

Learning, Teaching and Research and the Circular Economy

8th June 2022 – The Circular Economy Jigsaw

Dr Merryn Haines-Gadd – Research Fellow for Circular Revolution

University of Exeter

International Reputation for Excellence

The University of Exeter is home to the **UK's top five** of the world's top **100 climate change scientists**.

University of Exeter Business School (UEBS) accredited with Small Business Charter Award

UEBS has twelve leading research centres, all of which have an important role to play in our CE activities.



Exeter Centre for Circular Economy (ECCE)

The Exeter Centre for Circular Economy (ECCE), launched in 2018 by Dame Ellen MacArthur, is a world leading academic centre dedicated to the provision of Circular Economy Research and Education.

- Work with the **leading experts** in the field of the circular economy
- **Strategic education partner** of the Ellen MacArthur Foundation
- Delivered **dynamic and collaborative training** to over 2,000 leaders and managers since 2018
- Engaged with over 200 global businesses

Our Vision is to be:

‘to be the leading UK centre for Circular Economy engaging in innovative research, knowledge transfer and executive education projects. We engage in projects that develop Circular Economy theory and practice designed to transform our economy, creating regenerative wealth and well-being’.



**Business
Outreach**

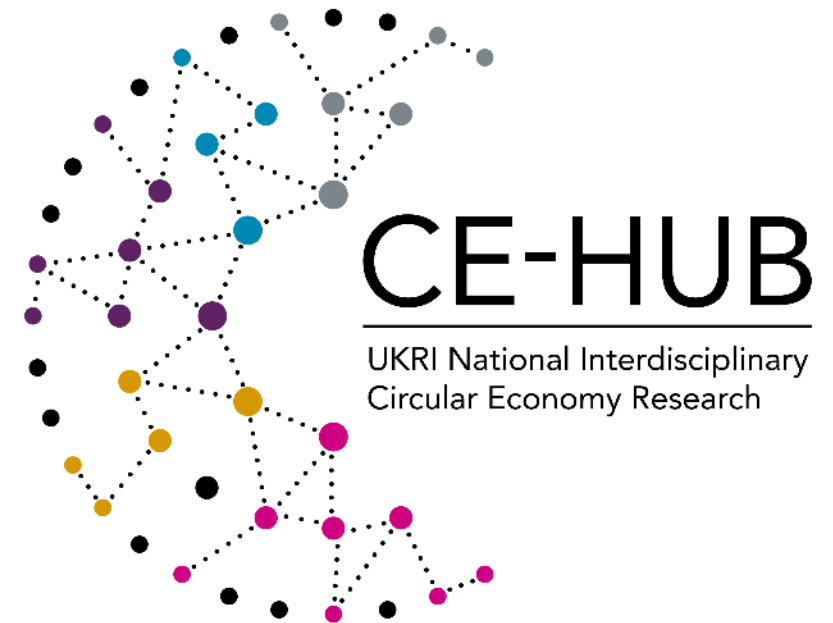
Research

Education

Research / business outreach

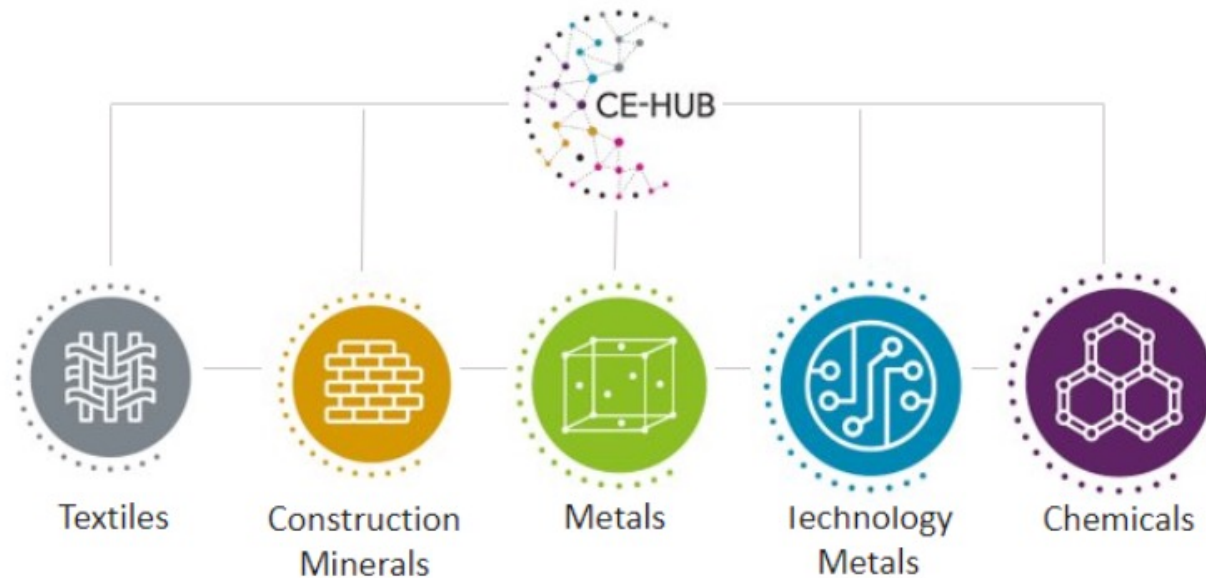
CE-HUB

- Embedded in ECCE is **The National Interdisciplinary Circular Economy Hub (CE-HUB)**. The **£30 million programme**, match funded by UK industry, aims to **scale and accelerate** the UK's **transition** towards a circular economy.
- The hub co-ordinates and leads five centres of **excellence involving 34 of the UKs leading universities**.
