



Evidencing how the Sustainable Farming Incentive (SFI) delivers for soil health and food security

Welcome and introduction

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Environmental Land Management Strategic Knowledge Exchange Hub (ELMS-Exchange)



UK Research
and Innovation



HIGHER EDUCATION
INNOVATION FUND

Funder objective ...

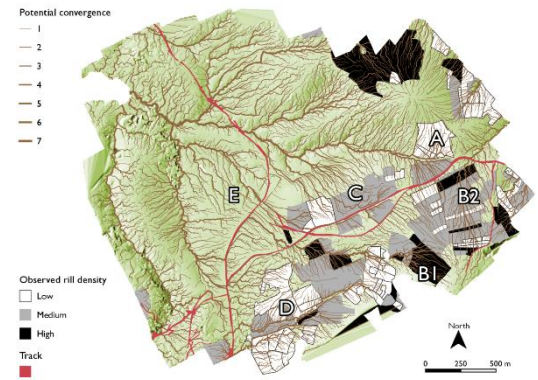
To deliver a **step change in the University's contribution** to policy making, the economy, and/or social and environmental wellbeing ...
... through the **translation of research**, development of industry, business and third sector partnerships, support for commercialisation and thought leadership



Our focus on ELMS agendas ...

To kickstart collaborative, cross-sector research and innovation initiatives specifically designed to help farmers and Defra evaluate how ELMS (with focus on SFI) will deliver for the environment and farm productivity

ELMs-Exchange core team cross-disciplinary expertise and current activities



Defining and diagnosing problems -> identifying pathways to change -> facilitating action

Growing the ELMS-Exchange community and co-designing the way forward for SFI-related R&D: today's purpose



... to inform and develop Research and Development (R&D) collaborations that will support the delivery of the Sustainable Farming Incentive



