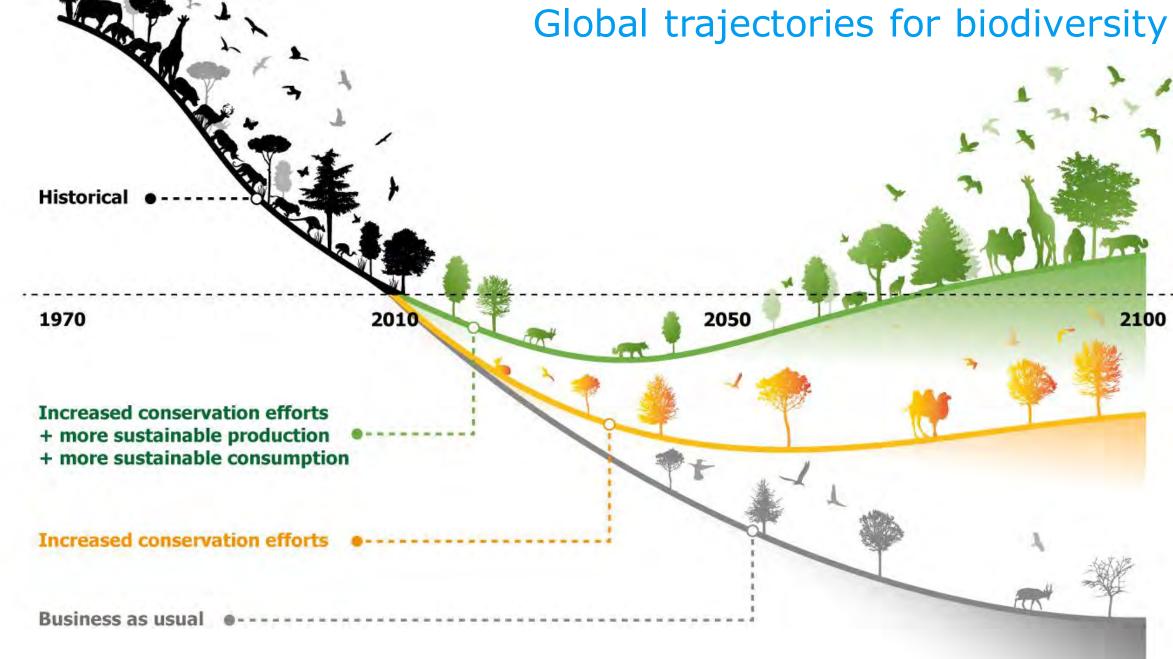
Visualisation

Interpretation



The global context for biodiversity

Ramboll 141





Global Biodiversity Framework



CBD



Distr. LIMITED

CBD/COP/15/L.25 18 December 2022

ORIGINAL: ENGLISH

CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY Fifteenth meeting – Part II Montreal, Canada, 7-19 December 2022 Agenda item 9A

Kunming-Montreal Global biodiversity framework

Draft decision submitted by the President

The Conference of the Parties,

Recalling its decision 14/34, in which it adopted the preparatory process for the development of the Kunning-Montreal global biodiversity framework and decided to establish an open-ended intersessional working group to support its preparation,

Noting also the outcomes of the first, second, third fourth and fifth meetings of the Open-ended Working Group on the Post-2020 Global Biodiversity Framework, of the regional and thematic consultations and workshops conducted based on decision 14/34 and of the intersessional work conducted on digital sequence information on genetic resources,

Noting the outcomes of the eleventh meeting of the Ad Hoc Open-ended Working Group on Article 8(j) and Related Provisions, of the twenty-third and twenty-fourth meetings of the Subsidiary Body on Scientific, Technical and Technological Advice and of the third meeting of the Subsidiary Body on Implementation

Expressing its gratitude to the following Governments of [.....] for hosting these consultations, as well as for their financial contributions,

Expressing its gratitude to the Co-Chairs of the Open-ended Working Group on the Post-2020 Global Biodiversity Framework, Mr. Basile van Havre (Canada) and Mr. Francis Ogwal (Uganda), for supporting the development of the Kunming-Montreal global biodiversity framework.

Welcoming the submissions by Parties, other Governments, indigenous peoples and local communities, United Nations organizations and programmes, other multilateral environmental agreements, subnational governments, cities and other local authorities, intergovernmental organizations, proposermental organizations, women's groups, youth groups, the business and finance community, the scientific community, academia, faith-based organizations, representatives of sectors related to or

GOALA

The integrity, connectivity and resilience of all ecosystems are maintained, enhanced, or restored, substantially increasing the area of natural ecosystems by 2050;

GOAL B

Biodiversity is sustainably used and managed and nature's contributions to people, including ecosystem functions and services, are valued, maintained and enhanced, with those currently in decline being restored, supporting the achievement of sustainable development for the benefit of present and future generations by 2050.

TARGET 2

Ensure that by 2030 at least 30 per cent of areas of degraded terrestrial, inland water, and coastal and marine ecosystems are under effective restoration, in order to enhance biodiversity and ecosystem functions and services, ecological integrity and connectivity.

TARGET 15

Take legal, administrative or policy measures to encourage and enable business, and in particular to ensure that large and transnational companies and financial institutions:

(a) Regularly monitor, assess, and transparently disclose their risks, dependencies and impacts on biodiversity, including with requirements for all large as well as transnational companies and financial institutions along their operations, supply and value chains and portfolios;

¹ CBD/WG2020/1/5.

² CBD/WG2020/2/4.

³ CBD/WG2020/3/5.

⁴ CBD/WG2020/4/4

^{*}CBD/WG2020/4/

⁵ CBD/WG2020/5/-

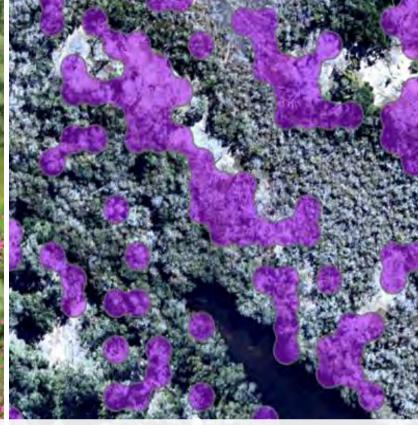


How do we measure biodiversity performance?

Ramboll 144







Habitat Classification

- Establishes a biodiversity y
- baseline learning Al model
- Informs performance reporting and strategic decision-making at a landscape-scale Road
- Development insights

Species identification and monitoring

- Time and cost-effective means of monitoring model
- Reduces safety risks and improves coverage te level
- Transferrable solution

Vegetation health and condition

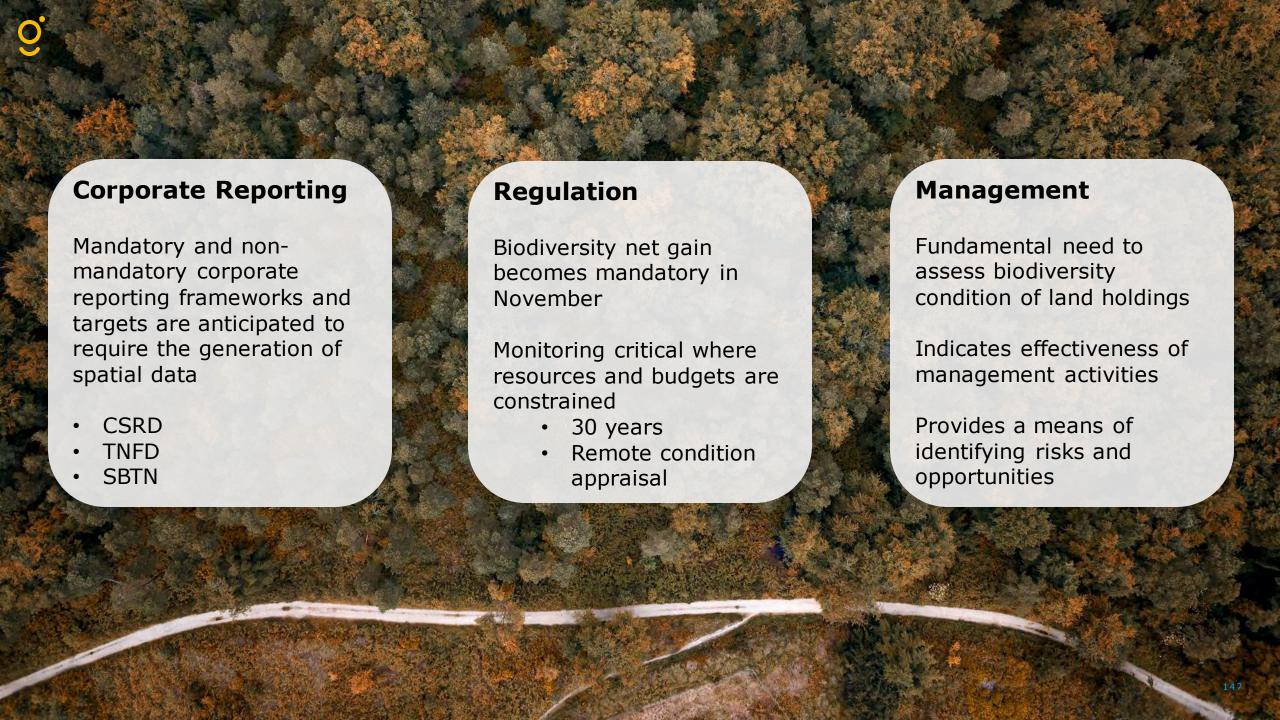
- Critical to lunderstanding the condition of habitats
- Monitoring at a project and strategic level toring over time





Our focus going forward

Ramboll 146





Thanks

Martin Broderick
Principal Consultant
Galago – European Lead
martin.broderick@ramboll.co.uk

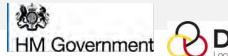


Ramboll 148

SHOWCASE 2: Industry & Innovation



SEICHE –
Mark Burnett
Director at Seiche Group







The Role of Marine Robotics in Climate Change & Oceanic Sound

DORSET LEP – ONE HEALTH CONFERENCE 13 JULY 2023 MARK BURNETT – DIRECTOR





+

Company Introduction





To safeguard and enhance the health and resilience of our planet's aquatic + ecosystems through innovative technology and environmental monitoring, consultancy services, and collaborative partnerships.

We strive to provide expert solutions and insights to inform sustainable decision-making, foster environmental stewardship, and promote the interconnected health of humans, animals, and the environment.

