



THE IMPACT OF THE CIRCULAR ECONOMY ON AN INDIVIDUAL'S QUALITY OF LIFE: A EUROPEAN UNION PERSPECTIVE

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Abstract: This article explores the relationship between circular economy strategies and individual quality of life in the European Union. While the circular economy is widely promoted for its environmental and economic benefits, its social implications – particularly for everyday well-being – remain underexamined. Drawing on legal and policy document analysis, as well as comparative insights from academic and institutional sources, the study identifies how circular measures contribute to or hinder improvements in quality of life. The findings indicate that circular approaches can positively influence environmental health, job creation, and access to services, particularly when implemented through inclusive and coherent governance structures. However, uneven institutional capacity, fragmented policy implementation, and the absence of social indicators in monitoring frameworks limit the equitable distribution of benefits. The research underscores the need to move beyond material efficiency towards a socially embedded circular transition that prioritises participation, equity, and measurable well-being outcomes. It concludes that circular economy strategies must integrate quality of life considerations explicitly within their planning, funding, and evaluation processes to serve as effective tools for human-centred development across the European Union. Without such integration, the circular economy risks remaining a primarily technical or symbolic agenda, rather than a pathway to improved and more just daily life.

Keywords: Circular economy, European Union, Governance, Quality of life, Well-being.

1. INTRODUCTION

In recent years, the circular economy (CE) has emerged as a critical paradigm in the European Union's (EU) transition towards sustainable development. Beyond its role in reducing material consumption and waste generation, the CE increasingly intersects with broader societal goals, including human well-being and quality of life (QoL) (European Commission, 2020; Sekulić et al., 2022). However, while environmental and economic benefits

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of circularity have been widely acknowledged (Aguilar-Hernandez et al., 2021; Bianchi & Cordella, 2023), the social dimension – particularly its impact on everyday life – remains underexplored in both academic research and policy implementation.

The EU's political commitment to circularity, as outlined in the European Green Deal and the Circular Economy Action Plan, aims not only to decouple growth from resource use but also to foster more equitable, inclusive, and resilient communities (European Commission, n.d.-b; European Commission, 2020). National governments and local authorities have started to implement CE initiatives with potential implications for health, mobility, housing, employment, and social participation (OECD, 2025). Cities and regions such as Tallinn, Berlin, and Central Macedonia provide concrete cases for examining how these ambitions translate into individual experiences of well-being (OECD, 2023; OECD, 2024a; OECD, 2024b).

Moreover, new policy tools, such as the EU Circular Economy Monitoring Framework, aim to track circular progress at urban level, offering opportunities to integrate QoL indicators into CE assessment (Henrysson et al., 2022). Yet, the methodological and conceptual linkage between CE and QoL remains fragmented. As noted by Cramer (2020), governance models and institutional capacity greatly influence the societal outcomes of circular transitions, particularly at the regional level.

This article seeks to bridge this gap by exploring the following question: How does the implementation of circular economy strategies in the EU influence the quality of life of individuals? To answer this, the study draws on normative documents, academic literature, and comparative regional analysis to examine both the enabling and limiting factors shaping the CE–QoL nexus. In doing so, the paper contributes to an emerging body of scholarship that emphasises the human-centred dimension of sustainability (De Pascale et al., 2023; Bahers & Rosado, 2023; Pinyol Alberich et al., 2023).

The following sections provide a conceptual framework, outline the methodological approach based on legal and regulatory analysis, and present a comparative discussion of regional experiences. Emphasis is placed on policy coherence, social inclusion, and the role of governance in mediating the effects of CE on daily life.

2. LITERATURE REVIEW

Establishing the connection between CE strategies and individual well-being requires a synthesis of theoretical, institutional, and legal perspectives. This section reviews how the concept of CE has evolved to encompass social dimensions, identifies key conditions for successful implementation, and examines the regulatory and policy frameworks that guide practice across the EU. It also outlines emerging approaches to evaluating CE impacts on individual and community well-being.

2.1. Defining Circular Economy and Social Dimensions

The CE has evolved from early ecological visions, such as Boulding's "Spaceship Earth" concept and Stahel's work on service-based business models, into a structured framework for reducing environmental pressures while supporting economic and social resilience (Cramer, 2020). The European Commission defines CE as a system that retains the value of products, materials, and resources in the economy for as long as possible (European Commission, n.d.-a), a goal formalised in strategic initiatives like the European Green Deal and the Circular Economy Action Plan (European Commission, 2020; European Commission, n.d.-b).

Although initial policy and academic attention focused on material flows and economic gains, a growing body of research explores CE's potential social co-benefits. Sekulić et al. (2022) argue that CE can improve QoL through better air quality, access to services, and new job opportunities. Aguilar-Hernandez et al. (2021) highlight that CE, when embedded in national planning, can lead to higher employment and more equitable development. Likewise, Sanz-Torró et al., (2025) show that national CE policies are increasingly designed with social outcomes in mind.

