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Towards a Circular Wellbeing Economy

An Integrative Framework for Europe

Hot or Cool

Report

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Please cite as Hot or Cool Institute. 2026. *Towards a Circular Wellbeing Economy: An Integrative Framework for Europe*. Hot or Cool Institute, Berlin.

ISBN 978-3-98664-027-9 (PDF)

Editing and Proofreading Lisa Mastny.
Graphics European Environment Agency (EEA).
Design and Layout Gauri Varma (Hot or Cool Institute, Germany).
Cover artwork "Happy Circles" by Wesley Hogan-Philipsen.

Financial support European Environment Agency (EEA) and KR Foundation.

Acknowledgements

This report was funded by the European Environment Agency (EEA) and KR Foundation. The EEA also hosted the high-level roundtable in January 2026 that discussed initial findings and provided additional inputs to an early draft of the report.

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While this report benefited from the contributions and review comments of numerous experts, responsibility for its content rests solely with the authors.

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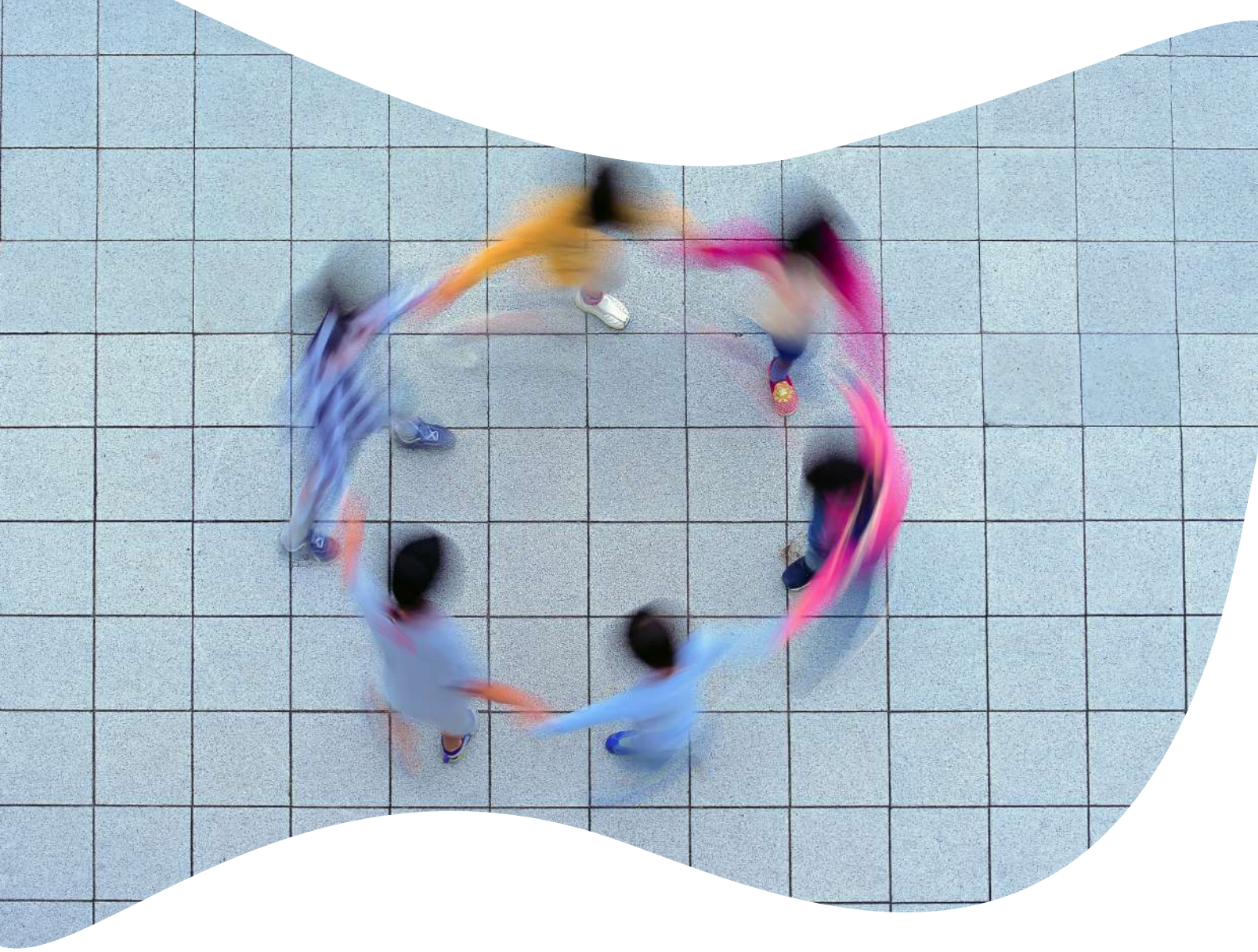

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Executive Summary

Key messages

- The circular economy and the wellbeing economy have until now been seen as two distinct concepts in research, policy and business. Embedding wellbeing in the circular economy can accelerate Europe's transition to circularity and benefit the wellbeing of both citizens and the planet.
- Circularity can be seen as the means, and wellbeing the goal. A circular economy that drives everyday wellbeing - including affordable living and better health - can increase public trust and help build broad support for a successful transition.
- The most effective strategies to maximise wellbeing in Europe's circular economy are 'before use' - refuse, rethink and reduce, complemented with during and after use interventions. By shaping production and consumption upstream, Europe can reinforce competitiveness, resilience, and resource security while preventing environmental and social harms.