SEICHE GROUP





Group Snapshot

- Location(s) South / South West UK
- Turnover GB£8.3M (2022/23)
- Staff 90

AutoNaut





Technologies





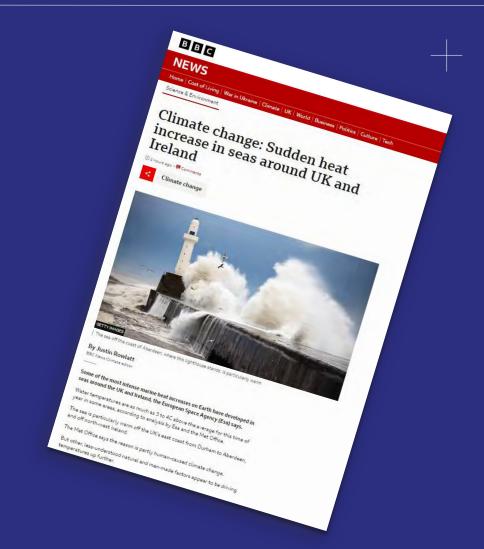






CHALLENGE 1

Marine Science & Climate Change



Climate change: Sudden heat increase in seas around UK and Ireland - BBC News



CHALLENGE 2



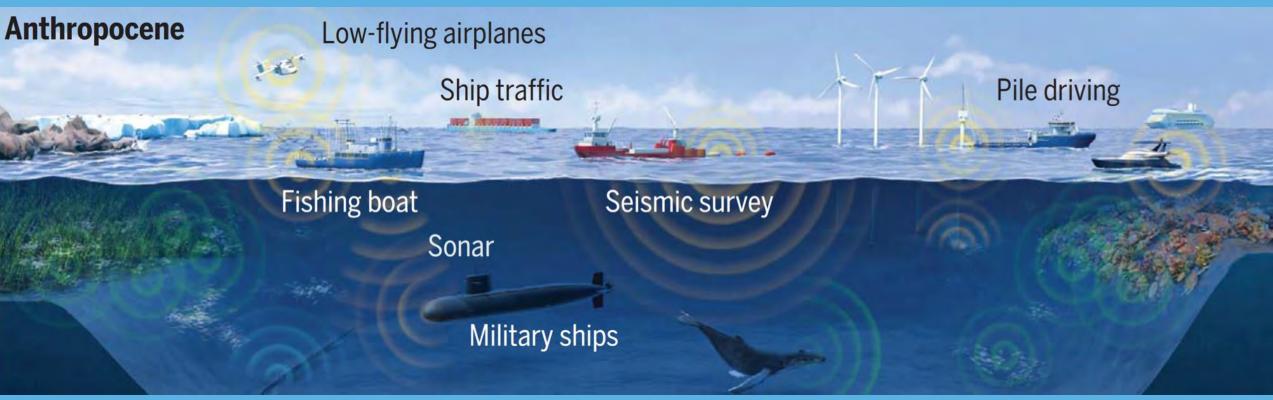
Climate change: Sudden heat increase in seas around UK and Ireland - BBC News

UNDERWATER SOUND



Anthropogenic Sound in the Ocean





C. M. Duarte et al., Science 371, eaba4658 (2021), DOI: 10.1126/science.aba46

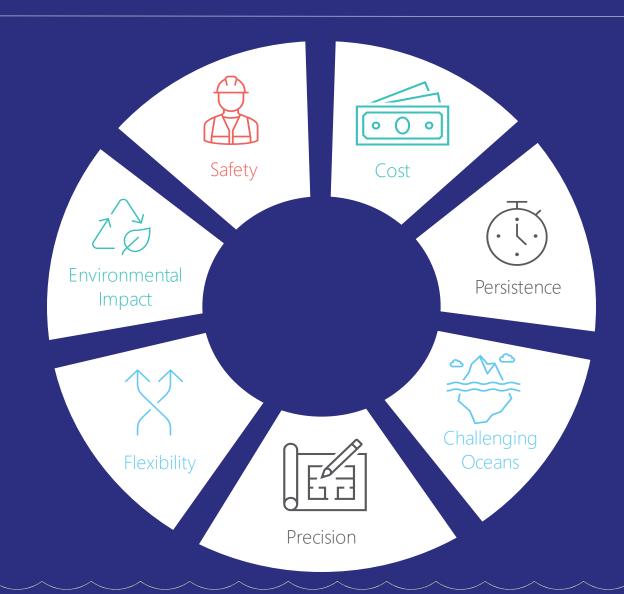


+

Marine Robotics



The Opportunityvs traditional 'crewed' vessels





→ Platforms













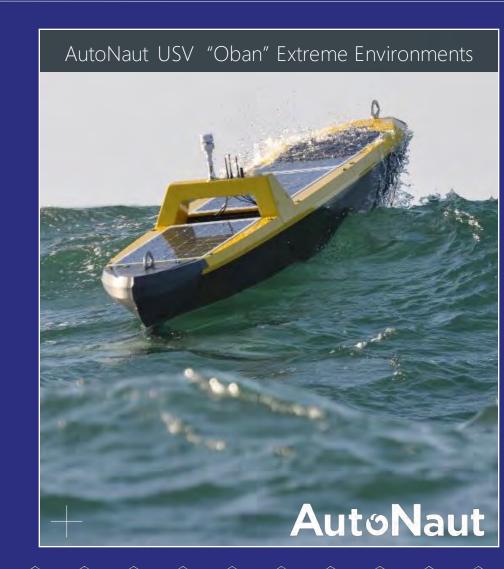








AutoNaut USV (Uncrewed Surface Vessel)



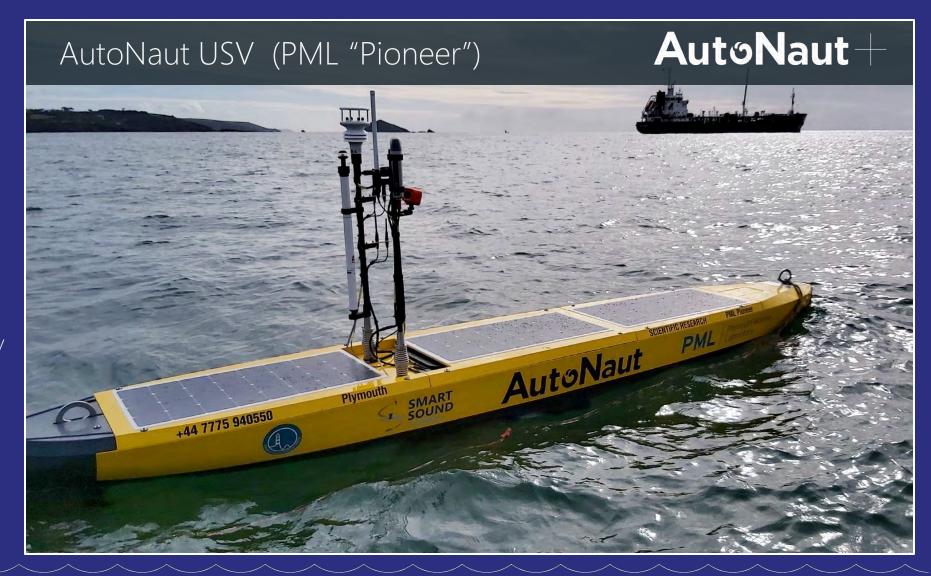
AutoNaut

AUTONAUT USV



Properties & Capabilities

- Wave Propelled Zero Carbon
- Neat Silent
- Persistent / Long Endurance
- Over-the-Horizon C2
- Smart Collision Avoidance
- Multiple Sensor Payloads
- Satellite / Radio Communications
- Vessel / Slipway launch & recovery





→ Solutions



Marine Science & Climate Change



CASE STUD'

- Innovate UK Robotics for Extreme Environments (2021)
 - → 115 days @ sea (including 1 port call), c. 4,000nm
 - → Sensor fit:
 - → Seiche MicroPAM + PAM-Fin
 - → Nortek Signature 500 ADCP
 - → Xylem Motus wave sensor
 - → SBE-49 FastCat CTD,
 - → Airmar weather station

Project Supporters:

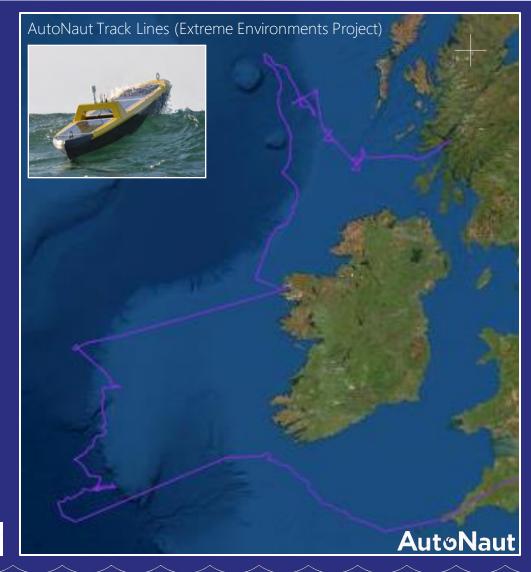










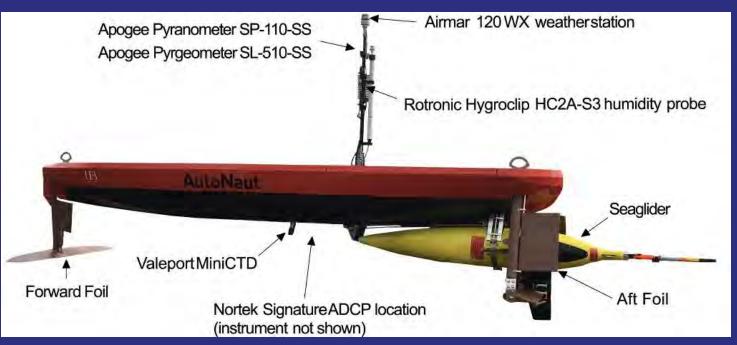


Marine Science & Climate Change



CASE STUD'

University of East Anglia Centre for Ocean and Atmospheric Sciences "A Robot to Deploy a Robot"







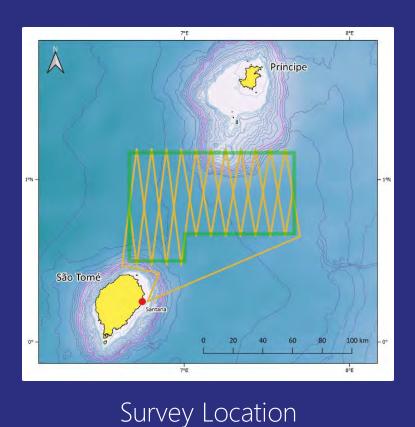
Oceanic Sound

Oceanic Sound



CASE STUD'