2.2. Governance and Implementation Conditions

Effective CE implementation depends not only on environmental ambition but also on the institutional capacity to align stakeholders and policy instruments. The OECD's (2025) twelve-dimensional governance checklist includes strategic vision, stakeholder engagement, regulatory coherence, and monitoring capacity. Local conditions and leadership also matter – Cramer (2020) emphasises the importance of transition brokers who coordinate regional CE processes across public, private, and non-profit sectors.

Urban case studies offer real-world insight into these dynamics. Berlin's Zero Waste strategy has integrated CE into procurement, construction, and employment planning (OECD, 2024b). Central Macedonia has used EU and regional funds to build capacity for CE in agriculture, tourism, and waste management (OECD, 2024a). Tallinn's transition benefited from a digital governance culture and stakeholder engagement across municipal departments (OECD, 2023). Despite contextual differences, each case highlights that cities with integrated and well-resourced CE strategies tend to see broader social returns.

Nonetheless, Pinyol Alberich et al. (2023) warn that policy silos and limited citizen participation still constrain many CE initiatives. Without inclusive design and multi-level coordination, efforts risk prioritising material efficiency over social value.

2.3. Policy, Monitoring and Legal Frameworks

The EU supports CE transition through both regulatory and soft-law instruments. The Waste Framework Directive (Directive 2008/98/EC), Circular Economy Action Plan (European Commission, 2020), and the proposed Ecodesign for Sustainable Products Regulation (European Commission, 2022) together form the legal foundation of the EU's circular policy landscape. These instruments aim to harmonise environmental goals while leaving implementation flexibility for Member States and regions.

Monitoring tools also support CE integration with QoL considerations. Henrysson et al. (2022) applied the EU Circular Economy Monitoring Framework in Umeå municipality, linking CE actions to improvements in mobility, waste reduction, and energy efficiency. Their findings underscore the need for localised, multi-dimensional indicators when evaluating CE success.

Complementary instruments, such as the *LIFE programme*, support experimentation and project-based integration of CE and social goals (European Commission, n.d.-a). However, De Pascale et al. (2023) note that many Member States still struggle to implement EU directives coherently at the local level. As Bahers and Rosado (2023) demonstrate in their comparative study of urban metabolisms, CE transitions can inadvertently lead to increased resource use unless supported by behavioural change, institutional reform, and active citizen engagement.

3. METHODOLOGY

In this research, classical methods of legal analysis were applied, as typically used in the study of regulatory and social policy frameworks. These included the logical-systematic method, legal document and policy content analysis, the comparative method, and selected approaches of legal interpretation. These methods enabled a structured examination of EU legal acts, strategic frameworks, and regional circular economy initiatives with regard to their impact on quality of life. The approach also allowed for the identification of institutional responsibilities and regulatory gaps across Member States and local authorities.

4. RESULTS AND DISCUSSION

This section presents and discusses the results of the analysis, focusing on how the implementation of circular economy strategies influences individual quality of life across the European Union. The discussion is structured into four thematic sub-sections, each addressing a different dimension of the circular transition's impact on well-being.

The analysis draws on European Union legal instruments, strategic policy documents, and secondary data from academic and institutional sources. Rather than examining specific locations in detail, the discussion highlights broader patterns observed across selected cities and regions within the EU. Emphasis is placed on interpreting how governance practices, institutional arrangements, and policy coherence shape the social outcomes of circular initiatives. Each sub-section reflects on both the observed tendencies and the potential limitations of circular strategies as tools for enhancing everyday life.

4.1. Measurable Impacts of Circular Economy on Quality of Life

Circular economy strategies, when implemented coherently, can generate tangible improvements in several dimensions of individual well-being. A recurring observation across various EU cities and regions is the association between CE initiatives and enhanced environmental conditions, particularly air quality, waste reduction, and access to green public spaces. Such outcomes contribute directly to quality of life (QoL) by improving urban liveability, supporting physical and mental health, and reducing exposure to environmental hazards.

Among the most influential CE interventions are those targeting household and municipal waste. Shifting from landfill dependency to reuse, separate collection, and repair-oriented infrastructure has demonstrably reduced both physical pollution and public expenditure, while also increasing public trust in local governance systems. Furthermore, citizen-facing initiatives – such as community composting stations or second-hand material libraries – not only decrease material throughput but simultaneously promote civic participation and shared responsibility.

Another measurable benefit relates to mobility and public service provision. CE-inspired approaches to urban transport – such as bicycle reuse schemes, vehicle-sharing platforms, and electrified low-waste logistics – can contribute to more affordable, sustainable, and accessible infrastructure. These systems not only reduce congestion and pollution but also enhance social equity by enabling access to services and employment opportunities for wider segments of the population.