Wellbeing in Europe's Circular Economy

Europe's circular economy has become a cornerstone of EU industrial and environmental policy. The Competitiveness Compass, the Clean Industrial Deal, and the forthcoming Circular Economy Act together position circularity as a driver of resource security and resilience. Limiting dependence on imported raw materials, retaining value and jobs within Europe, and reducing environmental pressures are now shared priorities across policy, business and society.

Yet despite strong political ambitions and a well-developed legislative framework, the transition is not accelerating. Key indicators show that the likelihood of reaching the 2030 EU circular economy targets is either low or moderate. The circular material use rate stood at just 12.2% in 2024, against a 2030 target of 22.4%. Europe's material footprint remains high, at roughly 15 tonnes per person annually, alongside around 5 tonnes of waste per person. Efficiency gains in specific sectors are frequently offset by expanding production and consumption, with rebound effects eroding overall progress.

A structural reason for this slow progress lies in how circularity has been defined and pursued. Policy attention has gravitated heavily towards downstream, end-of-life solutions such as recycling and waste recovery, which are technologically tractable and quantifiable, but limited in their transformative potential. Around 43% of sectoral circular economy strategies focus solely on end-of-life stages. Higher-order strategies addressing production design, consumption patterns and material use before and during the use phase have so far received comparatively less emphasis.

Monitoring frameworks reflect this imbalance, though they are evolving. Both the European Commission's Circular Economy Monitoring Framework and the EEA's Circularity Metrics Lab have progressively expanded their scope beyond recycling and waste, moving towards indicators that capture upstream material use, product lifetimes and, potentially, social and wellbeing impacts.

Taken together, the evidence points to a clear conclusion. Reaching the 2030 targets will require addressing the upstream drivers of material use, not just optimising what happens at end of life. This is also where the greatest opportunities for business value creation and competitive advantage lie.

The potential of complementing circularity with a wellbeing economy approach

This is where the wellbeing economy offers a relevant and practical complement. A wellbeing economy is one designed to meet the needs and rights of all people

within the capacities of a thriving planet, reorienting economic success away from narrow measures of output and throughput, towards quality of life, social foundations and ecological health. It is built around four principles: pre-distribution of economic benefits by design, rather than after the fact; purpose-driven alignment of economic activity with social and ecological value; prevention through early investment in social and environmental infrastructures; and people-powered governance that ensures democratic participation in economic decision-making.

The practical implication for the circular economy is significant. When circular strategies are explicitly linked to tangible improvements in everyday life, such as lower household costs, better housing, accessible mobility, meaningful local employment and cleaner air, they gain broader public support and become easier to implement at scale. Circularity becomes the means; wellbeing becomes the goal.

Wellbeing approaches have already gained traction across Europe. Amsterdam, Barcelona, Vienna and Copenhagen have each integrated wellbeing principles into housing, mobility and procurement decisions. At EU level, the 8th Environment Action Programme sets a 2050 vision of living well within planetary boundaries, and recent European Semester cycles have progressively incorporated social, health and environmental dimensions. The challenge now is to move from narrative endorsement to structural embedding, integrating wellbeing objectives into core economic governance so that they actively shape priorities rather than sit alongside them.

Synergies of a Circular Wellbeing Economy

The circular economy and the wellbeing economy have until now been treated as distinct policy families: one concerned with materials, design and recycling; the other with fairness, participation and social foundations. Making the relationship between the two explicit and deliberate can unlock significant synergies and accelerate both transitions.

The strongest synergies lie in the before-use phase. Strategies of refuse, rethink and reduce engage with material flows at the point of production and pre-production, where the potential to prevent environmental and social harms is greatest, and where the scope for rethinking business models and value creation is widest. During the use phase, strategies

Table ES1. Synergies between circular R-strategies and wellbeing economy P-principles.

