

CE Programme

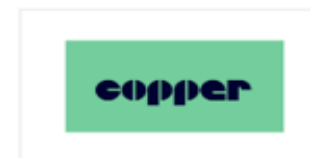
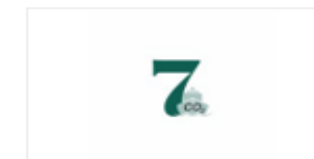
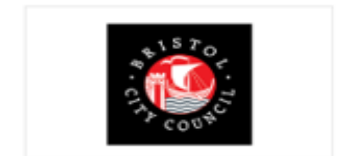
**Local Industrial Decarbonisation Plan
West of England Industrial Cluster**

What is the West of England Industrial Cluster?

- The West of England Industrial cluster is a consortium of public and private organisations formed in 2024
- The Cluster is funded by the UK Government to create a regional 'Local Industrial Decarbonisation Plan' in support of the UK's Industrial Decarbonisation Strategy.

- This funding allocation supports 'dispersed sites' – areas with less concentrated but significant industry –
- It follows a first allocation of funding for major industrial clusters with concentrated industry for example, in Teeside, Hynet (Liverpool) and South Wales

Core plan partners

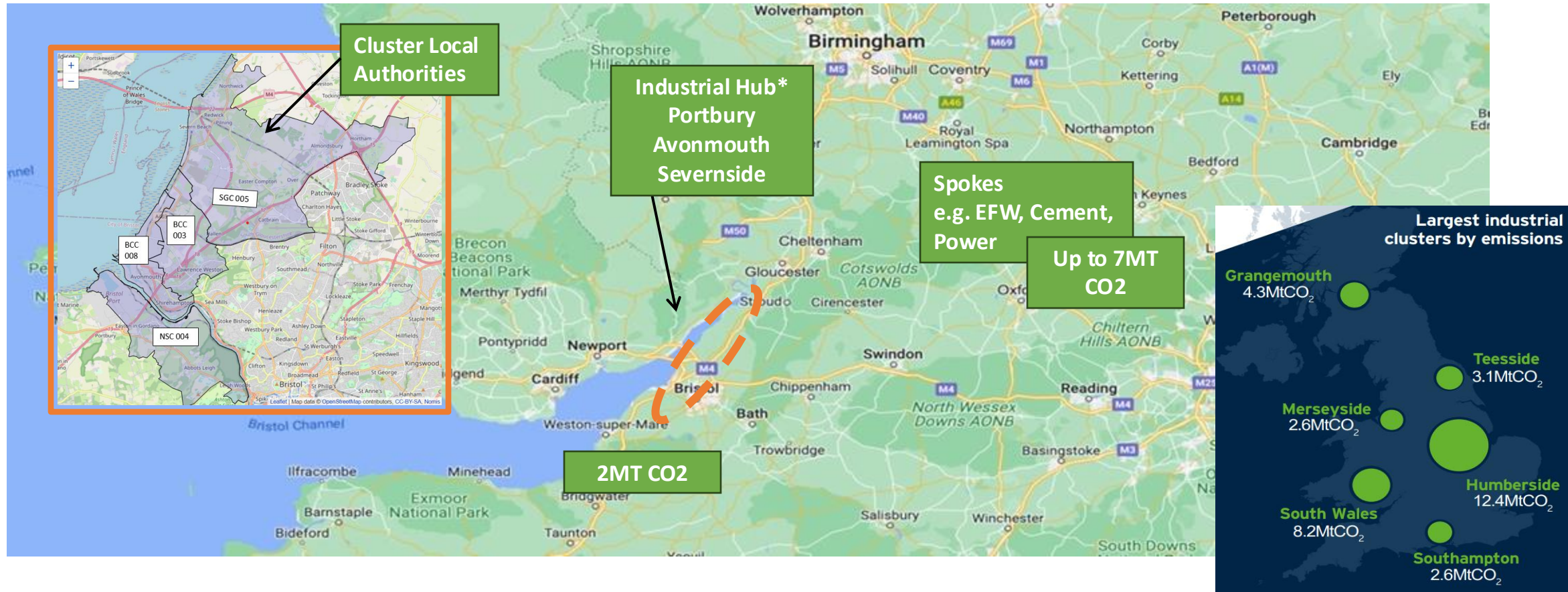


Industry Supporters + c.200 stakeholders



A Hub and Spoke Model

The Cluster 'Hub' at Portbury Avonmouth Severnside uniquely straddles **three local authorities** and the **Port of Bristol**. Our 'cluster' extends via 'Spokes' for so far as there are potential energy, infrastructure or other decarbonisation links.



LIDP Project Goals

- Create a coherent, overarching **decarbonisation strategy for regional industry** (hubs and spokes) (2/3 reduction by 2035)