The food system also demonstrates strong synergies between CE principles and QoL. Local circular food networks that emphasize short supply chains, surplus redistribution, and packaging minimization not only reduce environmental impact but also address food

affordability and nutritional access. Such schemes – particularly when supported by public procurement policies – help mitigate food insecurity and strengthen community ties, especially in urban neighborhoods.

Job creation is also frequently cited as a positive outcome of the circular transition, particularly in sectors such as repair, recycling, reuse, green construction, and bio-based innovation (Aguilar-Hernandez et al., 2021; Sanz-Torró et al., 2025). These so-called “green” or “circular” jobs tend to be local, low-barrier, and skills-diverse, offering inclusive employment potential. However, questions remain about the long-term stability and social security of such positions – an area requiring further policy support and monitoring.

In some contexts, CE initiatives have extended into housing and education, where circularity is associated with redesigning service delivery models to prioritize community well-being. Citizen-led workshops, urban retrofitting, and material recovery centers offer not only functional benefits but also spaces for social interaction and learning – components increasingly recognised as contributors to subjective and collective well-being (Sekulić et al., 2022).

Nevertheless, it is important to acknowledge that not all CE strategies result in immediate or measurable improvements. Their effects often depend on scale, funding, local political will, and the degree of integration with social policy. Some initiatives, while symbolically circular, may lack sufficient follow-up or impact assessment mechanisms. This raises the need for clearer evaluation standards and QoL indicators embedded into circular transition planning (Henrysson et al., 2022; OECD, 2025).

4.2. Governance and Participation as Conditions for Quality Outcomes

The social outcomes of CE implementation are shaped not only by the design of policies, but critically by the way they are governed and communicated. A growing body of literature affirms that strong, integrated governance systems are among the most decisive factors influencing whether CE initiatives result in measurable improvements in QoL (OECD, 2025). Where institutional arrangements are coherent, cross-sectoral, and participatory, CE strategies are more likely to support equitable well-being outcomes.

One of the clearest insights from comparative case analyses is that decentralized governance – when coupled with adequate coordination – can generate more context-sensitive and socially responsive CE models. Local authorities that take ownership of CE priorities tend to be more flexible in adjusting strategies to community needs and are often more successful in activating local capacities. Conversely, top-down implementation without local agency tends to produce fragmented outcomes and low citizen engagement (Pinyol Alberich et al., 2023).

Participation mechanisms are a particularly powerful driver of QoL-enhancing CE. Initiatives co-designed with community groups or co-managed by civil society actors have demonstrated stronger longevity, legitimacy, and social resonance. Examples include collaborative reuse hubs, repair cafés, participatory budgeting for CE investments, and social enterprises based on circular practices. While these models may not scale rapidly, they often provide deeper and more lasting benefits in terms of social inclusion, knowledge exchange, and civic empowerment (Cramer, 2020).

The role of intermediaries or “transition brokers” is also notable in shaping outcomes. These actors – often non-governmental or semi-public institutions – facilitate dialogue between stakeholders, align funding and project priorities, and help bridge administrative or ideological gaps. Their presence has been linked to improved coordination across sectors and sustained CE implementation, particularly in complex governance environments.

Despite these strengths, many CE strategies still suffer from insufficient integration of participatory processes. Consultations are frequently formalistic or narrowly scoped, failing to

reach vulnerable or marginalized populations. These risks reproduce socio-spatial inequalities, particularly when circular policies affect housing, waste, or transport systems that already exhibit disparities in access and affordability. Moreover, limited transparency in how CE benefits are distributed can undermine public support, even when environmental goals are met.

The findings indicate that governance quality and participation are not supplementary features of CE success – they are core determinants of whether circular policies contribute to everyday well-being. As such, building institutional frameworks that explicitly prioritize equity, inclusion, and co-creation are not only desirable, but essential to ensuring that CE serves as a genuine pathway to improved QoL in the EU context.

4.3. Equity, Inclusion, and the Risk of Uneven Benefits

While CE policies are often promoted as inherently sustainable and socially beneficial, there is growing recognition that their impacts on QoL are not uniformly distributed. Evidence suggests that unless inclusion is embedded from the outset, CE strategies may exacerbate existing inequalities, particularly in access to services, affordability, and participation.

One key challenge lies in the unequal accessibility of CE-related infrastructure and services. Waste separation systems, for instance, often assume a level of digital literacy, transport mobility, or spatial proximity that is not shared by all citizens. Lower-income and elderly populations may face higher barriers to engaging with such systems or may bear disproportionate costs when CE measures involve user-paid schemes, deposit-refund systems, or shifts in waste tariffs. These concerns raised in the literature are that CE transitions, if left unexamined, can reinforce rather than reduce social disparities (Bahers & Rosado, 2023).