Anatomy of the day ☺

Session 1: understanding SFI from policy to farm-level implementation

Session 2: Identifying R&D needs and priorities, and funding opportunities

Session 3: co-design of R&D collaborations and project concepts





Rural Payments
Agency

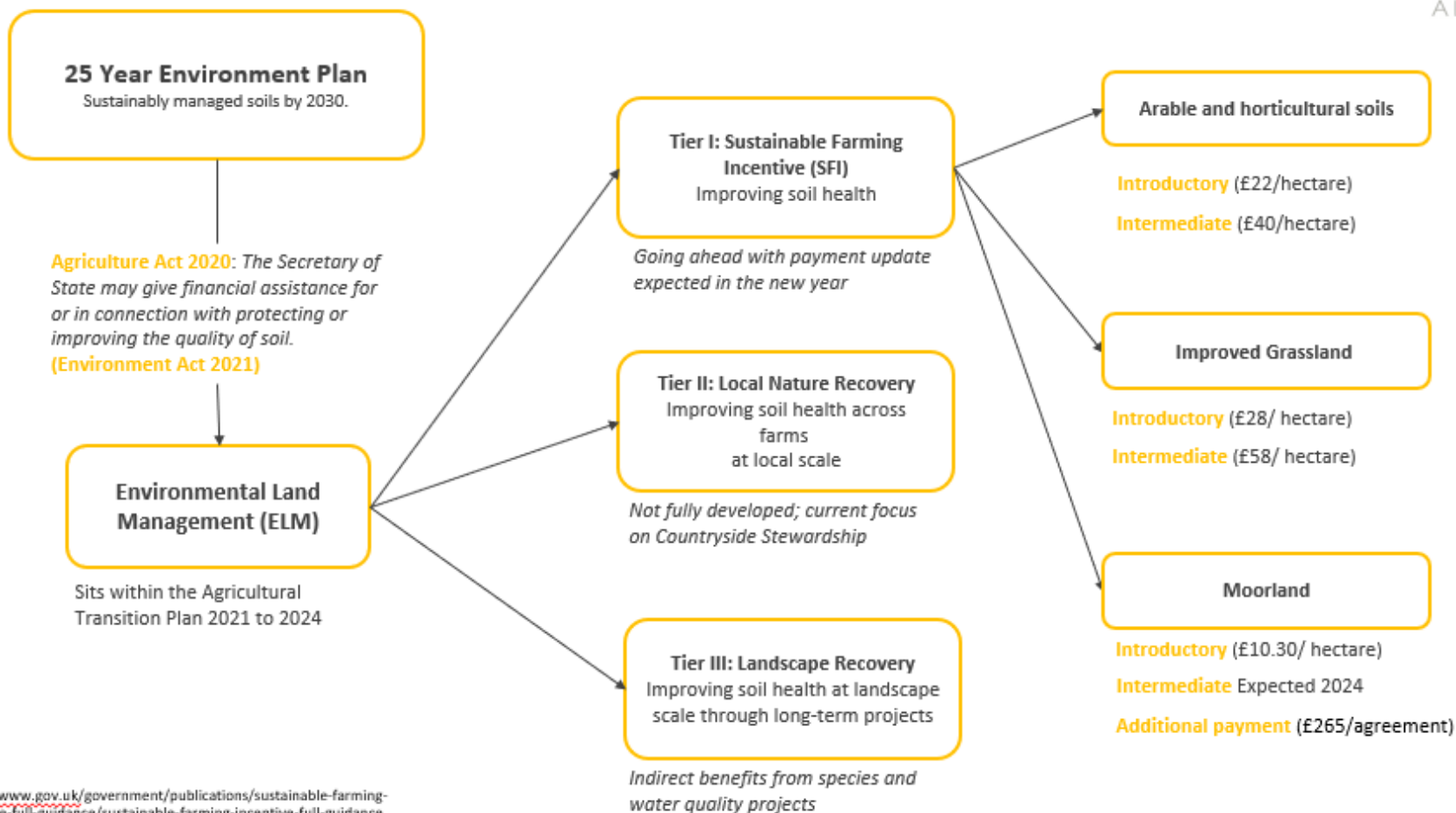
ELMS Exchange Workshop on SFI

Understanding the Policy Context

Claire Douglas



Policy context for Soil in Environmental Land Management (ELM)



Current participation in all land schemes

- 84,000 farmers claiming BPS;
- 19,000 in CS mid-tier; and 8,100 in other CS agreements (HT, Capital etc) with an additional 7,500 applications being processed for agreements to run from 2023;
- 8,900 farmers in ES (mainly HLS);
- 877 farmers in SFI Pilot; almost 1,400 live SFI 2022 agreements;
- Managed Agricultural Transition Plan

Agri-environment agreements

- From 1 January 2023 all CS and ES agreements will be operating under national rules:
 - More flexible inspection regime;
 - No penalties beyond loss of payment;
 - ES expirees offered 5 year extension, with flexible end date if joining scheme 'of at least equivalent environmental value.'
 - Possible to have ES and CS agreements running in parallel, even on same land parcel.
 - Can have CS Capital Agreement alongside ES (HLS) extension.

Key features of SFI

- Simple online application process, eligible options presented to applicant based on mapping and land cover.
- Three-year agreements, with no fixed application window.
- Annual opportunity to incorporate additional standards, add land and/or increase ambition levels of standards
- Quarterly payments, first payment three months after agreement starts. (No claim required, but do need to make an annual declaration).
- Can be combined with CS and private schemes, with options 'stacked' on same land parcel.
- No penalties beyond loss of payment.

Other SFI rules

- Applicants must be BPS eligible.
- Applicants must have 'full' Business permission or 'BPS submit permission' in order to apply.
- Agreement holders must have management control of the land.
- Ambition and coverage can only be reduced in exceptional circumstances.
- English land parcels only, but no whole-farm requirement.

SFI 2022: Arable & Horticultural Soils Standard

Introductory level – £22 per hectare	Intermediate level – £40 per hectare	Advanced
Test soil organic matter	Test soil organic matter	<p>We plan to add an advanced level to this standard from 2023 onwards.</p> <p>Likely to include increased use of no-tillage techniques.</p>
Undertake a soil assessment and produce a soil management plan	Undertake a soil assessment and produce a soil management plan	
<p>70% winter cover to protect soil:</p> <ul style="list-style-type: none"> •at least 70% of land in the standard must have green cover over the winter months (Dec-Feb) •this can include any kind of green cover, including autumn sown crops and weedy stubbles 	<p>70% winter cover to protect soil:</p> <ul style="list-style-type: none"> •at least 70% of land in the standard must have green cover over the winter months (Dec-Feb) •this must include land with multi-species green cover – covering at least 20% of total land in the standard 	
<p>Addition of organic matter:</p> <ul style="list-style-type: none"> • add organic matter to 1/3 of the land in the standard each year •this can include any kind of organic matter, including sown green cover crops 	<p>Addition of organic matter:</p> <ul style="list-style-type: none"> •add organic matter to 1/3 of the land in the standard each year •this will include multi-species green cover, and other ways to add organic matter 	

SFI 2022: Improved Grassland Soils Standard

Introductory level – £28 per hectare	Intermediate level – £58 per hectare	Advanced
Test soil organic matter	Test soil organic matter	We plan to add an advanced level to this standard from 2023 onwards
Undertake a soil assessment and produce a soil management plan	Undertake a soil assessment and produce a soil management plan	
95% green cover to protect soil (no more than 5% bare ground over winter)	95% green cover to protect soil (no more than 5% bare ground over winter)	
	Establish/maintain herbal leys to improve soil health on at least 15% of land in the standard	