Marine Mammal Baseline Study





Sperm whale

AutoNaut Beach Launch

Data Results

C Pierpoint, E Oliver, L Scala & D Hedgeland (2021) An acoustic survey of beaked whale distribution at São Tomé and Príncipe, Gulf of Guinea, using an unmanned surface vessel, African Journal of Marine Science, 43:4, 443-454, DOI: 10.2989/1814232X.2021.1982769

OPPORTUNITIES FOR MARINE ROBOTICS IN THE BLUE ECONOMY



Renewable Energy Generation Carbon Capture and Storage

Coastal Protection Ocean
Monitoring 8
Research

SECTORS

Sustainable Fisheries and Aquaculture

Clean Maritime

Marine Conservation and Restoration

Defence & Security



THANK YOU

Mark Burnett - Director M.Burnett@seiche.com





SHOWCASE 2: Industry & Innovation



EKOGEA –
Mike Clarke
Head of Animal Health







Farm Slurry Management System

One Health Conference 13th July 2023



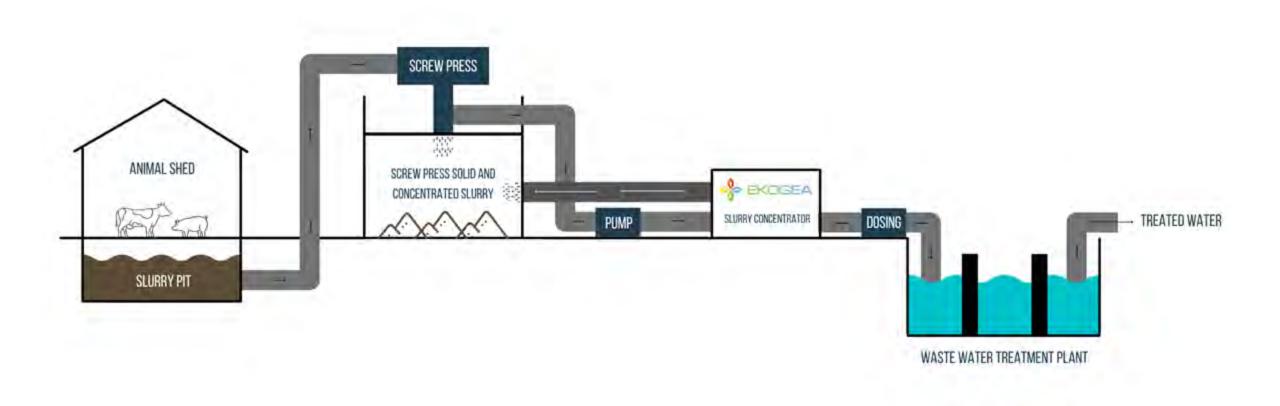
Farm Slurry Management System – Circular Farm Economy







Farm Slurry Management System – Flow Diagram





Farm Slurry Management System - Key Benefits

- → 85% reduction in the volume of raw slurry;
- → For use on Pig and Dairy Farms as well as AD and other Sites;
- → Reduces the need to store and spread slurry;
- Helps resolve the 'phosphate issue' for farms;
- Creates quality feedstock for AD plants or high quality BioFertiliser;
- → Minimal Energy Use;
- → Additional income stream for the farmer;
- → Treated water can be discharged to water course/drain subject to permit





Farm Slurry Management System Trial Farm in Devon



Farm Slurry Management System Control Centre

1-2m³/hour capacity

Larger models are available



Farm Slurry Concentrator in Situ



Sustainable Solutions for Farming

Video showing
Concentrated Slurry
leaving the Concentrator







Waste-Water Treatment Process

H2e Waste-Water Treatment plant, run without additional energy input

The medium has at least 20 years of lifespan before needing replacement





Sustainable Solutions for Farming

Grey water leaving the Concentrator and flowing into the H2e Plant



Waste Water flowing out after treatment through the H2e Plant





Farm Slurry Management System – Summary of Benefits

- → Reduces the need to store and spread slurry
- → Helps resolve the 'phosphate issue' for farms
- → Creates quality feedstock for AD plants or high quality BioFertiliser
- → Additional income stream for the farmer
- The process uses minimal energy
- → Treated water can be discharged to water course or drain



Contact Us

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mike.clarke@ekogea.co.uk 07484 187050

David Cosford

david.cosford@ekogea.co.uk 07710 650300

SHOWCASE 2: Industry & Innovation

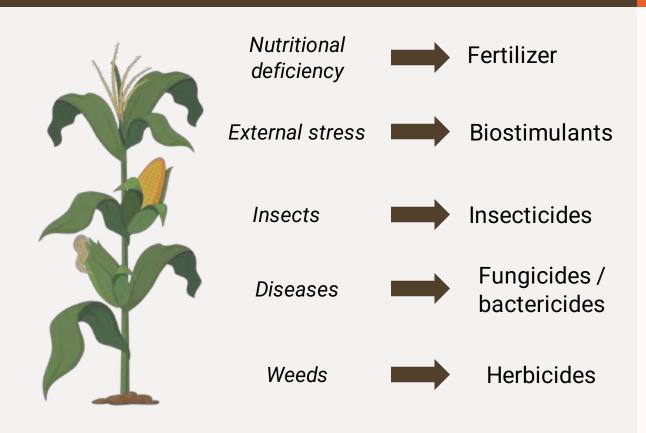


GAIAGO – Mark Shaw Country Manager UK & Ireland



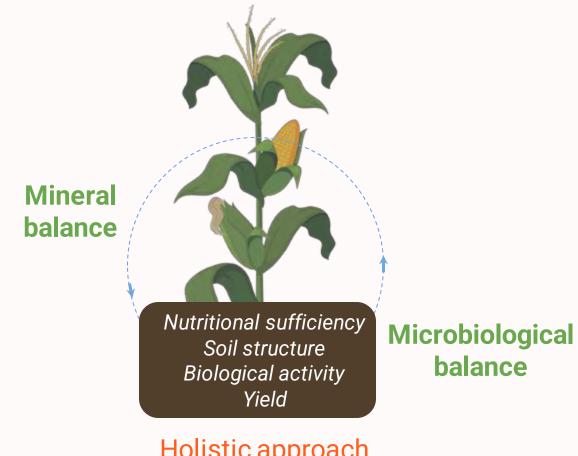


Traditional approach vs. Gaiago's approach



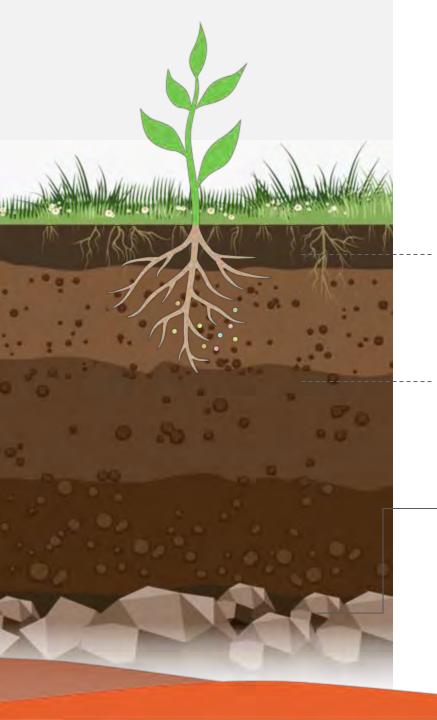
Targeting individual problems

- Root cause understanding incomplete
- Causing negative side effects



Holistic approach

- Brings balance to a complex living environment
- Eliminates unwanted side effects



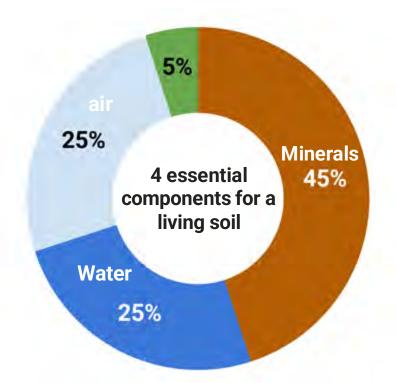
What is a soil?

Organic matter

Transition

Surface

Bedrock

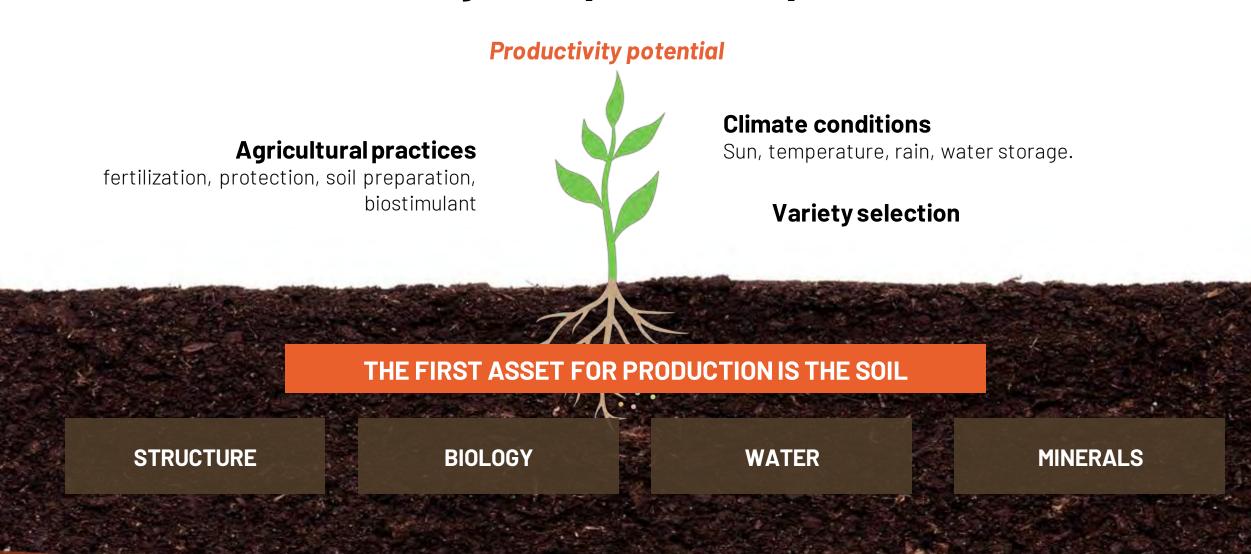


A living soil contains about 25% air, 25% water, 45% minerals et 5% organic matter.

Each component contributes to vital characteristics for the nutrition and plant growth

Source: Albrecht Papers (publication Acres USA)

The soil, a key component of performance.