		Pre-distribution	Purpose	Prevention	People-powered
BEFORE USE	Refuse		■	■	■
	Rethink	■	■		
	Reduce			■	■
DURING USE	Retain		■		■
	Reuse and share		■		■
	Repair		■		■
	Remanufacture	■		■	
AFTER USE	Recycle			■	
	Return			■	

Note: Coloured squares indicate strong synergies.

that extend product life, such as retain, reuse, repair and remanufacture, are labour-rich and locally embedded, generating employment and distributing economic value more widely. Downstream strategies remain essential for responsible end-of-life management, though their potential is more limited. Table ES1 illustrates where synergies between R-strategies and wellbeing principles are strongest.

Translating this into policy requires action across several areas. Governance frameworks need to reward long-term value creation rather than material throughput, with public procurement, industrial policy and innovation funding creating stable demand for circular solutions. Integrated measurement systems that link material use to social outcomes, such as affordability, health, job quality and equity, are needed to improve decision-making and accountability. Ensuring that the transition distributes benefits broadly across income groups, regions and generations will be critical to its durability and social legitimacy.

Beyond the existing nine R-strategies of the circular economy, four additional strategies extend circular thinking into cultural and societal domains:

Reimagine — redefining what a good life means, shifting aspirations from accumulation towards care, connection and belonging

Retell — redirecting advertising, marketing and social media narratives away from overconsumption

Relocalise — shortening supply chains and anchoring circular practices in local communities and ecosystems

Reconnect — strengthening relationships among people, between people and nature, and between citizens and their cultures

Together, these thirteen R-strategies define the architecture of a wellbeing-oriented circular economy, as illustrated in Figure ES1.

Figure ES1. R-strategies for circularity with wellbeing.

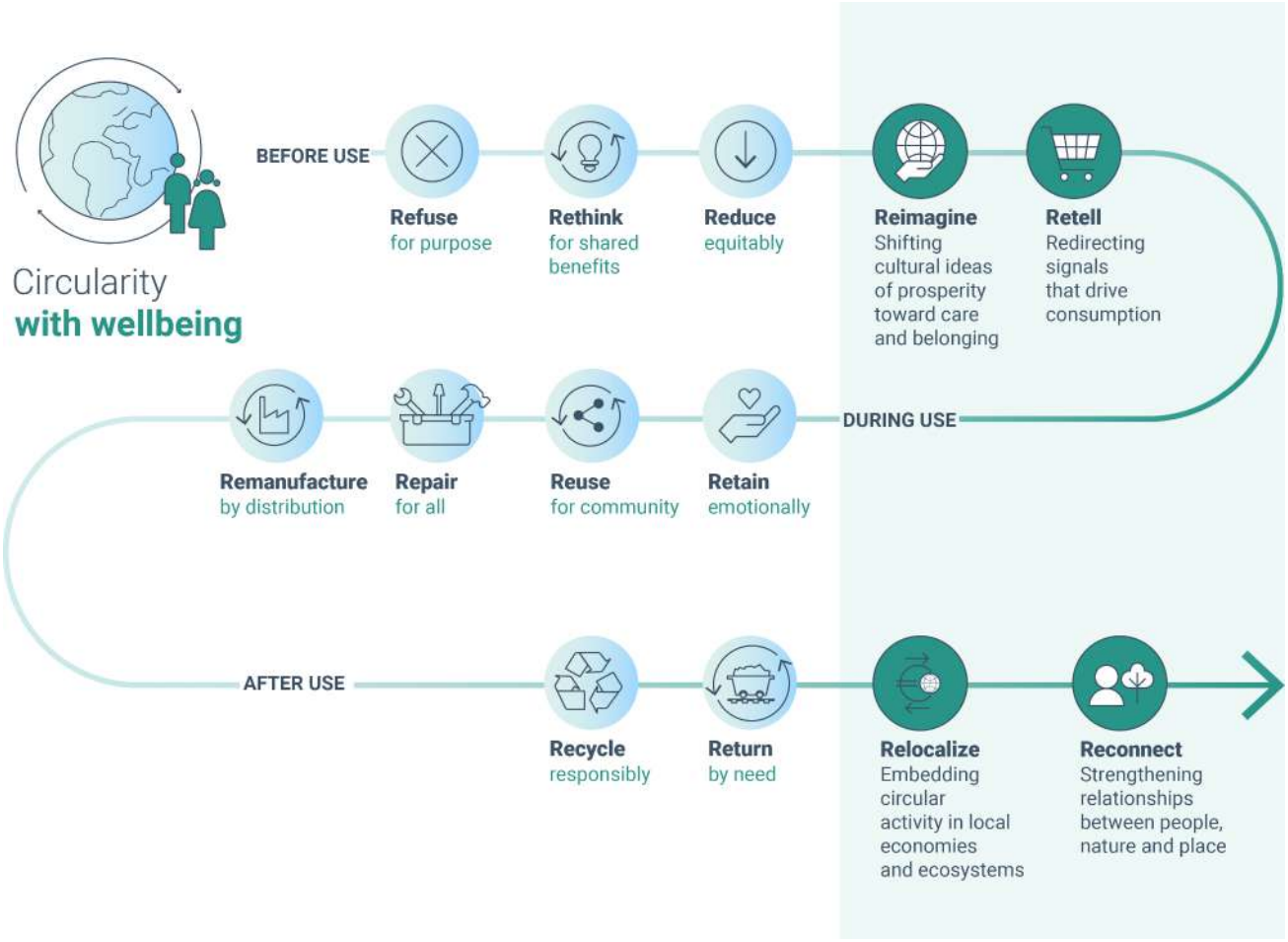
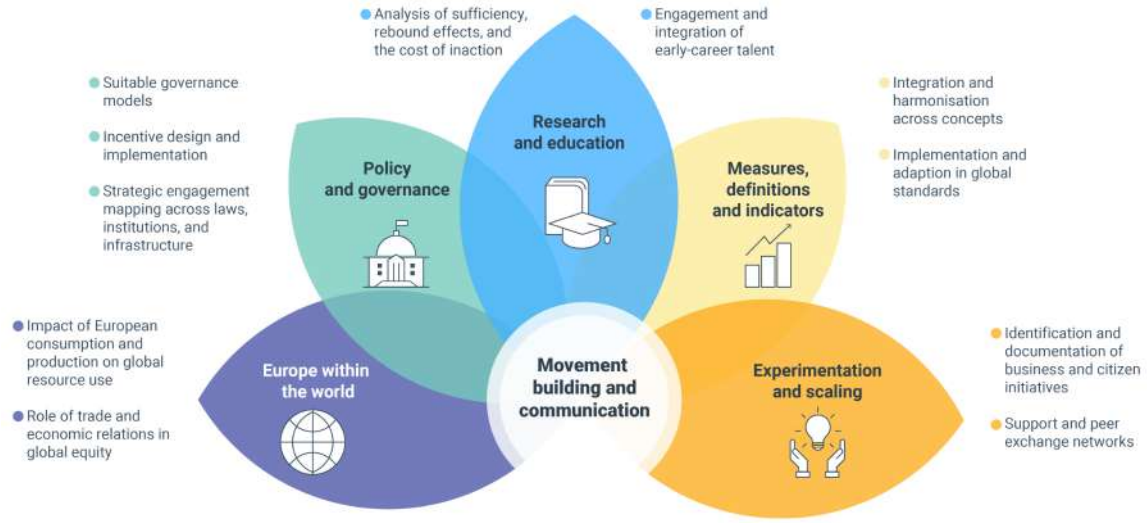