SFI 2022: Moorland and Rough Grazing Standard

Introductory level – £148 fixed per agreement per year, plus additional variable payment rate of £6.45 per hectare

Verify and record soil types, including peatland, and associated vegetation

Evaluate the public goods potential and condition of the moorland

Identify opportunities to maintain or enhance public goods

Intermediate and advanced levels

To follow later in SFI rollout

Progress With SFI

- SFI Pilots
 - 877 live agreements
 - 74 capital grants offered and accepted
 - 99% of quarterly payments made on time
 - Annual declaration and amendment process underway
 - 367 received so far
 - 52 requests for amendments to agreements
- SFI 2022
 - Rolling application window – opened June 2022
 - Almost 1,400 applications received
 - More than 1,200 agreements live
- New options for SFI 2023
 - Hedgerows,
 - Integrated Pest Management
 - Nutrient Management

SFI Challenges & Opportunities

Mel Squires, Director, NFU South West
Wednesday 23 November 2022



The prize - why our soils are important

"Despite all our accomplishments we owe our existence to the top 6 inches of soil, and the fact that it rains"

Paul Harvey, US Radio broadcaster (1978)

- Soil is a vital ecosystem that supports our crop, as well as providing clean water, air and storing carbon.
- Soil systems provide 99% of terrestrial food production, filters & stores billions of litres of water to drink, feed crops and moderate flooding.
- Improving soil health saves fertilisers, fuel, farming and the planet
- Soil health is a measure of how well our soil is functioning to provide water, nutrients and structure for your crops

The South West region

- Historically (and remains) the most active region for agri-environment schemes and has also been very reliant on BPS (Great SW report here: [GSW-agricultural-transition-report.pdf \(heartofswlep.co.uk\)](https://heartofswlep.co.uk/GSW-agricultural-transition-report.pdf))
- A lot to lose and a gap to fill – total BPS loss to the Great SW area would be £883.7 million.
- More organic farms than any other region [Organic land use, by region UK 2021 | Statista](#)
- Significant, vital Uplands area – which is currently let down by measures that form SFI

Opportunity

- Deliver for both the farming, food production and environment – the issue is most of the proposed actions potentially have a negative impact on crop production.
- The current payment rates need to offer an incentive to change and further deliver on farming practices. Recognise true value, drive down costs, increase resilience.
- On farm the timescales for the introduction of ELMs does not match the BPS reductions. This is a fundamental issue for many sectors.
- SFI needs to be universal, working for most farmers. Currently not being achieved due to detailed definitions/actions required e.g. arable systems based on veg and root crops can't deliver the winter cover requirement. Perm grassland systems will struggle to access the intermediate soil level requirement.

Opportunity

- ELMs needs to deliver against the full range of environmental outcomes. Missing opportunities for 'win, win's' for net zero e.g., supporting carbon audits to drive productivity and engage excluded sectors like horticulture.
- Phased approach to truly co design and roll out buys time to work issues through. Once standard launched difficult/unlikely to be amended (e.g. taking a soil sample to inform both soil organic matter and better nutrient management. Currently these actions may sit in two different standards). Means actions that look entirely sensible on own, are complex/repetitious on farm.
- Despite design ambitions that SFI should be a scheme that can be entered into without advice Defra are now bringing in advice and training to secure environmental outcomes
- Getting the majority of farms in the schemes as easily and quickly as possible!



Improving SFI

- The current payment rates do not offer an incentive to change farming practices.
- On farm the timescales for the introduction of ELMs doesn't match BPS reductions. This is a fundamental issue for many sectors
- The ambition to create SFI standards that are universal, working for most farmers, is not being achieved.
- The initial group of standards are linked to productivity through their titles (e.g. soils, IPM, nutrient management), however, the actions are driven by environmental outcomes which could impact on productivity. We CAN do, and have both!
- Listen to farming grass root feedback, from the diversity of food production systems – truly co design.



Relationship across schemes

- For ELMs to work on farm there is a need for SFI to work alongside LNR. Smooth process, alignment across schemes simple for the applicant – SME family farms.
- Welcome CS/HLS agreements being brought across to national regulations as that will given much more flexibility to manage transition.
- There is a need to ensure existing CS/HLS agreement holders can also access the new ELM offer, either alongside those agreements or as transition smoothly across to new ELM agreements.
- Relationship with Landscape Recovery (LR) scheme is less of an issue. LR is about land use change. If land going into LR is already in CS/HLS Defra will make the transition across work. SFI, being focussed on farm activity, will not be appropriate for land in LR.