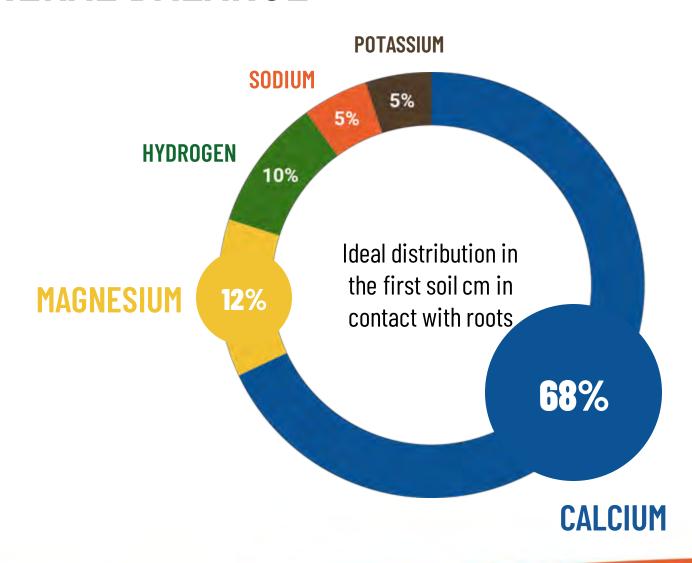


MINERAL BALANCE

First, establish mineral balance by targeting and managing element excess and deficiency in the soil

THE IMPORTANCE OF THE CATIONS DISTRIBUTION/CEC!

- Impact on the physical and chemical fertility: Ca/Mg
- Good soil functioning
- Create good conditions for development of positive microorganisms





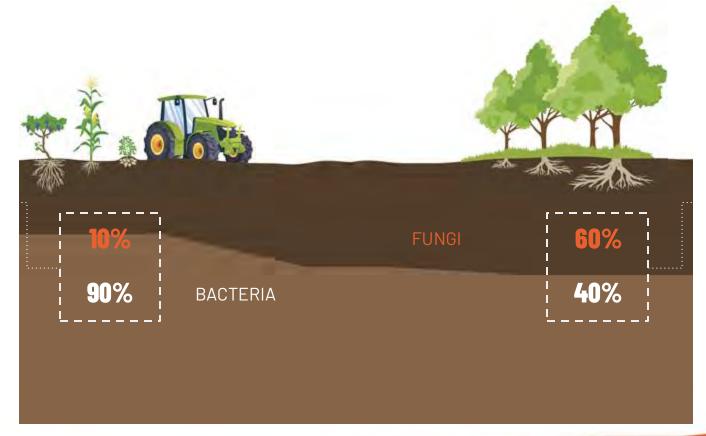
BIOLOGICAL BALANCE

IMPORTANCE OF THE BACTERIA/FUNGIRATIO!

INTENSIVE CROPS

MINERALIZATION

Humus removal
Compaction
Deficiency
Parasitism
Weed resistance



FOREST

HUMIFICATION

Humus storage
Porosity
Resilience
Sustainable nutrition
Health



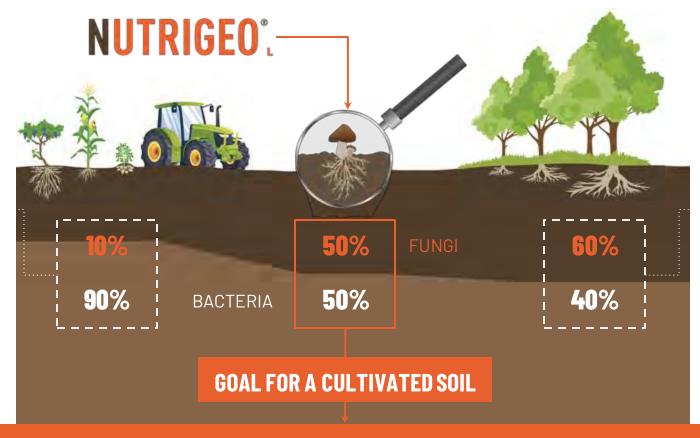
BIOLOGICAL BALANCE

IMPORTANCE OF THE BACTERIA/FUNGIRATIO!

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MINERALIZATION

Humus removal
Compaction
Deficiency
Parasitism
Weed resistance



FOREST

HUMIFICATION

Humus storage
Porosity
Resilience
Sustainable nutrition
Health

MAINTAIN A GOOD PRODUCTIVITY AND A GOOD HUMUS LEVEL



A fast-growing company



Established 2014 in France, Brittany



9 years history of product technical validation (Laboratory, Distributors, Farms)



French production, based in Saint Malo



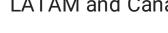
Sales in 12 countries through

Europe

with 1st subsidiaries incorporated



Expansion in Northern, Central and South- East Europe, LATAM and Canada

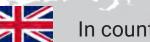




Team Growth

⇒ from 10 to 80+ people





In country (UK) presence established 2022



Establish a network of local trials and reference farmers



In country Logistics and warehousing



Developing sustainable partnerships to support a growing portfolio

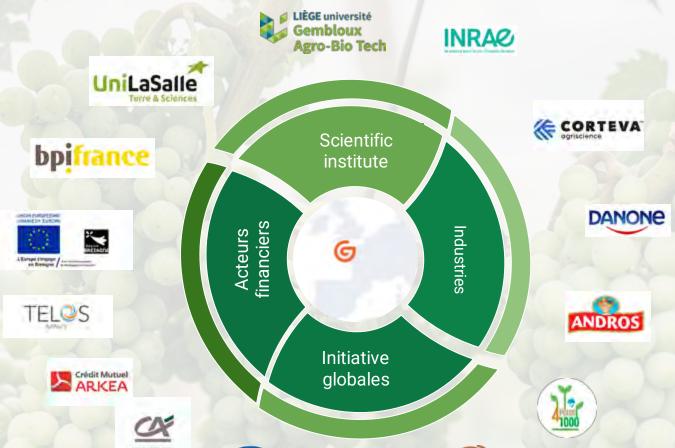


Team Growth ⇒ planned for 2023

At the heart of Agroecological transition

R&D Chair

- -Caractérisation
- -Modes of Action
- -Models



Fundraising

- -Industrial expansion
- -Geographical expansion
- -R&D











Partnerships

- -Soybean (Danone)
- -Biocontrol (Corteva)

Awards

- -Greentech
- -Solar Impulse
- -XPrize

A consistent answer to farming challenges



Biocontrol/Plant protection

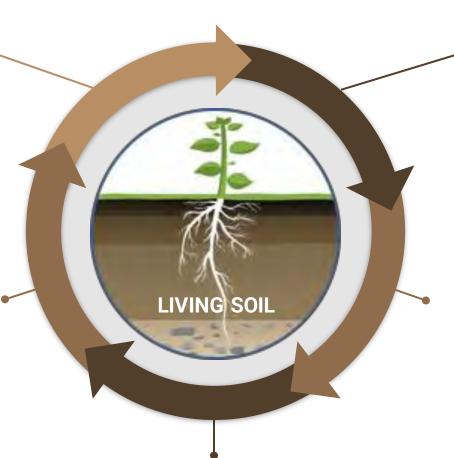
Prevention Range

R&D product

PLANT PHYSIOLOGY

Foliar Nutrition management

Foliar Range



SOIL LIFE

Soil physics and functions

Soil Range

SEED

Seed germination quality

Seed Range

RHIZOSPHERE

Optimum of roots nutrition

Rhizosphere Range

Thank You

Mark Shaw UK & IRE

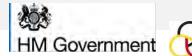




SHOWCASE 2: Industry & Innovation



POLLENIZE – Matthew Elmes Director







WORKING TO SECURE A THRIVING FUTURE FOR POLLINATORS, PLANTS, PEOPLE AND PLANET













WHO ARE POLLENIZE?

We deliver nature-led remedies to help pollinating insects recover so our environment can flourish

Our work focuses on:

Artificial intelligent beehives, moth boxes & Asian hornet traps

Rewilding projects, Pollen DNA analysis and reports

Seed prescriptions to improve biodiversity

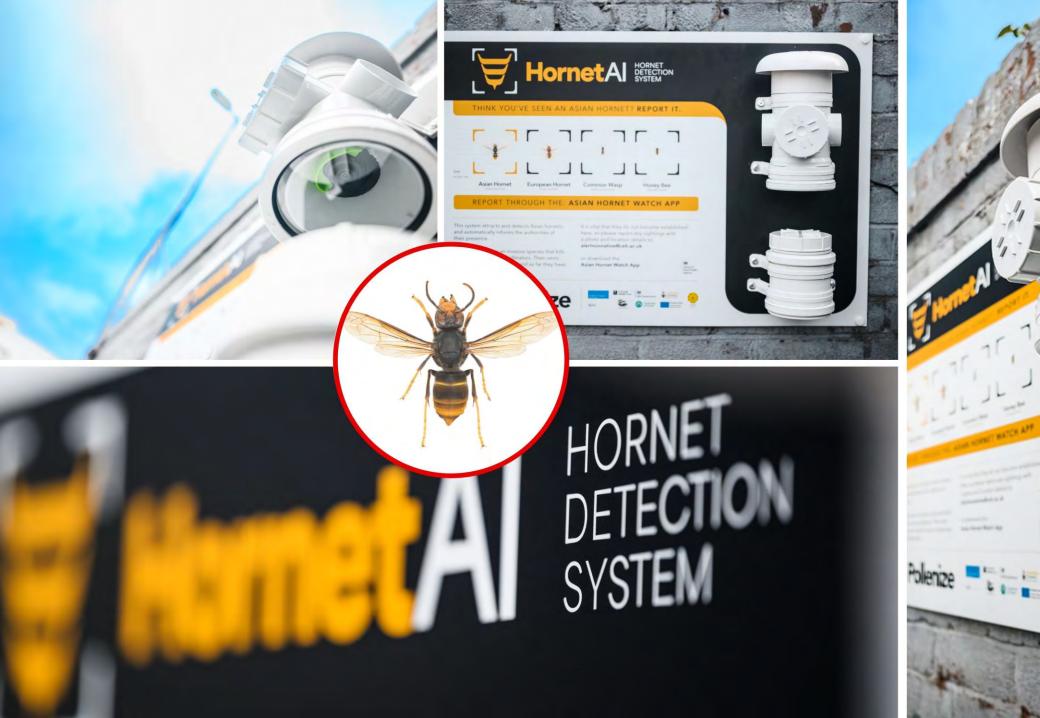


WHY DOES POLLINATOR DECLINE MATTER?

It threatens the survival of our natural ecosystems, as well as human health and global food security

41% of England's native flora and fauna species have considerably decreased since 1970, with 15% at serious risk of extinction.