- Supported with £3.5 million from UK Research and Innovation (UKRI), the hub **supports post doc and PhD research**, webinars, events, funding bids.



N³ER PROGRAMME

Innovate UK collaborative research & development fund



Wider academic, industry, third-party, policy community (including DEFRA, BEIS, devolved administration)

Business engagement projects



European Structural & Investment Funds (ESIF) Growth Programme:

- **Welsh European Funding Office (WEFO) Circular Revolution**
£2.8M partnered with Swansea University & Riversimple (Jan 2021 to July 2023)
- **Higher Level Skills for Smart Specialisation**
£1.8M across 5 Partners in South West region (Nov 2020 to July 2023)
- **Future Focus II (Circular Economy, Innovation & Leadership)**
£3.5M partnered with Cornwall College (Jan 2020 to Mar 2023)
- **Accelerating Circular Skills for Cornwall and Isles of Scilly (ARCA)**
£1.1M partnered with Truro & Penwith College (Apr 2021 to Dec 2023)



Chwyldro Cylchol
Circular Revolution



CORNWALL &
ISLES OF SCILLY
GROWTH
PROGRAMME



The National Lottery Community Fund – Climate Action:

- **TEX Innovation** - support for Fashion and Textile organizations
Partnership with Cultivate Cornwall CIC and Upcycle Kernow CIC



Education

Executive education – CE Masterclass

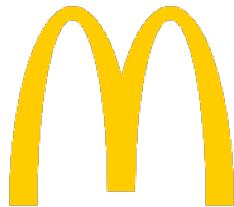
- Exeter is a **Global Pioneer University** and **strategic education partner** of Ellen MacArthur Foundation; delivering **leading CE Masterclass** - 13 cohorts since 2018.
- **6 week** and **4 week** online learning classes
- Support organisations **on their circular economy journey** by experienced **practitioners within an inclusive, peer-to-peer** learning environment.
- Success lies in helping companies develop a **customised actionable plan** to create value from circular opportunities within their business.