Outcomes

- We want to get it right, we need it to succeed – ATP budget, gov cycle
- We should want the majority of farmers to be able to engage
- We need clarity, recognition of true value, ability to deliver in all farm & food systems
- Ability to improve knowledge and understanding, sustainable ag
- Multi layered benefits recognition
- Work across wider Agricultural Transition Programme and alignment to enhance outcomes/benefit
- Ensure good mix of farming operations to aid co-design
- Cross department working

Session 2: Identifying research needs and priorities

Professor Richard Preziosi



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What are the key challenges, with respect to the Sustainable Farming Incentive (SFI) and its implementation, from your perspective?

For example:

- Will/do farmers understand the scheme as it is currently framed?
- Will farmers take it up?
- Will it give the results needed?
- How does it sit alongside other initiatives?
- How does the scheme need to build so it becomes self-sustaining for farmers?



What and where are the knowledge gaps that exist in relation to those challenges you have just identified?

For example:

- What knowledge/information/advice/data components could/should be included?
- What baseline data is needed?
- How could/should change be evidenced?
- How could/should financial and environmental sustainability be evidenced?
- What does good/acceptable/brilliant look like?
- Are there examples of where something similar has been done successfully?



Thinking about the knowledge gaps and their associated challenges, what would be the priorities that you would like to see R&D help with?

For example:

- What should the priorities for research be?
- What do you need to know to support implementation of SFI?
- What do you want to know to support implementation of SFI?
- How can the academic research community work collaboratively with you to help fill these knowledge gaps and address the challenges?



6 table discussions

1. Participatory and co-created research and public understanding: exploring barriers to uptake
2. What is the optimal farming system balancing env. Improvement and farm economics
3. Baselines, guidance and standards – collation and dissemination of knowledge to those who need it
4. Use of big data for benchmarks, baselines and standards
5. Testing methods – what works, what do we need (on site, farmer led/friendly). Optimising frequency and spacing of sampling to understand improvement in an economical and efficient way
6. How does participation change farmer behaviour and improve soil and add value. What are the indicators of these?





Introduction to ELMS-Exchange resources and the collaborative research funding call

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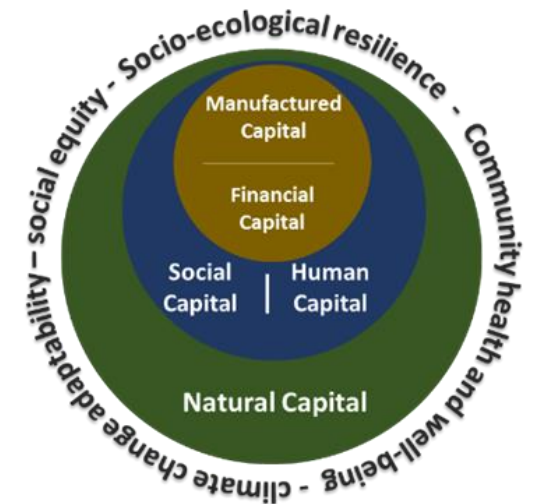
Sustainable Earth Institute Mission and Vision

RESEARCH · COLLABORATION · IMPACT



Led by **UN SDGs**, the mission of the Sustainable Earth Institute is to build resilience for our planet through an integrated, **interdisciplinary approach to challenge-led research**, education and innovative knowledge exchange...

... The SEI brings **researchers** together across disciplines and also with businesses, community groups and individuals to work **collaboratively** on projects that deliver positive **impact** towards a Sustainable Earth



Approaching SDG challenges through a **natural capital lens**

Institute Mission and Vision

Activities are clustered around strategic themes and intersecting agendas



2022 Interdisciplinary Challenge Themes

- Healthy Landscapes
- Net-Zero Carbon
- Environmental Intelligence & Sensors
- South West Natural Powerhouse



Responding to and feeding into national and international policy

ELMS-Exchange project builds on track record of impact research programmes hosted by SEI

Impact Lab



Assisting 65 Devon SMEs to address big data and environmental challenges

Low Carbon Devon



SUPPORTING ENTERPRISES TO REACH NET ZERO

Supporting Devon SMEs to shift to a low-carbon economy (<1000 LinkedIn)

