

CAPTURING THE BENEFITS OF CIRCULARITY

Introduction

Economic, environmental, cultural and social benefits are often said to be associated with the transition to a circular economy (CE), however the distribution of those benefits have scarcely been researched. This oversight risks contributing to existing economic and socio-environmental inequalities, thereby impacting individual and collective wellbeing. Through in depth research engaging public, private, and third sector representatives in Hull (UK), Troyes, Strasbourg and La Rochelle (France), Graz (Austria) and Santiago and Valparaíso (Chile), Cresting work package 4 (WP4) examined the distribution of the benefits from the CE and its ecological and socio-economic implications to build more sustainable and inclusive places.

This document outlines the core results from **WP4** of the [Cresting project](#) and presents key recommendations for public authorities and private companies obtained after 3 years of investigation.



WP4.1: Circular economy as a sustainable economic development tool in a global economy

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This research is examining the challenges to building collaborations at the regional scale to promote a circular economy. It analyses the relationships between firms and local agencies, in order to understand the influences on transitioning to a circular economy within a particular region.

This research asks how do the priorities of companies compare to aspirations of local public agencies in terms of circular economy development, with a particular focus on the local region?

The project used a combination of methods to explore this topic. 32 interviews were undertaken with policymakers across various levels and

businesses located in the regions of North Humberside (England) and Styria (Austria) to explore circular economy initiatives from multiple stakeholder perspectives. Other methods included the analysis of policy and business documents, observations and a survey primarily focusing on organisations located in North Humberside.

Findings suggest there are divergent views on developing circular economy activities between various stakeholders. In both case study regions, local policymakers see the circular economy as a way to improve the economic and environmental performance of the region. Additionally, different scales of government have their own interests, national-level policymakers are supportive of a regional circular economy, but regional authorities are competing with each other to keep potential benefits locally. On the other hand, business seeks to foster circular economy initiatives between supply chain partners, who tend to be globally distributed. This is likely to raise challenges for developing regional level circular economy collaborations.

Additionally, action from national government is needed to build support for local authorities, in their efforts to develop circular links between businesses in their region.

Key recommendations include the following:

- **Policymakers:** Require companies to prioritise local sourcing and disposal of materials. Make companies aware of how you can help them in terms of facilitating circular economy transitions and how you can collaborate for better aligned and more inclusive regional circular strategies.
- **Companies:** Explore the potential of shifting to regional suppliers in order to foster more resilient and circular supply chains



WP4.2: Employment in the Circular Economy: lessons on employment experience, skills, and public demand using the case of the repair service sector in Hull, UK

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Repair is an essential aspect of circular economy (CE) strategies to extend the life of products and materials, and has further been suggested as a key sector to benefit from employment through CE transitions. Project 4.2 sought to understand how employment in the CE might contribute to social sustainability using the case of the repair economy in Hull, UK. Public demand for repair services and interest in do-it-yourself repair was explored through a survey, which enabled the development of a profile

of repair economy participants. Quality of employment in the sector was investigated through a series of interviews with owners of repair shops and volunteers within the community repair space. Finally, ongoing research is exploring skill/education requirements and employment type for the CE via an analysis of job advertisements.

The public survey in Hull revealed the persistence of stereotypical gender roles between repair economy participants in the city. A distinction can also be observed between repair as a necessity versus a choice, where the former tends to be associated with shame or guilt. Common-ground motivations for repair may help to bridge this divide; namely, value for environmental impact or ethics of care motivations could both be viable framings for a more inclusive repair economy. Interview results also indicate that independent or third-party repair shops tend to value skill, experience and natural aptitude over formal training for staff. To owners, business and managerial skills are secondary to the technical skills necessary for repair work, but are often the component of the work that causes the most stress, and/or limits the capacity of the business. Financial support towards training/upskilling to develop business/entrepreneurial capacity is therefore recommended.

Furthermore, while owners are the sole decision makers for their business, their influence is limited by structural barriers to repair; namely the proprietary nature of knowledge and hardware/parts for repair. While Right to Repair legislation is addressing this to some extent, it is recommended that legislation be extended to cover additional goods (particularly smart phones and laptops), and that accessibility and affordability of spare parts and repair literature be included in the provisions.



WP4.3: The role of Social Enterprises and their networks in stimulating local and socially inclusive development of the CE

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This research considers how the economic, ecological and social premises of CE thinking can be harnessed through mission-driven social enterprises (SEs) aimed at tackling urban poverty and associated social inequalities, and fostering more inclusive, environmentally-attuned local economic development trajectories. It draws upon interviews with representatives of 50 case study SEs engaged in CE activities in the cities of Hull (UK), Santiago and Valparaíso (Chile), and Graz (Austria) and across multiple sectors (e.g., textile, wood, food); 3 local authorities (Hull, UK); and 7 support infrastructure organizations (UK).

The research involved (1) mapping the social circular enterprise ecosystem in the City of Hull, (2) outlining a range of social-circular impact scaling strategies, and (3) proposing a toolkit for SEs, which is aimed at promoting local CE development in different spatial contexts. An important impact scaling mechanism concerns developing entrepreneurial networks between different types of SEs to facilitate flows of circular knowledge and resources across the city. Another important impact scaling mechanism concerns demand creation through social circular procurement whereby SEs offer their clients (private and public sector organizations) circular products and services that embody social and environmental value.