- Spearhead industries which **support national targets** - e.g. CCS, clean power, net zero transport
- Identify and connect existing **projects and initiatives, sharing decarbonisation infrastructure** and **accelerating** opportunities for new developments
- **Unite public and private sector stakeholders** ensuring the **social, economic and environmental benefits** of decarbonisation are fully realised and accessible to all (e.g. SMEs, local residents)



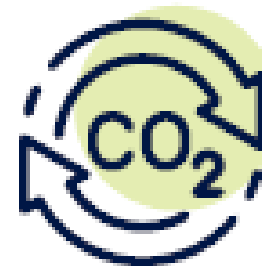
Energy and process efficiency/
Demand reduction



Green power
generation



Fuel switching
(including hydrogen)



Carbon capture
and storage



Circular
economy

Local Industrial Decarbonisation Plan Overview: 2025 - 2040

- Cross technology plan for **Net Zero 2040** across our Hub, West of England spokes and CCS spokes – abating up to **7MT p.a. CO2**
- **£3.5bn** contribution to GVA, over **15,000** jobs created, **£3bn** inward investment
- **Prioritising 6 key projects** and **3 programmes**
- **Supporting many other projects, site-based investments and trials** supported including major clean energy projects across the region
- **18 enablers identified** for growth and Net Zero
- **Platform for collaboration** created, with **3 phases of Cluster development** planned from 2025, to oversee and deliver the plan



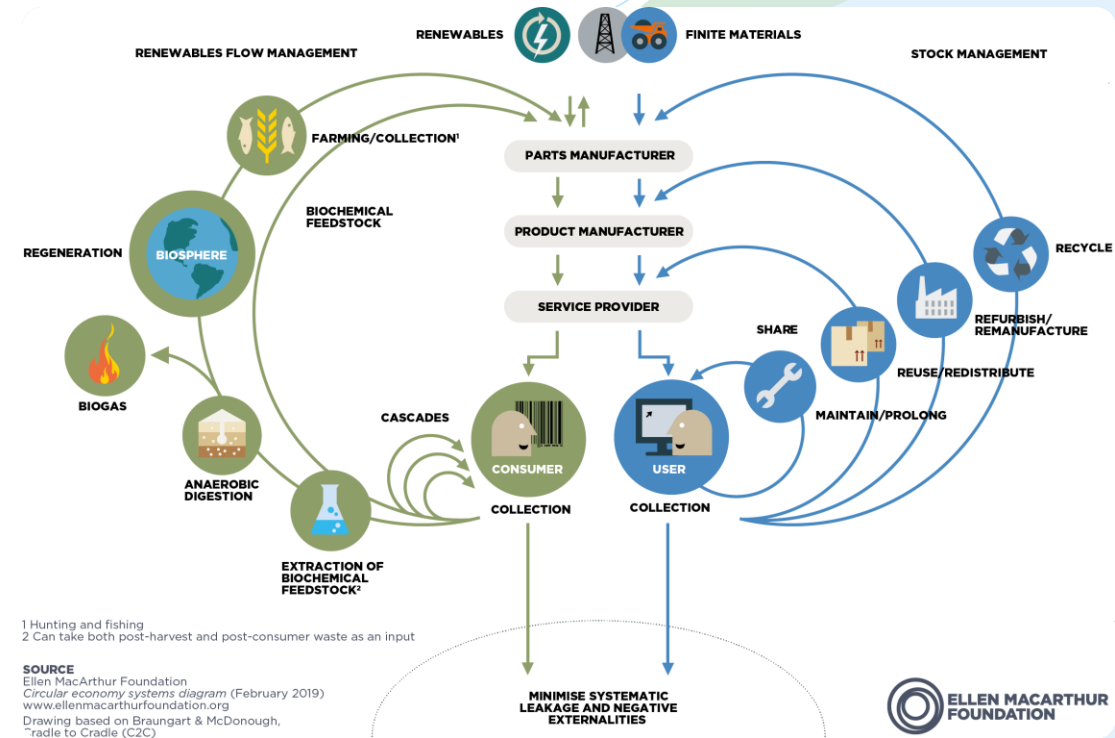
What is a Circular Economy?