Recon Soil

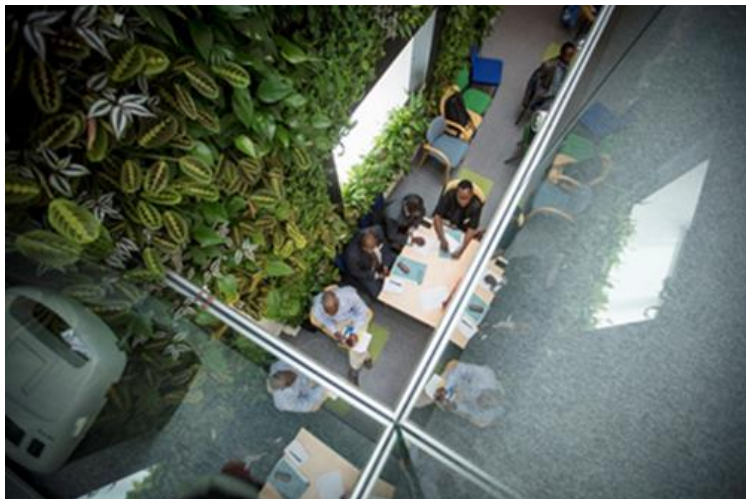


Project to revolutionise how waste material from construction projects is managed

DATA



Supporting Devon Agri-Tech SMEs



Specific funder requirements for ELMS-X call:

Deliver **step-change in University contribution** to policy making, the economy, or social and environmental wellbeing ... translation of research through development of industry, business and third sector partnerships

Grow potential for **return on investment**, either through new commercial income streams or through development of partnerships that leverage external funding

ELMS-Exchange collaborative project funding call

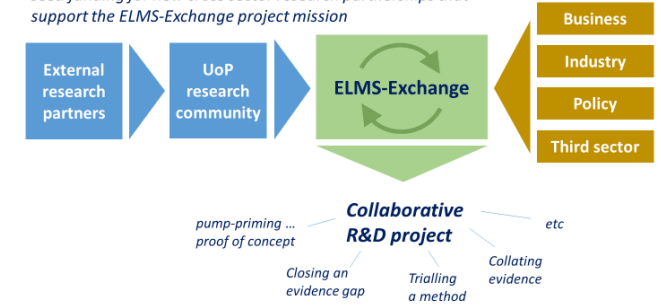
seed funding for new cross sector research partnerships that support the ELMS-Exchange project mission



ELMS-X Funding collaborative R&D project call process

ELMS-Exchange collaborative project funding call

seed funding for new cross sector research partnerships that support the ELMS-Exchange project mission



- **Project concept** may come from and/or be led by the external partner or UoP researcher(s) but both entities must be involved in co-design and delivery of project
- Projects designed to operate over a **3 to 6 month timeframe** in first instance (all spend competed by July 2023)
- **Requested costs** may cover staffing at or between either party, direct costs associated with activities, travel and subsistence etc
- University of Plymouth staff time and infrastructure costs provided as **in kind contribution**. Similar in-kind input from external partner will be looked upon favourably by the panel.
- Successful bids will have a clear **pathway to impact and/or future funding opportunities** aligned to the ELMS-X and HEIF funding agendas.
- The **ELMS-X team is available** to connect external partners to relevant UoP research expertise and facilitate concept development

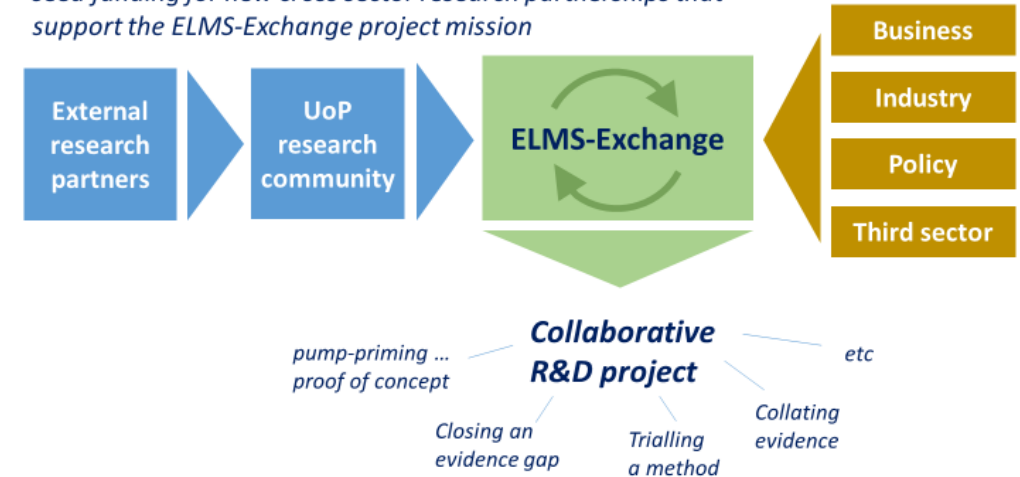
ELMS-X Funding collaborative R&D project call process