For more details, please contact: circular-economy@exeter.ac.uk



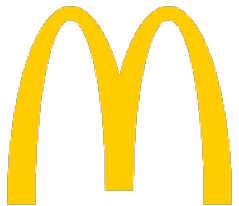
Exeter MBA – Design & CE module

- 8 week module – *“The Circular Economy Design Challenge”*
 - 3 day design sprint
 - 6 week CE masterclass
 - 1 week corporate circular economy challenge



MBA consultancy projects

- 3 month client led thesis projects with CE focus



**Examples of our research,
education and business
outreach in practice**

Circular Supplies: *Provide renewable, bio-based or fully recyclable input material to replace single use inputs*

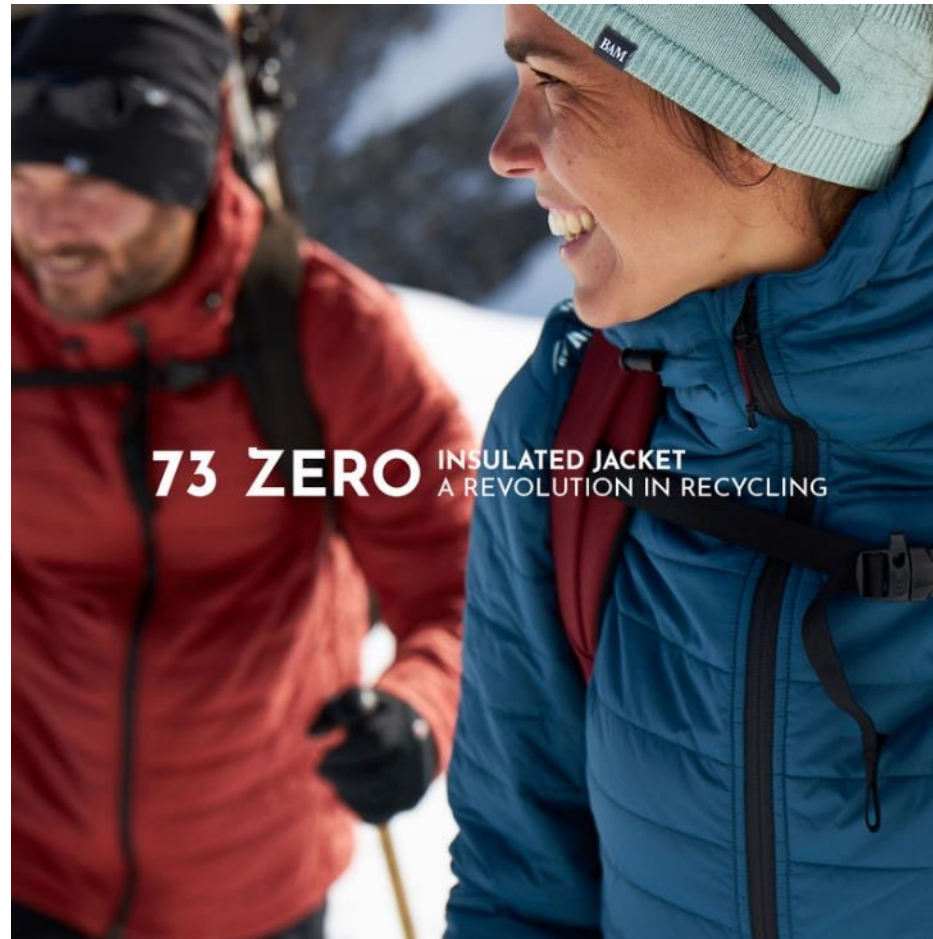
BAM
BAMBOO CLOTHING



In 2018 they set the goal to become **impact positive by 2030**, identifying and quantifying any negative impact we have and reducing it to zero.