In contrast to the '**take-make-waste**' linear model, a 'Circular Economy' is **regenerative by design and powered by renewables**

Circularity – its more than just recycling

- resources re-used as many times as possible through e.g.
 - disassembly and component re-use
 - sharing residual resource flows
 - exchange of by-products

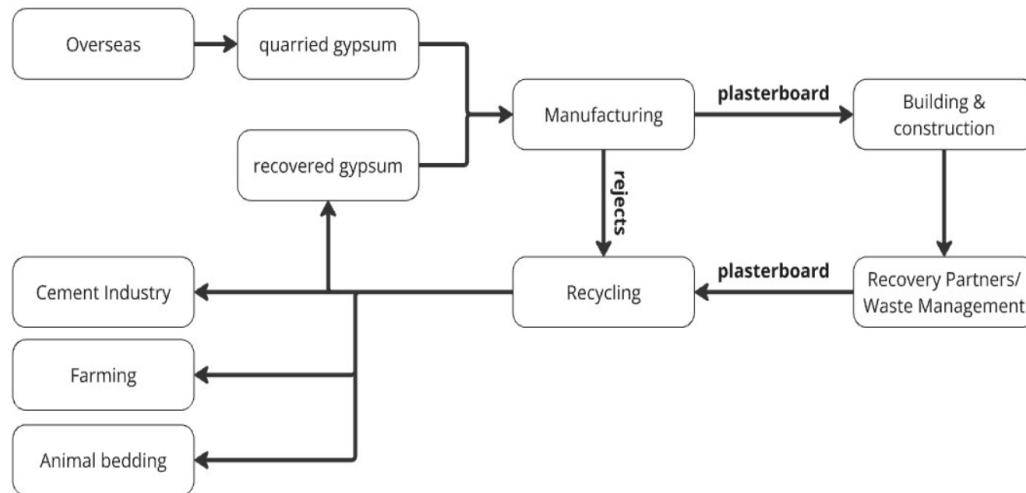
It's also **detoxification, dematerialisation, decarbonisation**