Provisional Timeline

- ELMS-X workshop: 23rd November 202
- Funding call launched: 30th November 2022
- Deadline for applications: 3rd January 2023
- Assessment Panel meeting: w/b 9th January 2023
- Projects begin: mid January 2023
- Successful applicants project integration workshop: February 2023
- Delivery of individual projects: January – June 2023
- Spending Deadline for Round 1: 31st July 2023
- Delivery of project report by August 2023

ELMS-Exchange collaborative project funding call

seed funding for new cross sector research partnerships that support the ELMS-Exchange project mission



ELMS-X Funding collaborative R&D project call process

Evaluation criteria

Project concept, timeliness and fit to ELMS-X mission

Fit to external partner organisation and research impact potential

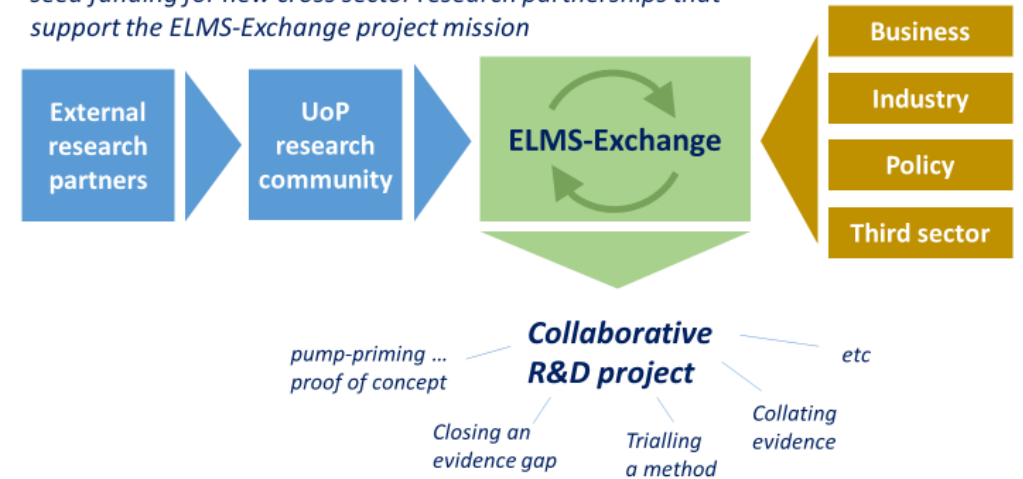
Feasibility of activity, outputs and outcomes (inc. future funding)

Project team / partnership experience and potential

Value for money [inc. in-kind contribution to research effort)

ELMS-Exchange collaborative project funding call

seed funding for new cross sector research partnerships that support the ELMS-Exchange project mission



Application Form – requires 1200 words max

The image shows two pages of the '2022/23 ELMS-Exchange Collaborative Research Awards: Application Form' from the University of Plymouth. The left page contains sections for 'Project Details', 'Principal Investigator', 'Co-Investigator', and 'External industry/policy partner team'. The right page contains sections for 'Project Summary for Website', 'Project Rationale & Background', 'Project Aims and Objectives', 'Impact potential of partnership', 'Deliverables and Timescales', 'Budget Outline and Value for Money', 'Project Team and Summary of Relevant Experience', and 'Any other information you wish to be considered / References'. The form includes various text boxes for providing details and a signature line at the bottom.

ELMS-Exchange collaborative project funding call

seed funding for new cross sector research partnerships that support the ELMS-Exchange project mission