Figure ES2: Identifying collective opportunities and sharing state-of-the-art knowledge.



Ways forward

To move from theory to practice of advancing a Circular Wellbeing Economy, six focus areas were identified by a high-level expert group convened by the EEA in January 2026. As it can be seen in Figure ES2, policy and governance frameworks, academic research, measurement systems, and practical experimentation by firms, citizens and local communities each generate valuable insights. When these domains are connected through strong communication and movement-building, they create a shared knowledge base capable of accelerating innovation, improving policy design and strengthening collective ownership of the transition.

Reaching Europe's 2030 circular economy targets will require a shift in policy focus from end-of-life waste management towards upstream interventions in production design and consumption patterns. Integrating wellbeing objectives into existing governance frameworks offers a practical pathway to broaden public support, improve policy coherence, and strengthen the overall effectiveness of the transition to a more resilient, socially just, and therefore competitive Europe.

1

Introduction: Restoring Circularity's Social Purpose

Europe's transition towards a circular economy is a response to resource scarcity and environmental and climate pressures. Wellbeing economy approaches, on the other hand, seek to redefine economic success around quality of life, equity and ecological sustainability. This report argues that these perspectives are most effective when pursued together: circularity is the means, and wellbeing is the goal. Framed in this way, a circular economy is not an end in itself, but a strategic instrument for enabling people to live well within planetary boundaries.

A central but often underemphasised dimension of this transition concerns the role of existing material stocks: buildings, infrastructures and long-lived goods. In high-income economies, such as those in Europe, wellbeing depends less on expanding material throughput than on how effectively these accumulated stocks are managed, maintained, shared and upgraded. This report therefore pays particular attention to how circular strategies can shift the focus from producing *more* to using existing assets *better*, as a pathway to deliver wellbeing while reducing environmental and resource pressures.

Europe's circular economy is in a new policy phase. Circularity is now increasingly linked to competitiveness, resilience and security. Geopolitical

tensions, supply disruptions and price volatility have brought material dependence to the centre of a strategic debate. Reducing reliance on imported raw materials has become a shared concern across policy, business and society. Circular strategies are therefore gaining political traction, since they promise to reduce primary material use, retain value within Europe, and strengthen supply stability and autonomy.