73 Zero range: Denim – insulated jacket – waterproof jackets



73 ZERO INSULATED JACKET
A REVOLUTION IN RECYCLING





Chwyldro Cylchol Circular Revolution

circularrevolution.wales

#CircularRevolution #ChwyldroCylchol #EUFundsCymru #CronfaUE

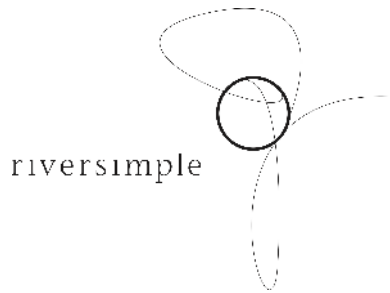
Circular Revolution

- A centre of innovation focussed on circular thinking
- A £2.4 m operation, part-funded by the European Regional Development Fund (ERDF) through the Welsh Government
- Business-led by Riversimple with Swansea University and the University of Exeter.
- Dual themed to support Wales to develop sustainability in West Wales and the Valleys:
 - **Business Outreach**

The practical transformation and transition of businesses to circular thinking

- **Research & Innovation**

Innovative R&D pilot projects focussed on real-world business challenges of servitisation and circularity.

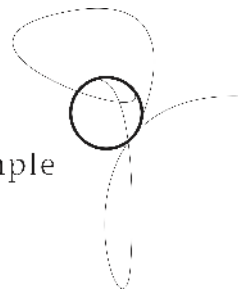


Business Outreach

- The Circular Revolution will work **with businesses in West Wales and the Valleys** who are interesting in learning about circular thinking in relation to their **products, services, processes and business models**
- Business Outreach is delivered by **Swansea University** and the **University of Exeter**, recognised academic leaders in the field of Circular Economy
- Business outreach can be delivered **both virtually and in-person** – where it is safe and effective to do so.



riversimple



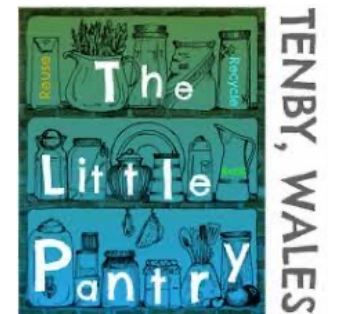
Swansea
University
Prifysgol
Abertawe

UNIVERSITY OF
EXETER



How we are helping companies

- Bid writing for securing funding
- Circular economy roadmaps
- Teaching tools, methods and case studies
- Business model mapping
- Waste stream analysis
- Product life cycle analysis
- Understand consumer behaviour change



Pilot Projects 1 to 3



1: Supplier Criteria & Procurement System

Aim: design and develop a broader process and system for procurement within a circular business



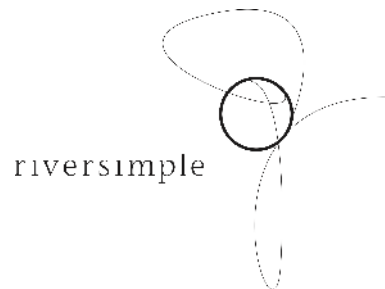
2: Blockchain Governance

Aim: design and develop the rules to govern the blockchain spine. This will ensure that fair, transparent, and principled governance is in place for all users



3: Blockchain Spine Design & Build

Aim: design and develop a blockchain spine prototype, which will provide the software base where shared and trusted information is established for all stakeholders in the supply chain



Pilot Projects 4 to 6



4: Blockchain Interface

Aim: design, develop and test example software that will interact with the spine sharing the agreed and trusted information required across the value chain



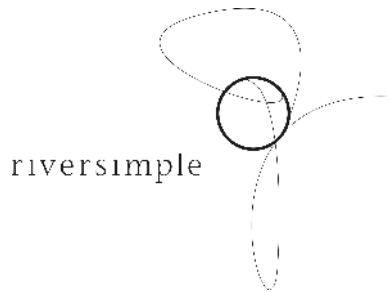
5: Contractual Agreements

Aim: explore smart contracts, alongside blockchain technology to create simple, seamless agreements for organisations providing sale of service offerings



6: Open Source Platform

Aim: develop and build on an existing open source platform enabling sustainable knowledge sharing across West Wales, the Valleys and beyond.



Swansea
University
Prifysgol
Abertawe



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