Jenny Milligan

Innovation and Regional Funding

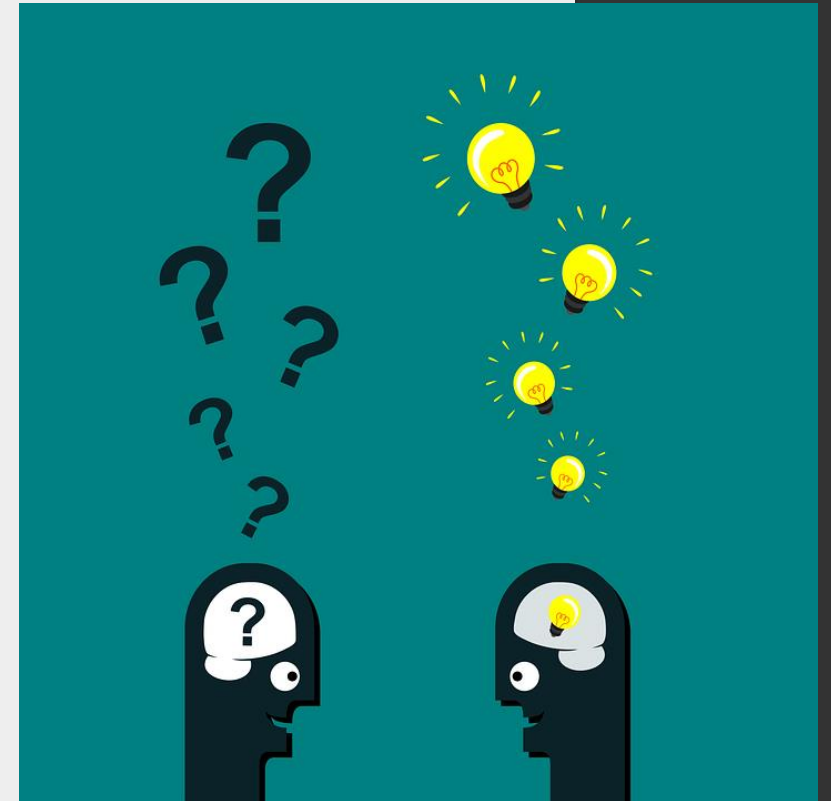


What is non-traditional Funding?

Funding that is underpinned by economic, social or environmental outputs, rather than research excellence

Non-traditional funding will often be delivered with businesses or other external stakeholders

It is a way for the research that we do in the university to make a difference in the real world





Innovation Funding Team

- Supports the development of 'non-traditional' funding applications
 - Partnership development
 - Application drafting
 - Liaising with funders
 - Cost development
- Public engagement - engaging people throughout the research process
 - Explore Awards
 - Get Involved Awards





Why is it Important?

- Great way to demonstrate impact
- Builds new partnerships
- Provide opportunities to access UoP facilities and expertise.
- Develop high-quality partnerships and collaborations (including internationally) that lead to opportunities.
- Develop R&D capacity and support local growth.
- Participate in business-led research projects to develop transformational new technologies.
- Develop commercially successful applications of new or improved products, processes or services.
- Improve productivity, accelerate innovation and remain competitive in increasingly global markets
- Benefit from the University of Plymouth's excellent research base
- Build local strengths and help companies benefit from them
- Create new jobs





Regional Funding Landscape

Shared Prosperity Funding

European Structural Funds have been replaced by **Shared Prosperity Funding** - very little funding across Devon (c£14m) although Cornwall still has significant allocations (£132m)

All investments must link to net zero and nature recovery objectives, 25 Year Environment Plan, and the UK's commitment to cut GGE to net zero by 2050, BUT little detail on how this will be achieved



Regional Funding Landscape

Devolution

Devon and Cornwall County Deals – On Hold...

- Two of nine areas given backing to make more local decisions
- No new money, but flexibility to use national budgets to meet regional needs...
- Net zero is a cross cutting theme, but no apparent specific devolution ask

Levelling Up...





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National Funding

Farming Innovation Programme

Partnership between IUK and DEFRA to support farmers with a range of research and innovation projects (currently closed)

Farming Futures

Opening January 2023, this fund will be managed through IUK and support the theme of automation and robotics

Plus many others...



Thank you for listening

Any questions?

Jennifer.milligan@plymouth.ac.uk

<https://www.plymouth.ac.uk/research/innovation-funding>

<https://www.plymouth.ac.uk/research/public-engagement-at-plymouth>



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Research and Innovation

An introduction to Knowledge Transfer Partnerships (KTP).