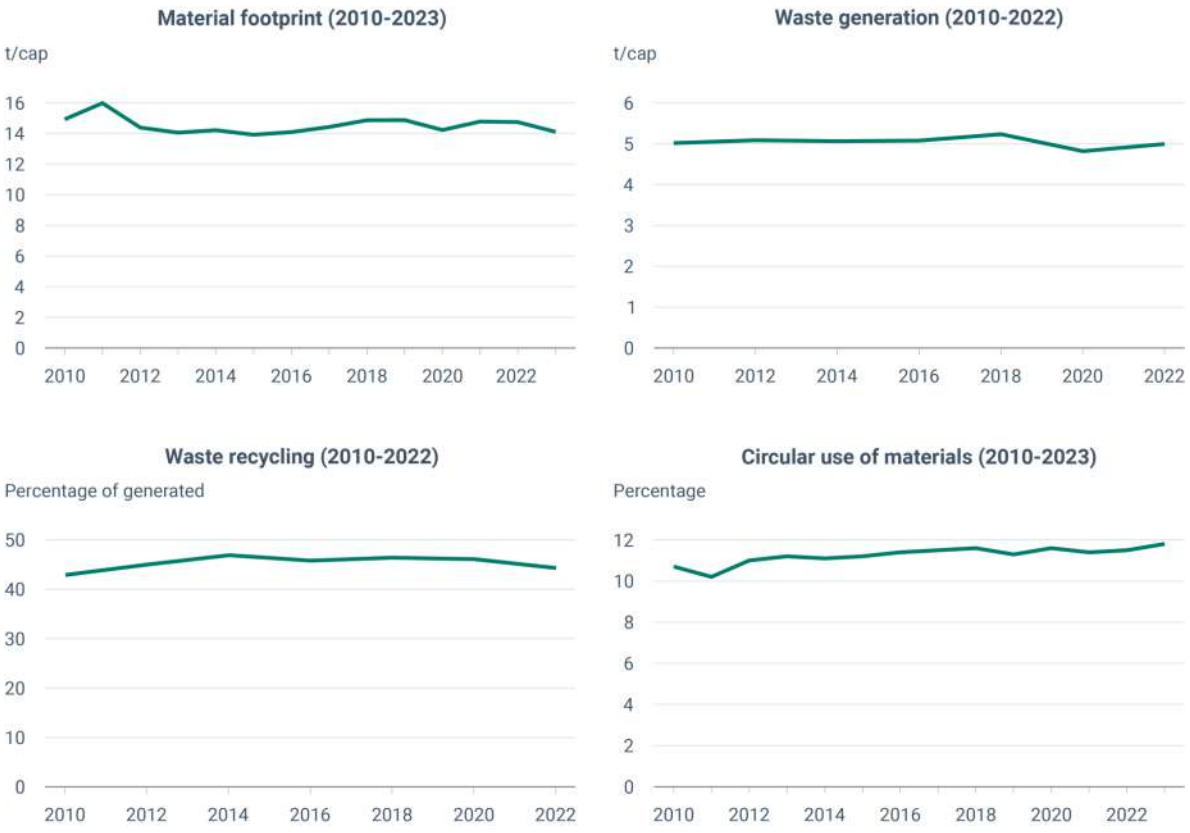
Yet progress remains limited. The circular material use rate in the European Union (EU) increased by only two percentage points between 2010 and 2024, reaching 12.2%, well below the 2030 target of 22.4% (EEA, 2025; Eurostat, 2025a). Efficiency gains in specific sectors are frequently offset by expanding production and consumption, with rebound effects reducing overall gains (Guzzo et al., 2025). Europe's material footprint remains high, at roughly 14 to 15 tonnes per person annually, alongside around 5 tonnes of waste per person (EEA, 2023a). These trends – as illustrated in Figure 1 – indicate that relative efficiency improvements alone are insufficient if absolute levels of resource use remain elevated.

Material pressures are further intensified by rising global demand for minerals, metals and other materials linked to digitalisation, renewable energy deployment, electrified mobility and defence (Carrara et al., 2023; UNEP, 2024). Competition for geographically concentrated resources deepens geopolitical dependencies and increases environmental stress in extraction regions (EC, 2020a; IEA, 2022). The environmental, climate and social costs associated with European consumption often extend beyond the region's borders, reinforcing global asymmetries (EEA, 2020; Hobson and Lynch, 2016).

The implications are not only environmental, climatic and strategic – but also social. Resource-intensive economic models co-exist with persistent inequalities in exposure to pollution, climate impacts and rising living costs. Lower-income households are more vulnerable to environmental, climate and economic shocks, whereas higher-income groups disproportionately benefit from material-intensive lifestyles (Chancel et al., 2022; EEA, 2018; OECD, 2021). In 2023, around 21% of Europeans were at risk of poverty or social exclusion (EC, 2024a; Wilkinson and Pickett, 2024).