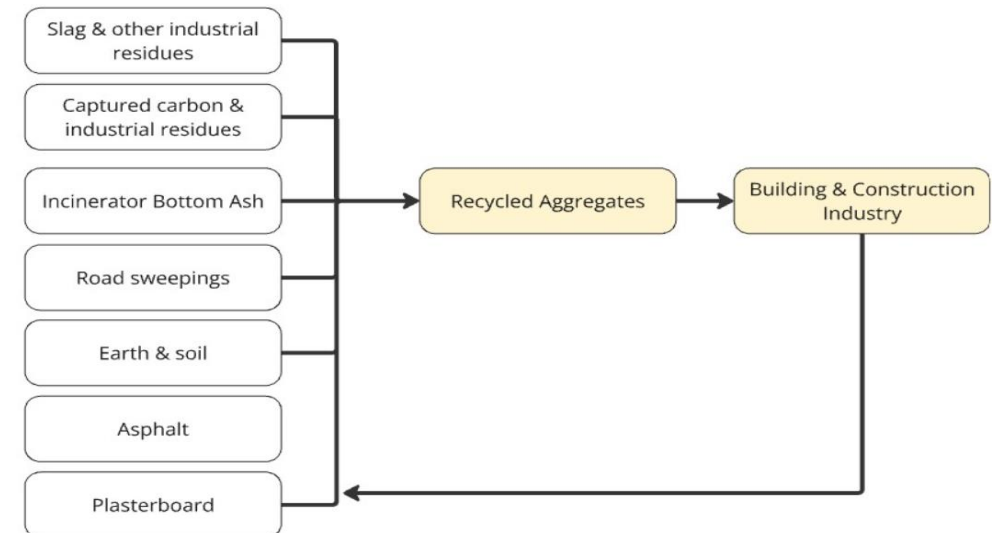
Circular Economy in the West of England Industrial Cluster

- SevernNet has been supporting a circular net zero economy at our Cluster Hub since 2008.
- Key industrial materials including **aggregates, food, gypsum, metals, bottom ash, water, dry mixed recyclates, wood and asphalt** are already recycled and reused by manufacturers at the Hub. (See case studies here www.severnnet.org/case-studies/)
- Significant local investment is underway in this sector, with **three upcoming sites**, which will further expand the area's circular economy capacity.

Gypsum



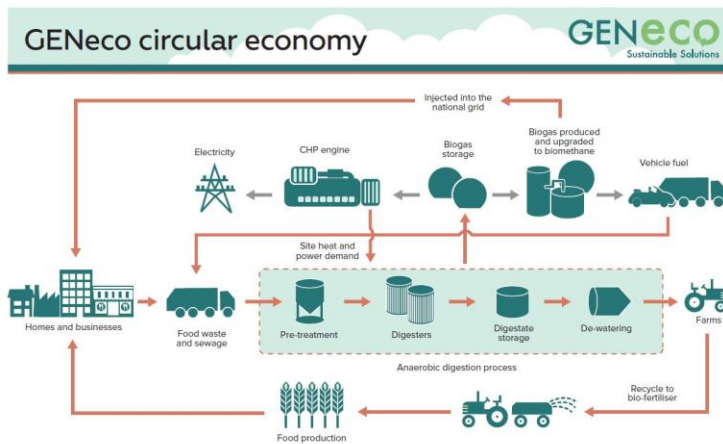
Aggregates



Ongoing Circular Activities in the Cluster

From multinational businesses to SMEs, businesses across our Cluster are innovating to create a circular net zero economy

GENeco Anaerobic Digestion Plant



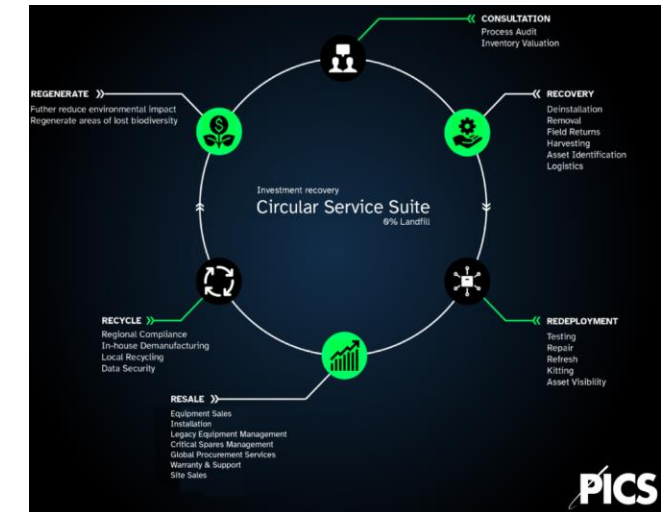
State-of-the-art AD plant and operate as a circular economy, treating **700,000 tonnes of varied waste per annum, including food and liquids**, which are especially resistant to biodegradation; turning them into biofertiliser, renewable gas & electricity.