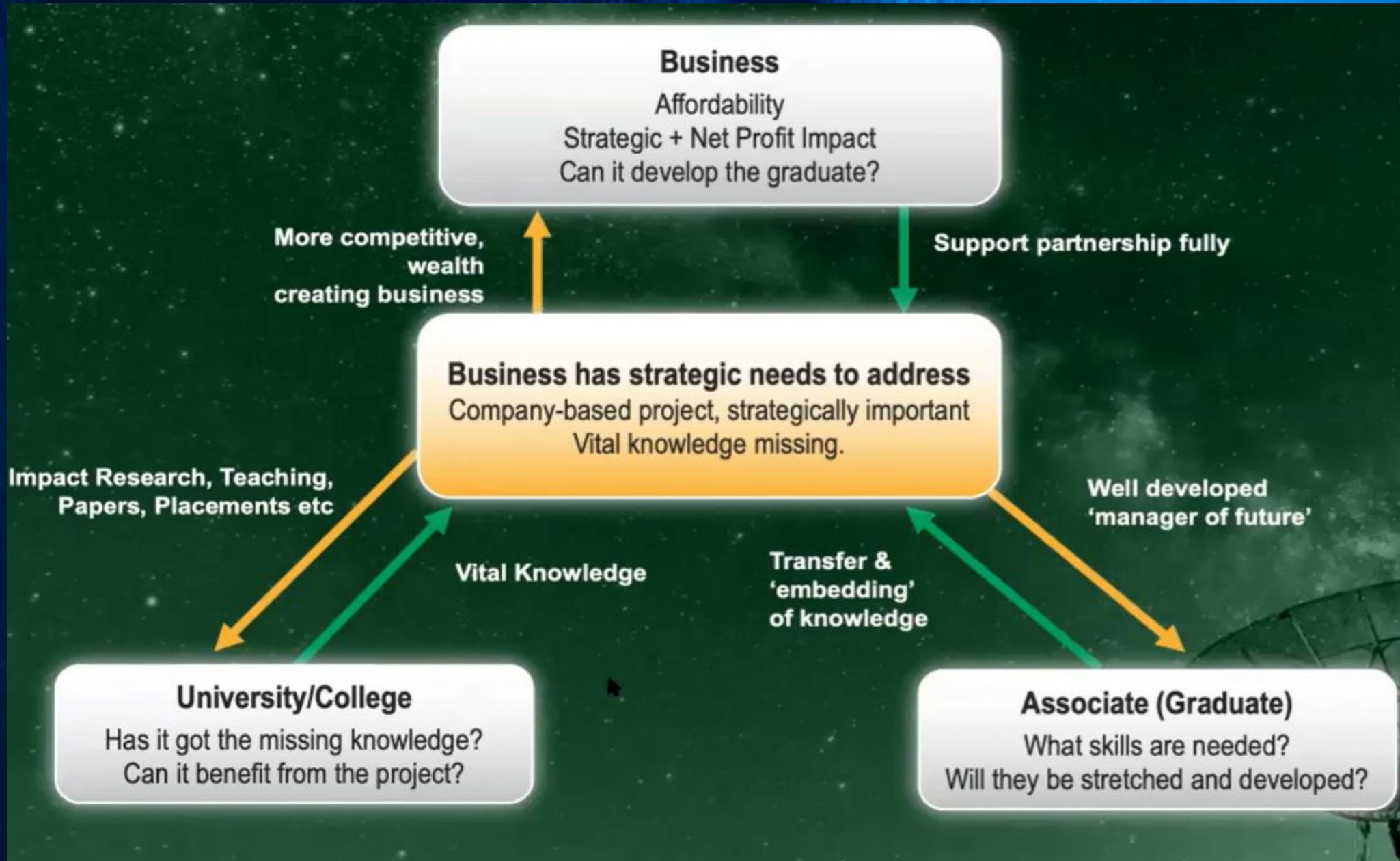
Dave Marshall
23rd November 2022

What is a KTP?

- ❖ 3-way partnership
- ❖ 45 years experience
- ❖ Bringing together:
 - A business
 - A knowledge base
 - A high calibre graduate/post graduate



KTPs are truly symbiotic relationships*



* Source: KTN

Summary of typical benefits and outcomes

- Company – a new innovative capability delivering new products, processes, increased productivity and a new income stream.
- University – REF income, Impact Case studies, new areas of research, publications, placements, curriculum development, PR and long term relationship.
- Associate - New skills and expertise, training and professional development and the chance to deliver a strategic project.

Additional Economic Impacts as a result of KTP

Knowledge Transfer Partnerships

£7.50-£8

£1



Public funding invested

Gross value added for the UK economy

Innovate UK

Knowledge Transfer Partnerships:
Building research/industry relationships

82%

work together more closely due to participation

Knowledge/research
organisations

Industry



Innovate UK

* Source: Independent report Warwick Economics and Development

Types of KTP projects

Classic KTP

Management KTP

How much does a KTP cost?

- The exact cost depends on the duration of the project-lasting between 12 months and 3 years
- Typically, total grant approximately £90k per annum
- Costs are shared between the business and IUK
- SMEs contribute 33% (approximately £30k)
- Larger businesses contribute 50% of funding

How can we help?

- Work with our Innovation Funding Manages to develop a project proposal
- We work directly with Innovate UK to ensure the highest chances of success
- IFM undertakes the majority of bid writing- with input from the academic team and the company where needed
- IFM submits the application and then supports the partnership throughout the KTP

We are here to help!



Contact us:

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Yana

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Thank you



Any Questions?

HELP

SUPPORT

ADVICE

GUIDANCE

ASSISTANCE

INFO