Furthermore, digital tools used to promote circular behaviour – such as repair app platforms, material tracing systems, or booking tools for shared mobility – may exclude those with limited access to technology or digital skills. In this regard, digitalization in CE should not be viewed as a neutral enabler, but as a potentially stratifying factor that calls for inclusive design and analogue alternatives (OECD, 2025).

There is also the risk that CE job creation, while positive in volume, may not guarantee quality. Circular sectors often rely on manual labour, short-term contracts, or informal economies – particularly in repair and reuse markets. Without labour protections or reskilling strategies, these jobs may replicate precarious conditions rather than offering a meaningful contribution to QoL (Aguilar-Hernandez et al., 2021).

Equity concerns also arise in the allocation of CE project funding and public-private partnerships. Regions with stronger institutional capacity or more established networks are better positioned to attract EU or national resources, while structurally weaker areas remain underserved. This institutional asymmetry may result in spatial inequalities in CE service availability and social return on investment (De Pascale et al., 2023).

Addressing these risks requires more than rhetorical commitments to inclusion. CE strategies must be systematically evaluated for their distributive effects, and proactive measures should be taken to support vulnerable groups through targeted outreach, subsidies, and participation mechanisms. Without deliberate attention to equity, CE may deliver environmental or economic efficiency at the expense of social cohesion and everyday well-being.

4.4. From Strategy to Practice: Fragmentation, Policy Coherence, and Local Realities

Despite the growing prominence of CE in European Union policy discourse, the translation of strategic goals into meaningful local implementation remains uneven. A recurring challenge is the gap between high-level ambitions – such as those outlined in the Circular Economy Action Plan – and the fragmented, sometimes inconsistent, execution at regional and municipal levels (De Pascale et al., 2023).

One key issue lies in the misalignment between different layers of governance. While national and EU frameworks often set out broad sustainability targets, local authorities are left to interpret and operationalise them with limited guidance, capacity, or coordination mechanisms. This frequently results in partial or symbolic application of CE principles, where individual projects are launched without being integrated into broader territorial strategies. Such fragmentation weakens the potential impact on quality of life (QoL), as isolated efforts tend to lack continuity, scale, and system-wide effects (Pinyol Alberich et al., 2023).

Another problem is institutional inertia. In many regions, traditional linear models are still deeply embedded in procurement rules, infrastructure planning, and budgeting procedures. Circular initiatives thus face structural resistance, requiring not only regulatory change but also shifts in organisational culture and competencies. Without institutional reform, CE risks becoming an “add-on” rather than a transformative paradigm.

Policy coherence is also undermined when environmental and social agendas are disconnected. While CE policies may succeed in improving material efficiency or waste statistics, they often fail to incorporate equity, inclusion, or well-being indicators as core objectives. This disconnect limits the extent to which circular strategies can meaningfully enhance everyday life. The use of monitoring frameworks that include social criteria remains limited and inconsistent across Member States (Henrysson et al., 2022).

Local realities further complicate implementation. Resource availability, administrative capacity, political leadership, and public awareness vary widely across EU regions. Well-funded urban areas with strong institutional networks tend to advance faster, while smaller or structurally weaker municipalities struggle to activate CE potential. This geographical disparity raises questions about fairness and cohesion in the circular transition (Sanz-Torró et al., 2025).

To bridge the strategy-practice divide, it is essential to strengthen multi-level policy coordination, embed QoL goals explicitly within CE planning, and build institutional support at the local level. Only then can circular policies evolve from abstract ambitions into lived experiences that support both environmental sustainability and social well-being.

5. CONCLUSION

This study has examined the relationship between circular economy strategies and individual quality of life within the context of the European Union. The analysis confirms that CE has the potential to deliver meaningful social benefits, particularly in areas such as environmental quality, inclusive employment, access to services, and community engagement. When designed and implemented coherently, CE initiatives can enhance everyday well-being while advancing sustainability goals.

However, the findings also highlight several limitations. The distribution of CE-related benefits remains uneven across social groups and territories. Governance quality, citizen participation, and institutional capacity are critical in determining whether circular policies translate into tangible quality of life improvements. In the absence of inclusive processes and

adequate resources, CE may unintentionally reinforce inequalities or result in symbolic rather than systemic change.

Furthermore, a disconnect persists between strategic policy objectives and practical implementation. Many initiatives still operate in isolation, without being integrated into broader social and urban development frameworks. Monitoring tools often neglect well-being indicators, limiting the capacity to evaluate CE outcomes beyond material flows.

To ensure that CE transitions genuinely contribute to human-centred development, future policy efforts must embed quality of life goals more explicitly, support inclusive governance structures, and invest in local institutional capabilities. Integrating social metrics into circular planning, funding, and evaluation processes will be essential to realise the full promise of the CE as both an environmental and social innovation pathway.

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