A-Gas Lifecycle Refrigerant Mgmt



For over 30 years, A-Gas has been driving circular economy solutions by **recovering and reclaiming used gases** to reduce reliance on virgin gases and when no longer reusable, provides a safe destruction technology, preventing emissions.

PICS Telecom Circular Service Suite



With over 35 years of industry experience and a commitment to **zero waste to landfill** practices, PICS Telecom maximise value in the telecom industry through innovative **reuse, refurbishment and recycling** practices.

CE Programme Objectives

The CE Programme addresses the following areas with the aim of accelerating emission reduction, reducing costs and generating investable projects:

- Building **networks** between stakeholders for collaboration, cooperation, and **identification of synergies**
- **Closing the loop** for key resource streams
- Developing **shared infrastructure**
- Increasing **energy & process efficiency** and reducing wastes
- Creating **jobs, skills**, and human capital development
- Developing circular **supply chains**
- **Reducing demand** for virgin materials and
- **Reusing and exchange** of industrial by-products



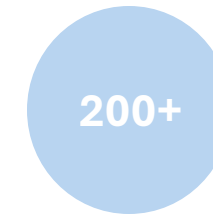
Our Engagement in 2024-25



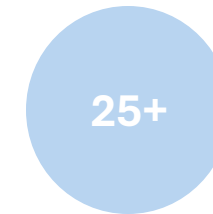
2 x Resource Synergy Workshops



3 x Circular Economy Forum

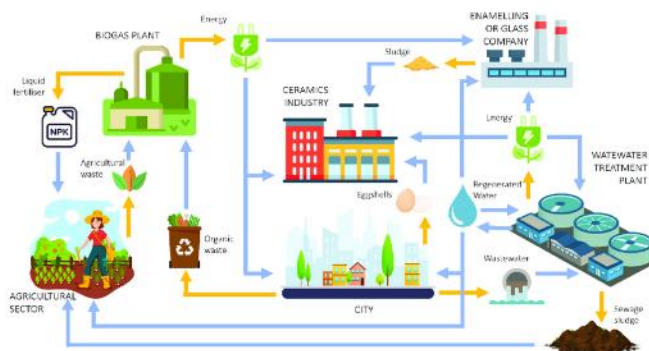


engaged



introductions

Local Network Development



Resource / Energy Flow Mapping



6 x Best Practice Case Studies
published



2 x CE themed Networking
Breakfasts

1. Feasibility Studies

Title	Completed in 2024	Future action	Potential partners
Local Heat Network	Collaborated with Vattenfall UK to progress initiative, gathering data and identify potential funding avenues.	- Conduct a feasibility study to assess the viability of a local heat network. - Prepare grant funding applications in collaboration with Vattenfall Heat UK, WEIC, and local authorities.	Vattenfall UK / BCC / LAs
Circular Economy Hub & Centre of Expertise	Concept development with potential partners and understanding needs of the area.	- Conduct a detailed study to refine the CE Hub concept, evaluate potential sites and define core functions. - Advance engagement with potential partners including CGH and BRC.	Bristol Repair Coalition / Bristol City Council / Clean Growth Hub / WEIC

2. Pilots

Title	Completed in 2024	Future action	Potential partners
Resource Sharing Platform	- Residual resources data aggregated - Suitable platform identified, trial secured and SevernNet marketplace established	Onboard businesses, complete trial and review utility of the platform	Excess Materials Exchange / Hub Businesses
Waste Aggregation for SMEs	- Proposal developed, partners and pilot area identified - Initial waste audits completed for 2 businesses in pilot area	- Continue pilot and develop a model for aggregated waste collection and treatment for SMEs. - Assess implementation at scale, subject to results of the pilot.	Bristol Waste / BCC / TBPC