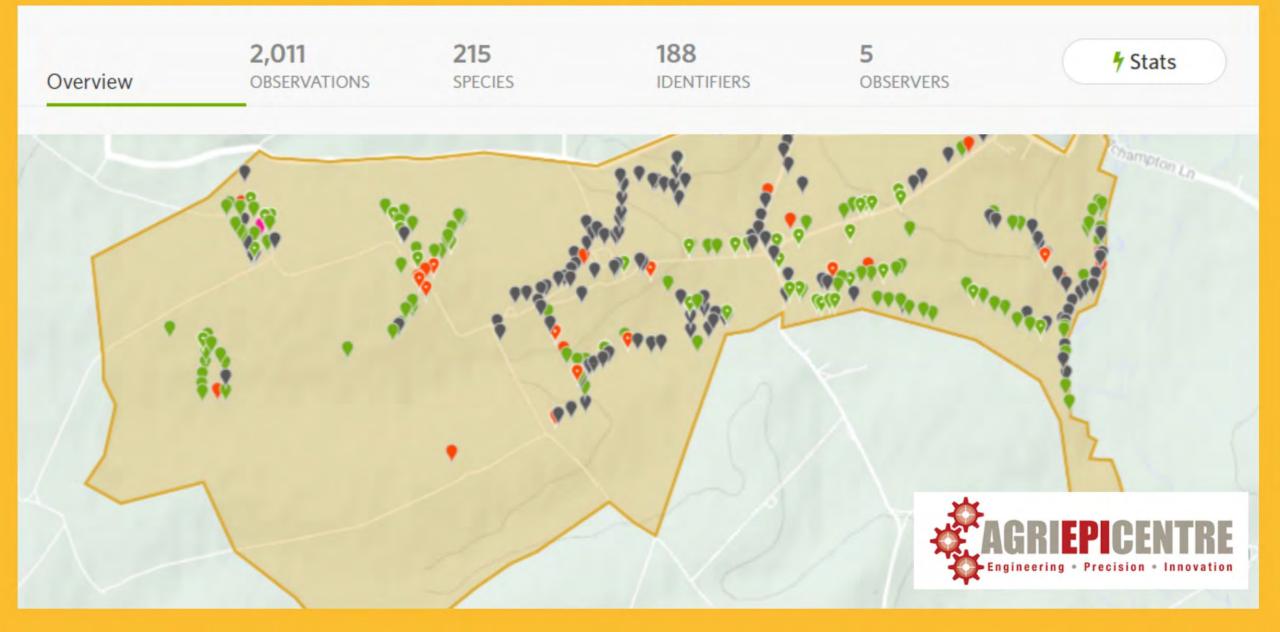








HEMSWORTH FARM BIOBLITZ PROJECT





Increased biodiversity, annual report created & process repeated







2.



Monthly sampling conducted by Pollenize





Seeds available for purchase through the seed pharmacy



The tool performs a gap analysis and a seed prescription is generated



Data populates map with current biodiversity



Data uploaded to Floradex



NEXT STEPS....

Development of a rewilding tool with Capegemini, a global leader in consulting, technology services and digital transformation













Q&A















LUNCH









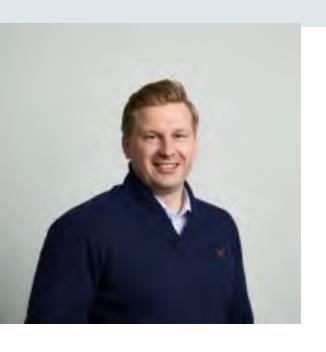
ONE HEALTH CONFERENCE 2023

COLLABORATION TOWARDS A ONE HEALTH BUSINESS CLUSTER



Finding solutions to 'wicked' One Health problems

SHOWCASE 3: Funding sources & Govt Support



SWIF (British Business Bank)

Ed Tellwright Senior Manager for South West



British Business Bank

One Health '23

July 2023





Our mission

Drive sustainable growth and prosperity across the UK, and to enable the transition to a net zero economy, by improving access to finance for smaller businesses





Who we are

The British Business
Bank is 100%
Government owned,
but independently
managed. We bring
expertise and capital
to the smaller business
finance markets.



We don't generally lend or invest directly. Instead, we work alongside over **218** delivery partners such as banks, leasing companies, venture capital funds and web-based platforms.



Businesses access capital through our partners who, because they work with us, can lend and invest more, especially to younger and faster growing companies. Operating indirectly gives us greater scale, reach and impact to our interventions.



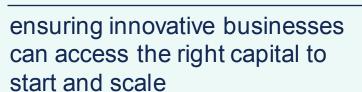
Our strategic objectives

Driving sustainable growth



ensuring smaller businesses can access the right type of finance they need to start, survive and grow

Backing innovation





Unlocking potential

unlocking growth by ensuring entrepreneurs can access the finance they need regardless of where and who they are



Building the modern, green economy



financing groundbreaking solutions to climate change and helping smaller businesses transition to net zero so they thrive in a green future



How we operate



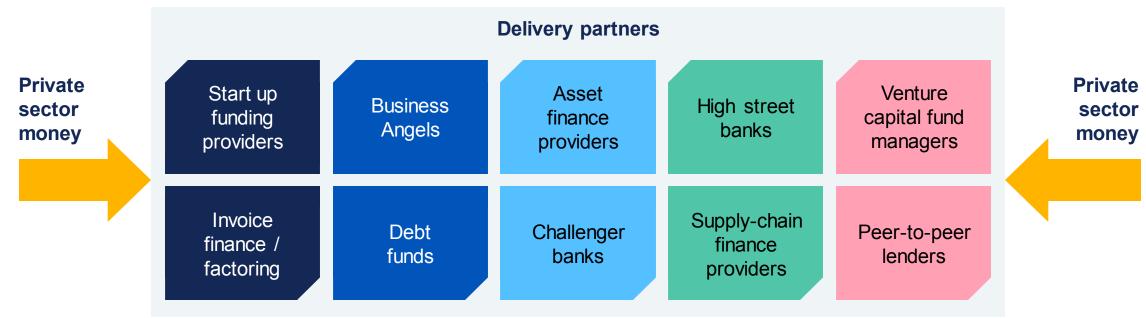
Expertise

Designing solutions to make finance markets work better for small businesses



Money

Over £12.2bn of finance supported by core Bank programmes





Who we work with





Start up, scale up, stay ahead

Start up

Mentoring and loans to 'be your own boss'

Start Up Loans

Scale up

Finance for higher growth potential businesses

Regional Angels Programme

Enterprise Capital Funds

Managed Funds Programme

British Patient Capital

National Security Strategic Investment Fund

Stay ahead

More finance options and choice of provider

Investment Programme

ENABLE programmes

Enterprise Finance Guarantee

We also deliver debt and equity funding to specific regions through our regional funds: **The Northern Powerhouse, Midlands Engine, and Cornwall & Isles of Scilly Investment Funds**. We encourage and enable SMEs to seek the finance best suited to their needs through our online **Finance Hub**.

Resulting in increased business investment, growth and jobs.



Overview of debt solutions

Illustrative

Value of investment

Start Up Loans

- Personal loans up to £25k and free mentoring to new entrepreneurs
- Would not typically qualify for loans from commercial lenders

Support new start-ups

Regional funds supported by UK govt & EU (Northern Powerhouse, Midlands Engine, Cornwall & Isles of Scilly)

Supporting smaller businesses across the nations and regions

Recovery Loan Scheme (RLS)

- Personal Guarantees can be taken at the lender's discretion, in line with their normal commercial lending practices. Principal private residences cannot be taken as security within the scheme
- Unlocks lending to borrowers otherwise excluded due to lack of collateral (not due to risk of default)

Lend to firms without collateral or sufficient track record

ENABLE Funding & Guarantees

- Funding: help new challenger banks grow SME loan books via securitisation
- Guarantees: reduce cost of capital on SME lending, encouraging more lending

Investment Programme

- Fully-commercial investment into alternative lenders and challengers:
 - Debt funds, Asset finance providers
 - P2P lenders (e.g. FundingCircle)
 - Challenger banks (e.g. Atom)

Expand total lending volume and diversity



Overview of equity solutions

Illustrative

Venture Solutions Enterprise Capital Fund (ECF) invests into venture capital funds – supports emerging fund **British Patient Capital** Value of investment managers Grants **Regional Angels** • Fully-commercial investment into venture capital Regional funds **Programme** funds and funds-of-funds Non-repayable supported by UK govt funding for research / Fully-commercial • Typically larger funds seeking higher ticket sizes & EU (Northern new teams scheme Powerhouse, Midlands Outside of BBB's Focused on regional Engine, Cornwall remit & expertise imbalances & Isles of Scilly) Delivered by InnovateUK & Growth Venture other bodies Early stage Seed R&D



Our impact



£12.2bn

We support over £12.2bn of finance



96,000

Over 96,000 smaller businesses supported



218

218 partners delivering our programmes



South West



£522m

of finance currently supported by Bank programmes to 5,612 SMEs



8,602

loans, worth over £79m, currently supported by the Start Up Loans programme



133,912

Covid-19 loan scheme facilities drawn, worth over £5.82bn*



31

Future Fund applications approved, valued at £21.1m**



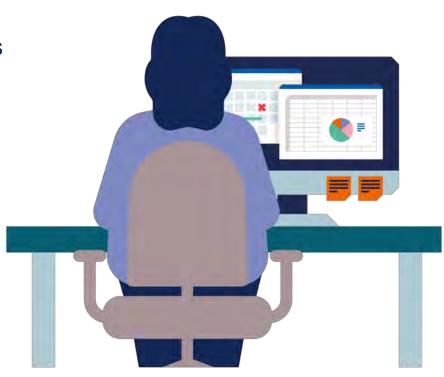
BAU stock data updated 30 June 2022 SULs stock data updated 30 June 2022 *Updated as at 30 September 2022, excludes CLBILS ** Updated as at 30 September 2022



Current trends

SBFM 22/23, SBET 22/23 & Intermediary Survey 2022/23

- 50%+ SW businesses anticipating growth in next 12 months
- 7/10 intermediaries believe SMEs lack understanding and awareness of finance options available to them
- Equity deals and volume fell in '22 (7% and 11%)
- Equity dropped 47% between H1 & H2 in '22
- Bank lending up (12%) but smaller businesses not accessing external finance (down to 33%)
- Challenger and specialist banks 'out-lent' traditional banks
- Life sciences investment £10bn+





Next generation of regional funds

- £660m A new Northern Powerhouse Investment Fund to include the North-East
- **£400m A new Midlands Engine Investment**Fund
- £200m A new fund for the South West of England www.southwestinvestmentfund.co.uk
- £70m A new fund to expand provision for businesses in Northern Ireland
- £150m A new fund for Scottish businesses
- £130m A new fund for Welsh businesses





Support across the regions

Southampton, Hampshire and Portsmouth

- Southampton University part of SETsquared programme
- Growth Hubs in the region (SOLENT and Enterprise M3 Growth Hub)
- Enterprise M3 Funding Escalator
 - Delivered through FSE Group
 - Debt £50k to £500k
 - Equity £100k to £500k

Sue Elliot – Senior Manager South East Susan.Elliott@british-business-bank.co.uk







UK Network

Local British Business Bank experts based in every English region and Devolved Nation.