These inequalities intersect with broader signs of stalled human development in several high-income regions, including parts of the European Union (UNDP, 2025). Slowing gains in life expectancy, rising housing costs, ecological degradation, and growing psychological and social stress indicate that material

Figure 1. Key material flow indicators in the EU-27.



Source: EEA, 2024a

expansion alone is no longer translating into improved wellbeing (Abdallah, Barberà Mas and Saujot, 2026). The challenge is therefore systemic: economic models that intensify resource use without strengthening social foundations risk undermining both resilience and human development.

A key structural gap lies in how the societal relevance of the circular economy is communicated and governed. While indicators such as material flows and recycling rates capture the aggregate effects of production and consumption patterns, they are seldom translated into implications for affordability, housing conditions, health outcomes and everyday security. As a result, circular strategies can appear technocratic or distant, even when their ultimate purpose is to improve living conditions. When people do not see how circular policies improve cost stability, public health or social resilience, public support can weaken and implementation can become politically fragile. Bridging this gap requires explicitly linking material efficiency and resource use to tangible improvements in everyday wellbeing, building the trust required to sustain ambitious transitions over time.

In this report, a circular wellbeing economy is conceptualised as a systemic transformation in which material use and economic organisation are deliberately designed to enhance ecological integrity and equitable wellbeing across generations. Wellbeing is the normative compass of economic policy, while circularity provides the operational strategies for reshaping systems of production and consumption.

The report addresses four key questions:

First, what does it mean to integrate wellbeing into Europe's circular economy in line with EU priorities on competitiveness and security, and how can wellbeing provide direction to circular strategies?

Second, why have circular economy and wellbeing economy agendas developed largely in parallel, and how does this limit their transformative potential?

Third, how can circular strategies deliver wellbeing outcomes in practice through an integrated framework linking circularity's "R-strategies" with wellbeing principles?

Fourth, which policy options can better align Europe's circular transition with wellbeing for all, strengthening both environmental and climate outcomes and social legitimacy?

Chapter 2 reviews the state of Europe's circular economy, examining policy progress, implementation, circular business models and monitoring frameworks. Chapter 3 explores the development of wellbeing economy approaches in Europe and their relevance to fairness, participation and ecological integrity. Chapter 4 presents an integrated framework linking circular strategies with wellbeing outcomes and discusses policy pathways for aligning circularity and wellbeing to support a resilient, competitive and socially inclusive Europe. Chapter 5 translates this integrated framework into options for action. It outlines governance enablers, institutional innovations and stakeholder-specific pathways capable of accelerating convergence between circularity and wellbeing, and identifies practical entry points for embedding this approach within European policy making and implementation systems.

2

The Circular Economy in Europe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2.1 Definitions and strategies

The circular economy has become a central organising framework in European policy, embedded in the EU Circular Economy Action Plan, the Clean Industrial Deal, and related strategies on climate neutrality, resource security and competitiveness (EC, 2020b). It aims at achieving two key goals: to lower environmental and climate pressures, and to increase economic resilience by reducing reliance on virgin materials and unstable global supply chains (European Parliament, 2026).

Despite this growing institutionalisation of circularity, interpretations differ in scope and ambition. Narrower interpretations focus primarily on improving material efficiency and closing resource loops. Broader interpretations emphasise reducing overall resource demand, addressing consumption patterns, and contributing to social and intergenerational equity (EEA, 2024b; OECD, 2025; UNDESA, 2025). These broader framings position circularity beyond a resource strategy, and as part of a wider socio-economic transformation.