3. Initiatives

Title	Completed in 2024	Future action	Potential partners
Energy Efficiency and Clean Energy Transition	- Connected 7 businesses to Ameresco for on-site renewable energy generation opportunities - Connected 2 businesses to CR Plus for decarbonisation audits	- Establish ongoing working arrangements with Ameresco and other delivery partners in energy efficiency, EV infrastructure and energy generation. - Support development of shared infrastructure such as microgrids and energy islanding systems.	Ameresco / Bristol Energy Coop / CR Plus
Circularity in Construction	- Engagement with network to understand current practices, initiatives and learning. - Initial mapping of material flows and networks.	- Identify and develop a circular construction demonstrator project within the cluster. - Map resource flows across the area and best practice case studies.	Gravity / WEMCA / Uni of Bath / B&A Group
Local Supply Chains and Trade Networks	- Understanding current resources available and needs - Engaging with potential partners	- Assess and update SevernNet Business Directory. - Revive Trade Local initiatives and conduct other focused events with partners.	WEMCA / TBPC / City Leap / Apollo
Knowledge Sharing & Best Practice	A repository of case studies developed and 5 published	- Develop and publish more case studies to facilitate knowledge sharing. - Explore other approaches including guides and toolkits to enable learning.	Hub Businesses

4. Study Areas

Title	Completed in 2024	Future action	Potential partners
Mapping Key Resource Ecosystems	Initial mapping of material flows and identification of key materials	- Conduct detailed MFA for mapping key resources identified. - Overcome barriers in accessing and sharing data required for mapping.	Resource Futures
Implementing Circularity Metrics	Understanding current practices and metrics used	- Undertake research with partners to identify and implement a suitable set of metrics. - Establish baseline figures and key performance indicators for progress	Biffa / IDRIC / UWE / Resource Futures
Addressing Hard to treat wastes	Identified various hard to treat materials arising in significant quantities	- Explore potential solutions such as pyrolysis for hard-to-treat residuals. - Collaborate with academia on developing circular solutions.	iCAST / Clinipower / CR Plus

5. Stakeholder Engagement & Communications

Channel	Completed in 2024	Future action
Direct Stakeholder Outreach	Outreach through emails, virtual calls, site visits and facilitated introductions	• Continue outreach to businesses, matchmaking and engaging through CE Programme • Support migration of stakeholder database to new CRM software
Website	CE Forum page and case studies portal established	Continue updating and developing: • CE Forum page and SevernNet progress. • Simple guides for businesses • Best Practice case studies • SevernNet Business Directory
LinkedIn	• Regular updates on events, partnerships and other • 'Looping by Design' campaign launched to share case studies	• Continue regular engagement, disseminating relevant information from the website and newsletters.
Newsletter	Regular newsletters about upcoming events	Regular newsletters with: • industry updates and policy changes • other relevant news, events or opportunities • impact measurement and progress reports
Networking Events, Workshops & Forum	• 3 x Quarterly forum • 2 x Resource Synergy workshop • 2 x CE relates networking breakfast	• Continue to engage stakeholders through regular themed events throughout the year.

Programme Delivery & Next Steps:

- Deliver the Circular Economy Programme and ensure its continuous evolution by incorporating new initiatives where necessary.
- Implement a structured and consistent communications strategy to enhance engagement and disseminate circular economy material effectively.
- Secure long-term funding to establish a financially sustainable working model and support ongoing and future initiatives.
- Strengthen partnerships and networks with other circular economy stakeholders to foster collaboration and knowledge sharing.
- Support other LIDP partners in the successful delivery of pipeline projects to maximise impact.
- Engage with policymakers at local, national, and regional levels, including the Circular Economy Taskforce, to align initiatives with broader strategies.
- Establish a robust mechanism to monitor, assess, and report on impact, ensuring continuous improvement and informed decision-making.



West of England
Industrial Cluster



Want to Get Involved?



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