Strengthening Bank relationships across the UK to help smaller businesses access finance.

Collaborating with business advisers, associations, intermediaries, investors, and more to:

- Understand local, region and nation insights.
- Share best practice across the UK.
- Strengthen local finance ecosystems.

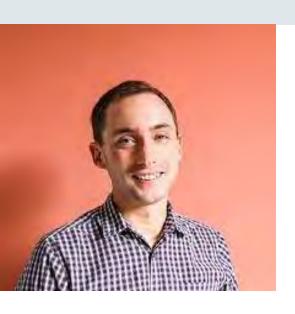


Thank you

edward.tellwright@british-business-bank.co.uk



SHOWCASE 3: Funding sources & Govt Support



INNOVATE UK EDGE –
Dr. Ben Masheder
Funding & Finance Manager





Innovate UK EDGE - driving business growth

Dr Ben Masheder





Innovate UK



Building the Future Economy An Action Plan for UK Business Innovation Strategic Themes

- Areas where our work can have a significant impact on the returns for the UK economy
- The themes allow us to draw upon the UK's established sector and technology expertise



Future economy

Deliver purpose-driven programmes across net zero, health & wellbeing, priority technologies, and horizon scanning



Growth at scale

Support businesses to develop their leadership, skills and commercial capabilities to scale up and attract investment



Global opportunities

Enable businesses to build the global supply chains of the future, access markets and attract inward investment



Innovation ecosystem

Increase responsiveness, agility, and co-ordination to support innovating businesses from idea to commercialisation



Government levers

Help stimulate innovation, through regulation, standards, intellectual property regimes, and public procurement





- 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
- Innovate UK has stated aims to strengthen its ability to help businesses to grow and scale. Beyond projects or novel products, and 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



Innovate UK EDGE



Innovate UK

At the business end of innovation

We enable ambitious, innovative businesses (<500 employees) to accelerate their growth and achieve scale.

Exploit Innovation

Source funding and finance

Enter new markets









To achieve our vision: 'increasing the propensity of the most dynamic UK businesses to scale, for the enduring economic & social benefits that brings,' we have since 2015 been behind:



5675 companies receiving intensive support



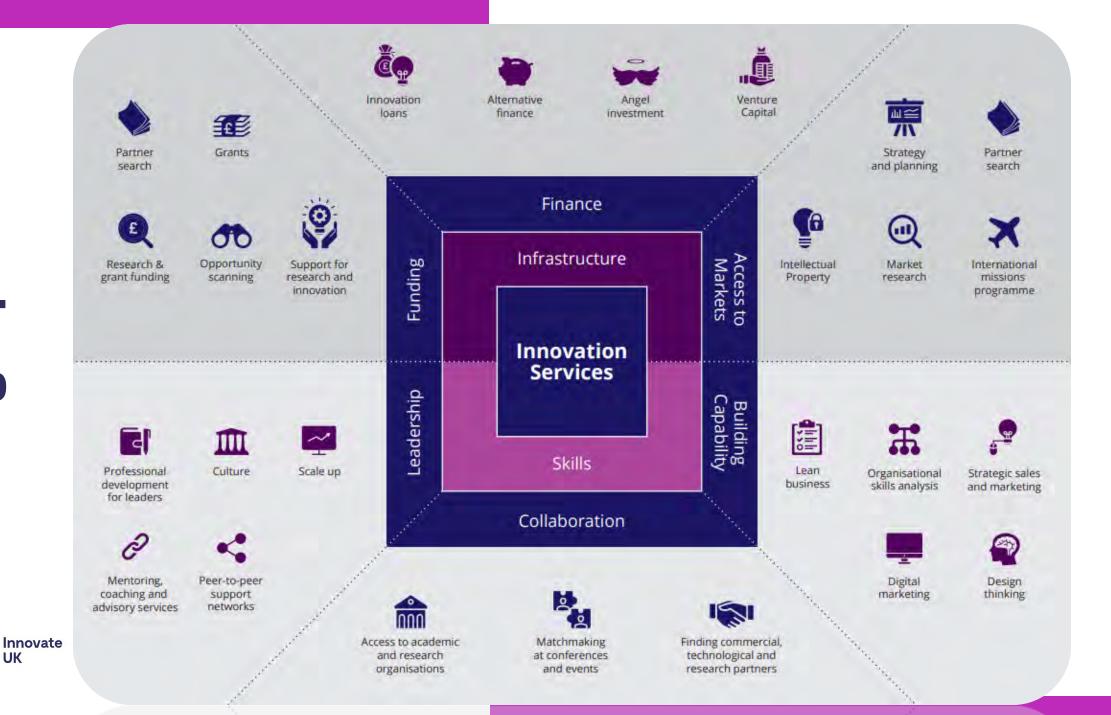
£350m+ funding and finance raised



2977 international collaborations

nfographic

UK



#1 Exploit Innovation

Equip your business to engage in continuous innovation and to optimise operations to deliver growth at scale
Up to 15 days of expert support, advice and mentoring

Vision and Strategy

- Governance & Leadership
- Innovation Management
- Organisational Development

Product / Process / Service Development

- Net Zero
- Lean & Agile



Market Readiness and Alignment

- Value proposition
- Market information
- Brand Development
- Innovation in Digital Marketing

Collaboration

- Supply chain development
- Managing & Partnering for Growth within the UK and internationally

Focusing on the most innovative and high growth potential businesses in SW England.



Exploit innovation



Source funding and finance



Enter New Markets

#1 Exploit Innovation

Equip your business to engage in continuous innovation and to optimise operations to deliver growth at scale

Innovation management

- Access to British Standards On-line services
- Design for Growth

Connect globally to the innovation ecosystem

Access to grants to work with Catapults

Exploit your Intellectual Property (IP)

- Using IP as a revenue generator and for new product creation
- IP Audits and Access Grants with the Intellectual Property Office (IPO)





#3 Enter New Markets

Break into international markets to grow and scale with help from our connections, expertise and targeted global programmes.

Global Business Innovation Programme
Global Incubator Programme

Recent and planned International 'events': South Korea, Canada, Taiwan, Singapore, China, Sweden...

Enterprise Europe Network The worlds largest support organisation for SMEs with International Ambition

And why is this so important? Because 99% of the global population and 97% of the wealth isn't here in the UK!





#2 Source Funding & Finance

Intensive support to businesses actively looking for funding and finance to grow and innovate

- Understanding finance and funding opportunities
- Financial management best practice
- Getting Investment Ready
- Horizon scoping for suitable grant opportunities
- Signposting useful resources
- Support with eligibility and suitability checking
- Partner identification for collaborative bids
- Advise on best practice when constructing an application
- Critical reviews of the final application



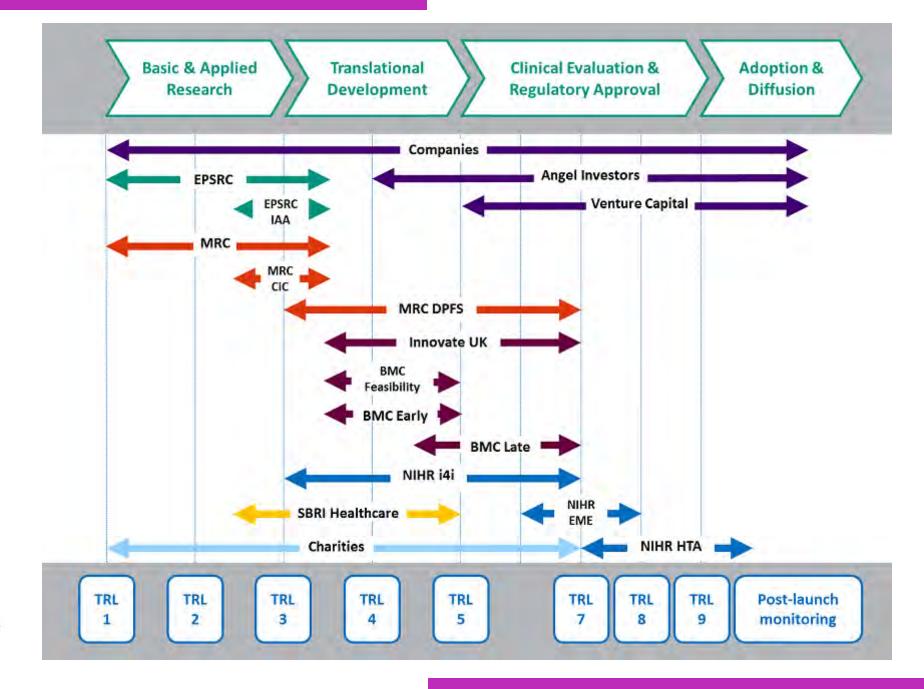
Impacts

In the South West over the last 2 years:

- Supported 640 SMEs
- Delivering 6300 hours 1-to-1
 (Max 40 hours, Min 1 hou
- 93 SMEs raised £46m Equity Investment
- 151 SMEs secured £31m Grant Funding



ptions unding







Innovation Funding Service

Sign in

Innovation competitions

| Filter competitions | |
|---------------------|----------|
| Keywords | |
| | |
| Innovation area | |
| Any | ~ |

44 competitions

Innovate UK Smart grants: June 2023

UK registered organisations can apply for a share of up to £25 million for game changing and commercially viable R&D innovations that can significantly impact the UK economy. This funding is from Innovate UK, part of UK Research and Innovation.