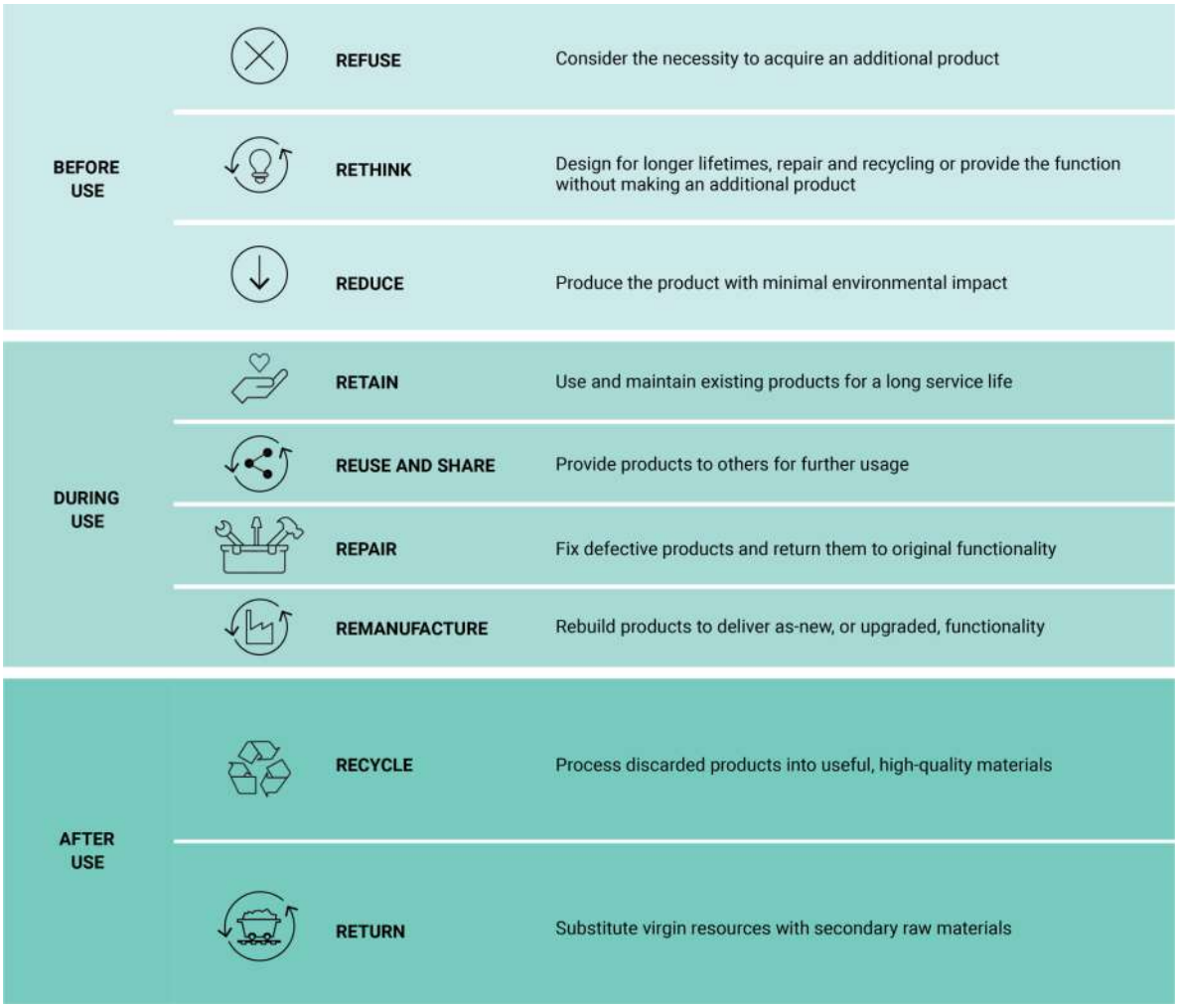
A useful lens to compare these perspectives is the 9Rs framework (see figure 2), which captures the full range of circular actions (EEA, 2024b).

Before use: Refuse, Rethink, Reduce – meeting needs with fewer resources, re-evaluating product necessity and designing for low-impact production.

During use: Retain, Re-use and Share, Repair, Remanufacture – extending the life and value of products.

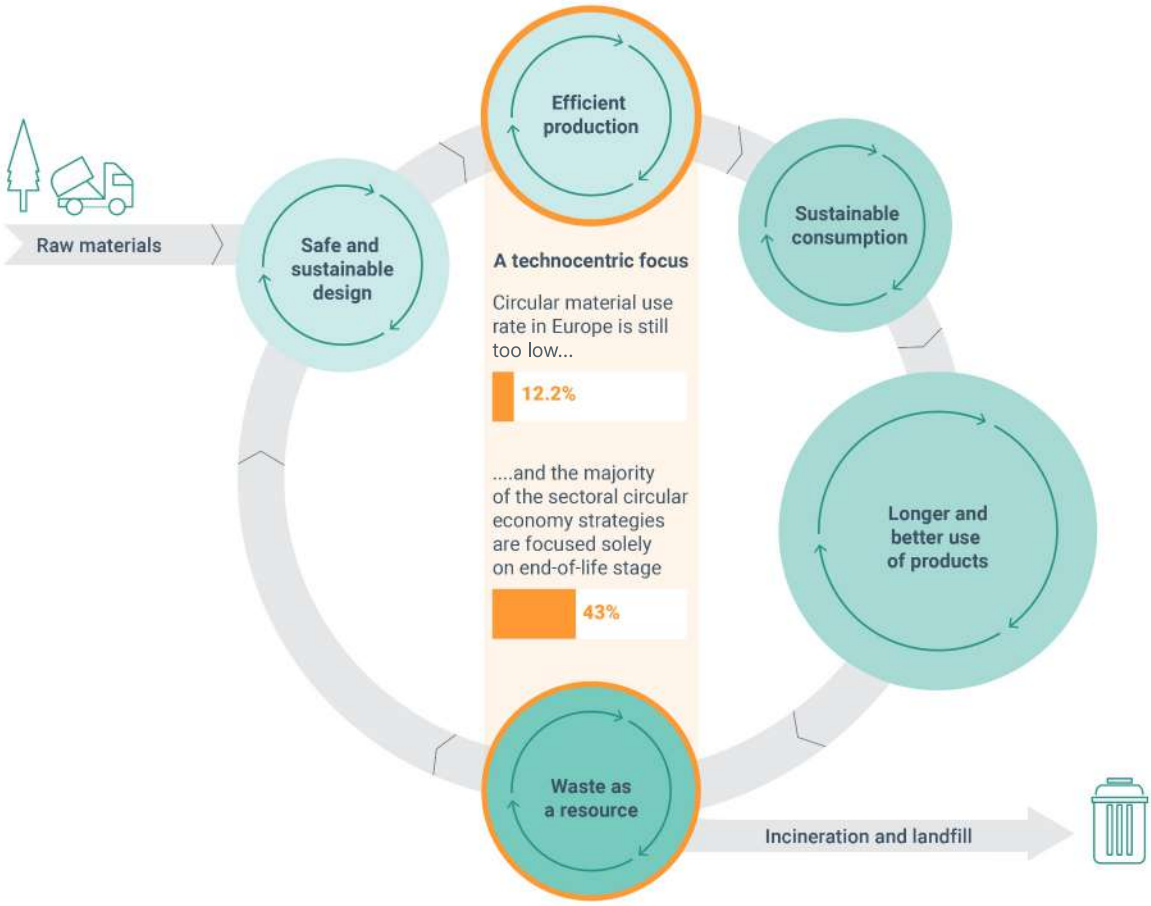
After use: Recycle, Return – maintaining material value through reprocessing and re-integration.