Linked to this, key recommendations for local authorities and private companies are as follows:

- Require private companies to make evident, in an accurate and transparent fashion, the significant use of their buying power to generate social and environmental value and avoid corporate greenwashing.
- Negotiate contracts with commercial waste management companies to enable SEs capture reusable items from waste recycling centres.
- Recognize SEs as important re-use operators enabling private companies to implement extended producer responsibility (EPR) schemes (see WP1.2 and 1.3), which should shift focus from recycling to reuse. As EPR schemes, whose implementation is underway, would oblige producers to pay a levy on new products within the scheme, it would be possible to create national funds to support SE-led CE activities, and invest into adequate urban recycling infrastructure.
- Promote a culture of innovative entrepreneurship, including the provision of support to small and family-run businesses engaged in circular practices to help them become financially sustainable and visible in the market. Financial autonomy should ultimately lead to the widespread ownership of capital/productive property as opposed to retaining it in the hands of a few. Entrepreneurs should also be encouraged to foster a collaborative environment to jointly confront competitive mainstream market forces. This can be facilitated by subsidizing the development of [alternative digital platforms](#) (i.e., those that are not owned by large corporations).



**WP4.4: Towards a
Circular Economy: from
individual to collective
action in the Industrial
Ecology**

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Industrial Ecology (IE) is a strategy that oversees the optimisation of industrial resources in a systemic, innovative, and environmentally responsible way. In practice, IE involves producing more goods and services using less resources, hence, reducing the environmental impact of industrial activities. In 2018, IE became one of the seven pillars of the Circular Economy (CE) strategy in France, the country where this study is based.

This research reveals the unexplored potential of two already mature and successful cases of IE in France, and their role in contributing towards larger regional sustainability paradigms. Using a combination of research methods, the study focused on the analysis of the individual and collective motivations towards the implementation and management of IE in two regions of France. Along with an extensive literature review, over 30 semi-structured interviews were performed for the evaluation of two case studies: CLES (main case study based in the city of Strasbourg) and BioTop, (validation case study based in La Rochelle).

The outcome of the study suggests that individual values and motivations towards sustainability are a prerequisite to succeed in the implementation of an IE project. Therefore, the IE case studies analysed were understood as successful examples of implementation of local sustainable actions that contribute to the [national CE](#) agenda and the

[transition to more sustainable production and consumption systems.](#)

Regardless the variety of individual definitions of the concept sustainability, the interviewed stakeholders agree that sustainable actions carry the following 5 conditions: 1) sustainability is a collective action; 2) the benefits of the action should be equally distributed among the stakeholders; 3) the local environment and/or natural ecosystems should be considered as stakeholders; 4) it requires a collective effort to implement long-lasting actions; 5) the collective effort should be effectively organised based on the individual capabilities of each stakeholder.

IE, as a sustainable action, is based on the principles of cooperation, sharing infrastructure and services, and substitution of raw materials. This study corroborates that the implementation of such principles in the IE contributes to reducing the environmental pressure from industry while boosting the economic competitiveness and attractiveness of those industrial territories. Particularly this research demonstrates that having successfully reduced the collective energy and material impact, firms are prone to develop further sustainable actions from both, within the IE project administrative boundary, and outside of it (other personal and collective networks).

WP4: CONCLUDING REMARKS

CE has reinvigorated the interest of all stakeholders in building a more environmental and sustainable reality. As a regional policy it has brought together different types of strategies towards sustainability respecting the local modes of governance and territoriality. WP4.1 and WP4.4 have found theoretical and practical differences in the way CE is operationalised in the UK and France. While the latter is more centered on exploring local

embeddedness, the former is more globally connected.

CE was found not to be intrinsically inclusive, as opportunities to deploy circular strategies are not necessarily fairly distributed among stakeholders. Care in implementation must be taken to ensure that a transition to CE does not carry with it the deficiencies of former and current economic systems.

Summary of Key Insights:

- There is untapped potential to foster, and capitalize on cross- and intra-sectoral (public, private and social) interactions to stimulate a socially inclusive CE development.
- CE practices are diverse and operate on many levels: many address immediate short term needs (e.g. avoiding food waste by donating surplus food), sometimes neglecting upstream solutions (e.g. promotion of sufficiency and food security) and even perpetuating unsustainable production and consumption. There is thus a vast potential to introduce Extended Producer Responsibility schemes encouraging producers to take responsibility for their products' end-of-life whilst ensuring that SEs are equipped to educate society on how to consume sustainably.
- The repair economy has potential to benefit structurally disadvantaged cities through meaningful employment opportunities, however skill capacities remain a limitation for expansion, as does inadequate legislation regarding access to proprietary parts and repair literature. Gender role stereotypes present in repair literacy and participation remain a barrier for an inclusive repair economy.
- It's essential to explore, analyse and mobilise the individual values and motivations behind the collective actions towards the development of Industrial Ecology and CE. Individual actions perform the role of catalysts for collective sustainable actions as they are motivated from a local perspective that illustrate the needs and desires of different stakeholders present in the discussion. However, this may vary from country to country, therefore IE strategies are dependent on their unique geopolitical context.
- A mutually designed common goal is needed to foster greater trust and alignment between local actors, aiding the development of a collaborative and inclusive regional CE. There is also a need to explore strategies for regional materials sourcing in order to close loops of production at a local level and build more resilient circular supply chains.
- A fair distribution of opportunities to develop CE strategies may ensure more sustainable agendas.

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