Innovation Loans

Recurring Programme

- £25m available
- £100,000 and £1.6m
- Late stage R&D and Commercialisation
- Up to 100% of the eligible project costs
- Flexible drawdowns and repayments
- Judged on Innovation AND Affordability
- Below market rates











Investor Partnerships

New Recurring Programme

- £100m to address the equity investment gap
- List of 50+ investors
- Project Costs and Grant Intervention Rates:
 - £50k-£300k Feasibility Study → max 60-70% Grant
 - £100k-£1m Industrial Research → max 60-70% Grant
 - £250k-£2m Experimental Development → max 35-45% Grant
- Rolling Competition until mid/late 24/25
- Deal Additionality ←→Traction←→Innovation







South West Funding & Finance Team



Grant Funding

- Non-Dilutive Funding
- Sources
- Planning
- Application Best Practice
- Eligibility Checking

Equity Investment

- EIS / SEIS
- Angel, Seed, Series A+, VC
- Pitch Preparation
- Finding The Right Investors
- Financial Forecasts

Other Options

- Commercial Finance
- Alternative Finance
- Peer-to-Peer
- Finance Health Check
- Cash Flow Forecasts









Innovate UK EDGE – Investment Readiness Initiatives



The Pitch Panel is an **impactful initiative** delivered in the context of one-to-one support from your Innovate UK EDGE innovation & growth specialist.









And there's more...

Innovate UK EDGE also supports

Innovate UK Unlocking Potential Award

Great ideas for innovation can come from anyone and anywhere. So, if you've got a great idea or a business with big ambition, this is the place for you.



Focusing on the most innovative and high growth potential businesses in SW England.



Exploit innovation



Source funding and finance



Enter New Markets



To Action

Are you a business with great ambitions?



Access the support you need to accelerate growth and achieve scale.



Innovate UK EDGE provides bespoke support to help you reach your goals.

Facilitated and delivered by Innovation & Growth Specialists, the service provides:

- Strategic analysis of your barriers to growth
- Expert support in key business areas to embed innovation-led processes
- A bespoke package designed to help you find funding and prepare for investment, protect and exploit your intellectual property, enhance your sales and marketing, adopt lean business practices and internationalise your business

Contact us















Thank You







in Innovate UK EDGE SW

South West 2022 - Feb 2023



Of the 67 respondents to date the Innovate UK EDGE satisfaction survey 22-23, 66 South West business rated Innovate UK EDGE support as either 'Good' or 'Excellent'.

£78.5m RAISED

Grants £18.9m Investments £59.6m

22 COLLABORATIONS

6 international partnership agreements

330 EDGE BUSINESSSES SUPPORTED

SHOWCASE 3: Funding sources & Govt Support



INNOVATE UK –
Chris Lyons
Innovation Lead - Agriculture





Benefiting everyone through knowledge, talent and ideas

UK Research and Innovation brings together the 7 Research Councils, Innovate UK and Research England.

As part of UK Research and Innovation, Innovate UK drives productivity and economic growth by supporting businesses to develop and realise the potential of new ideas including those from the UK's world-class research base.





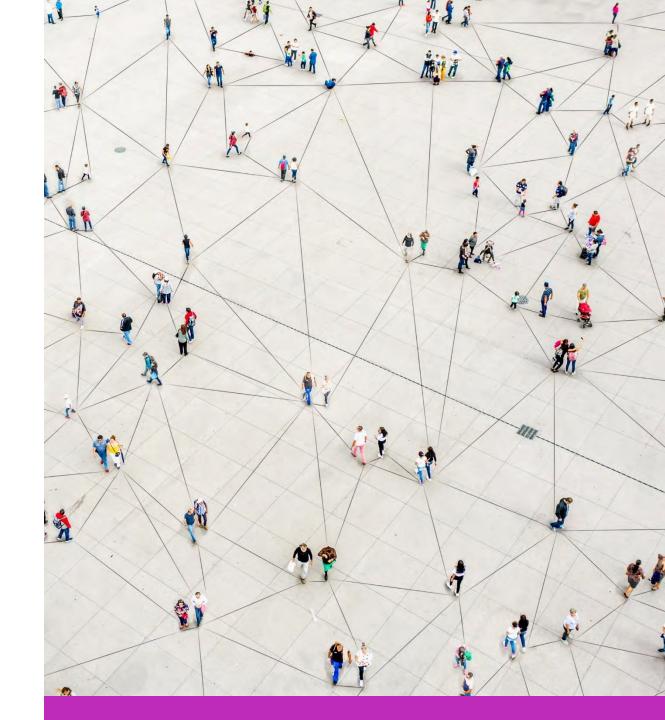
Innovate UK

- 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.





Inspire Involve Invest

Make the opportunity visible and compelling

Bring relevant organisations and people together

Convene the resources needed, including our own



Building the Future Economy Plan for action for UK business innovation





We have launched a <u>plan for action</u> to explain how we will deliver the <u>Government's UK Innovation Strategy</u>, with the vision for the UK to become a global hub for innovation by 2035.

Our actions will be guided and prioritised by the following:

Strategic Themes











Strong Foundations



Science & Research Strengths



Design Expertise



Societal Impact & Responsible Innovation



Innovation Talent & Skills

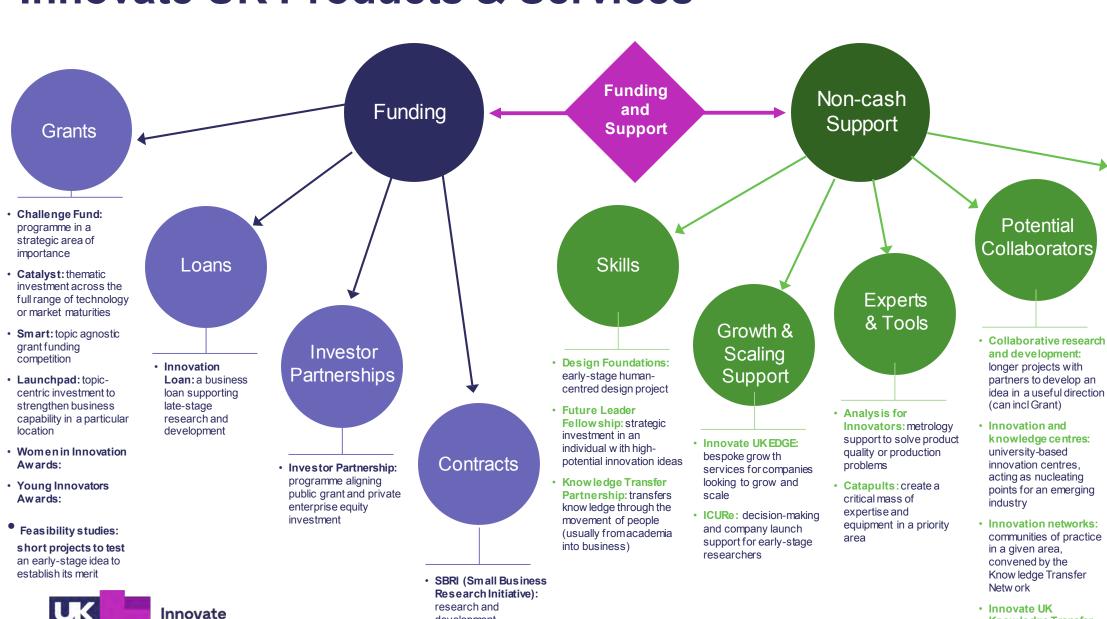


Equality
Diversity &
Inclusion



Place & Levelling Up

Innovate UK Products & Services



development

objectives

procurement driven by

government policy

UK

 Eureka: network supporting global research and development and innovation collaboration

Going Global

Potential

and development:

longer projects with

knowledge centres:

(can incl Grant)

university-based

industry

Netw ork

innovation centres,

acting as nucleating

points for an emerging

Innovation networks:

in a given area.

convened by the

Know ledge Transfer

Know ledge Transfer

innovation communities

Network: builds

and netw orks

communities of practice

partners to develop an

idea in a useful direction

Global Business **Innovation Programmes:** help high grow th businesses explore global innovation opportunities

(incl grants & non-cash)

- Global Expert Missions: deep dives to scope future global innovation opportunities
- Global Incubator Programme: immersion programme to equip high grow th businesses for international markets

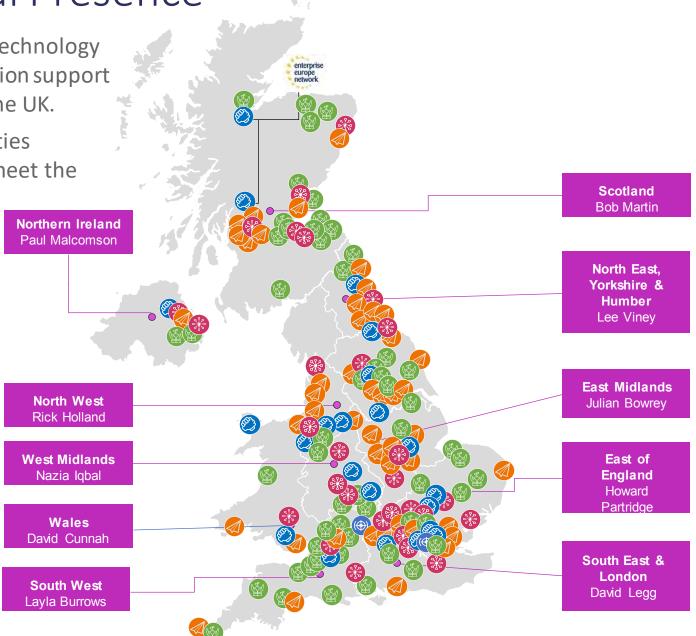
Strengthening our Regional Presence

From funding and advisory services to facility and technology access, Innovate UK and our partners offer innovation support to businesses across every national and region in the UK.

The geographical distribution of our staff and facilities ensures we engage place-based stakeholders and meet the

needs of the regions and nations of the UK.





The Farming Innovation Programme

 Part of Defra's Agricultural Transition Plan

 £270M of grant funding for R&D through to 2028/29

 To enhance productivity, environmental sustainability and resilience in England's farming sectors

 Funding is awarded on a competitive basis to high quality, innovative projects

 Collaborative projects must benefit farmers and growers in England



Farming Innovation Programme Projects



ARWAC (FIP Feasibility)

This project lays the foundation for next-generation robotic vehicles powered by renewable energy and tooled to control blackgrass. It drives productivity by increasing yield through weed eradication.

This project will push the technology from laboratory stage to full testing in multiple farm environments.



CowView (FIP Small R&D Partnerships)

CattleEye is developing a novel way to gaining insights into dairy cows. The completely hands-free solution will monitor a cow's welfare and performance without the need for wearable devices. The new version CowView will advance the product, to enable lesion detection, increase accuracy and offer data so intervention can be timely.



Muddy Machines - Robotic Courgette Harvester (FIP Feasibility)

Developing a novel class of agricultural machine that can reliably replace manual labour. Building from their autonomous asparagus harvester, Muddy Machines are focussing on Courgettes, which present more complex challenges for imaging, software, and gripping.







International Activity

Global Business Innovation Partnerships(GBIP) & Global Incubator Programmes (GIP)

Funded by Innovate UK and delivered by Innovate UK EDGE, the Global Business Innovation Programme aims to give our high growth clients the opportunity to identify international partners for collaborative R&D and Tech Transfer

Bilateral funding arrangements between the UK and the target country to stimulate further collaboration may apply

- Currently: -
 - GIP Australia 2nd market visit in June 2023
 - AgriFood Canada GBIP recruitment underway. Closes 16th June Market visit 9-15th Sept.
 - Singapore GIP focussing on Agrifood and access to Asia. Recruitment closes 2nd July Market visit w/c 30th Oct 2023
 - New Zealand AgriTech GBIP. Focus on emission reduction in grazed systems. Open now Closes 12th July . Market visit 20th Nov – 1st Dec 2023
 - Australia AgriTech New cohort for GBIP and GIP planned. 1st Market visit Feb 2024 being planned.





Horizon Europe: Opportunities for Agriculture in Cluster 6





Horizon Europe 2021-2027



Pillar 1 EXCELLENT SCIENCE

European Research Council

Marie Skłodowska-Curie Actions

Research Infrastructures



Pillar 2 GLOBAL CHALLENGES &

GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

- Health
- Culture, Creativity and Inclusive Society
- · Civil Security for Society
- · Digital, Industry and Space
- · Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre



Pillar 3 INNOVATIVE EUROPE

European Innovation Council

European innovation ecosystems

European Institute of Innovation and Technology



A new way forward

UK Research and Innovation

Horizon Europe guarantee guidance



WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

Widening participation and spreading excellence

Reforming and Enhancing the European R&I system



Watch this space

SHOWCASE 3: Funding sources & Govt Support



DEPARTMENT FOR BUSINESS & TRADE – Ellis Emwanta

Senior Strategy Manager – NHS Innovation & One Health







Department for Business and Trade (DBT):

Adopting A One Health
Approach to Promote Future
Sustainability.



Content

- ☐ Who We are and What We Do
- **□ DBT One Health**
- □ DBT Key Message
- ☐ Why A One Health Approach?
- ☐ UK HMG and One Health
- ☐ DBT One Health Highlights
- ☐ How We Can Collaborate



We are the department for *Economic Growth*.

 We Support Businesses to invest, grow and export, creating jobs and opportunities across the country.

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- Support UK businesses to drive sustainable International Growth

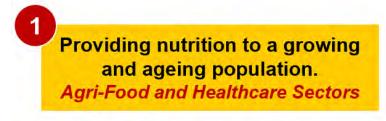
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- Promote the UK as a leading destination for Foreign Investment
- Negotiate Trade Deals and open up markets
- Use trade & investment to underpin the government's agenda for a *Global Britain* and its ambitions for prosperity, stability, and security worldwide.

DBT sees One Health as referring to two related ideas: first, it is the concept that the health of **humans**, **animals**, **plants** and the **environment** we live in are inextricably **linked** and **interdependent**. Second, it refers to the **collaborative** and sustained effort of **multiple disciplines** working locally, nationally regionally and globally to attain optimal health for all living things and the ecosystems in which they co-exist.

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Providing nutrition to a growing and ageing population.

Agri-Food and Healthcare Sectors





Tackling infectious disease and preventing pandemics

Life Science & Healthcare Sectors





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Improving environmental health to support human and animal health Climate Change & Agri-Tech Sectors





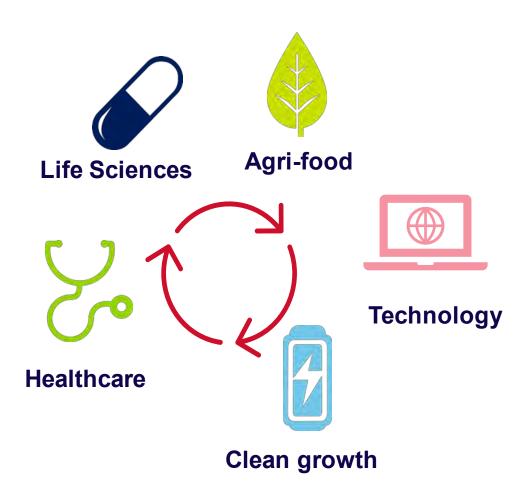
Key Message: Multisectoral and Collaborative

 One Health is an example of a UK offer where multiple sectors can come together



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We are also engaging cross-Whitehall









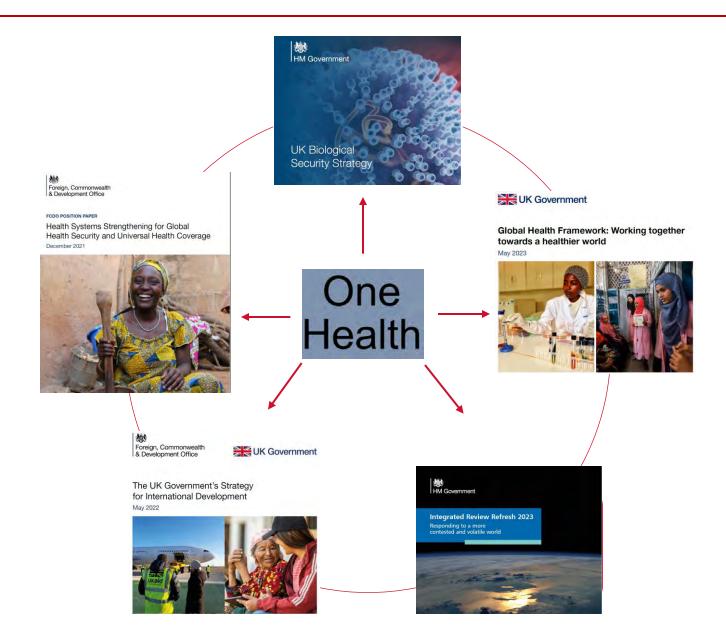




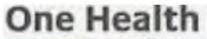
Why A One Health Approach?



UK HMG and One Health



DBT Highlights





Successfully Established

July 2022



DBT Highlights

One Health



Successfully Established

July 2022



Produced and Launched

Winter One Health Roadshow –





November 2022



DBT Highlights



Successfully Established

July 2022



Produced and Launched

Winter One Health Roadshow – *** +



November 2022



Brazil Trade Mission

May 2023



Think Tank Membership

















Department of Health & **Social Care**





The Newcastle upon Tyne Hospitals **NHS Foundation Trust**



lechyd Cyhoeddus Cymru Public Health



Foreign, Commonwealth & Development Office

















Innovate UK KTN











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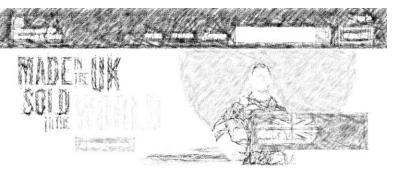


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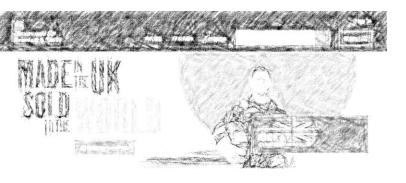


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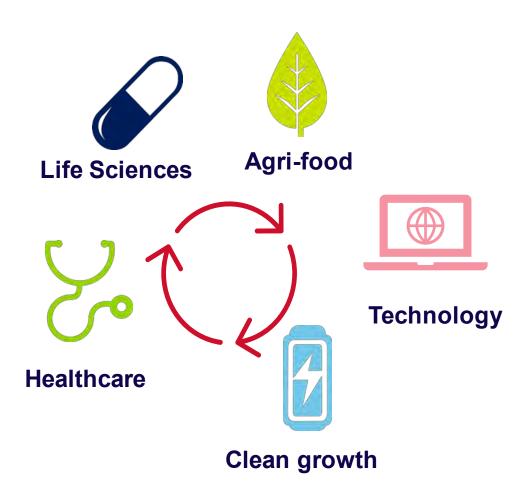
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Department for Business & Trade

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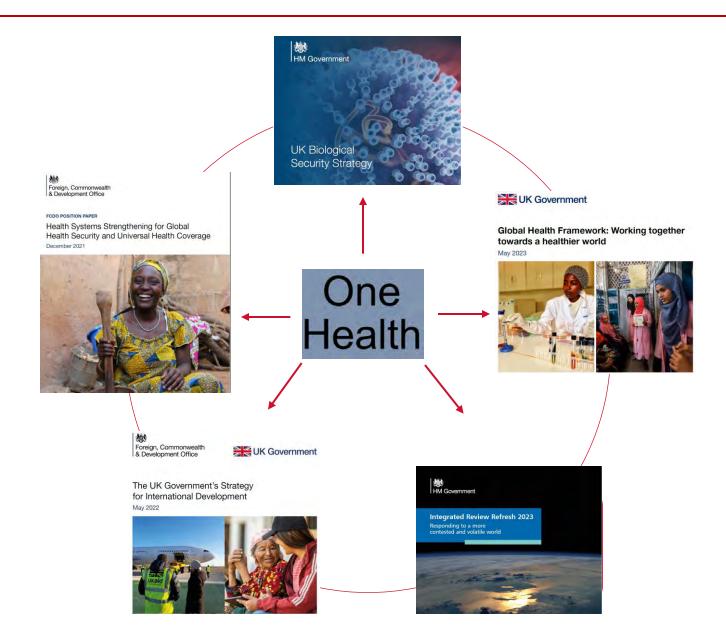




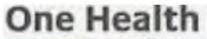
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Innovate UK KTN











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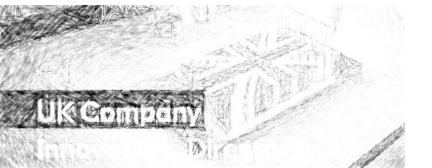




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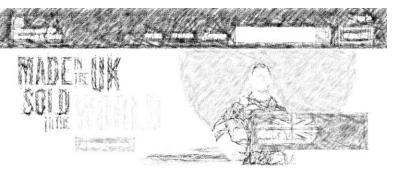


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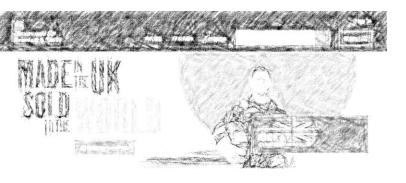


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Department for Business & Trade

Q&A















EXT STEPS & CLOSING REMARKS Cecilia Bufton



ONE HEALTH CONFERENCE 2023

COLLABORATION TOWARDS A ONE HEALTH BUSINESS CLUSTER



Finding solutions to 'wicked' One Health problems