Figure 2: Nine circular economy R-strategies within the product chain.



Source: EEA based on Potting et al., 2017

Figure 3: Limitations of the predominant technocentric focus on recycling and production efficiency.



Source: Future Impacts / Bertelsmann Stiftung: basic closed-loop cycle based on EEA 2024, Circle Economy 2024, Bahn-Walkowiak et al. 2019; data from de Pascale et al. 2023, EEA 2024

Two concepts are central to this report's framing. First, competitiveness is understood not as volume expansion, but as the smart and equitable use of resources to secure long-term prosperity, resilience and improved living standards. Second, sufficiency is understood here as the material requirements needed to secure wellbeing for all without excess. Sufficiency complements efficiency by shifting attention from how resources are used to how much is used and for what purpose. It asks what levels and forms of production and consumption are compatible with human flourishing within ecological limits (Di Francesco and Schluep, 2026; Hot or Cool, 2025).

Both concepts help reconnect circular strategies with their broader social purpose.

The hierarchy presented in figure 2 also makes explicit that circular strategies and business models differ in their potential to reduce primary resource extraction. Measures taken before and during use tend to preserve more value and avoid resource inputs altogether, while end-of-life strategies recover materials only after value has already declined.

In practice, however, implementation is dominant at the lower end of the hierarchy. The lower-order Rs, particularly Recycle and Return, prevail in both policy and business practice. A report by Bertelsmann Stiftung (2024) notes that 43% of sectoral circular economy strategies focus solely on end-of-life stages, highlighting the strong emphasis on recycling and waste recovery, as can be seen in figure 3. Monitoring frameworks, investment flows and public communication similarly prioritise measurable waste and recycling indicators.

This imbalance illustrates how definitions shape approaches. When circularity is framed primarily around waste management or resource efficiency, policy attention gravitates towards downstream solutions that are technologically tractable and quantifiable. Higher-order strategies that question production volumes, product necessity or consumption levels receive comparatively less emphasis. Consequently, the implementation of circularity in Europe often reflects a narrower interpretation than the broader visions articulated in foundational policy documents and academic literature.

Clarifying these distinctions is essential. If circular economy policy is to contribute meaningfully to long-term ecological stability and social resilience, its implementation should align with its broader conceptual foundations. Linking circularity with wellbeing perspectives offers a pathway to reconnect material strategies with social objectives and to rebalance action towards higher-order approaches.

2.2 Policy progress, implementation and social uptake

Despite sustained policy development over the past decade, Europe's circular transition remains concentrated mainly in a limited segment of the circular economy spectrum. Labelling schemes, extended producer responsibility systems, eco-design requirements and sectoral waste initiatives have strengthened regulatory architecture and improved data availability. Yet measurable progress in reducing overall material throughput remains modest. Improvements in recycling capacity, sorting technologies and secondary material markets have not translated into substantial reductions in primary resource demand.

The structural imbalance between downstream and upstream focus identified in section 2.1 is reflected in implementation. End-of-life measures and business models have expanded significantly, whereas upstream interventions addressing production and consumption levels, sufficiency-oriented product design and systemic demand reduction remain comparatively underdeveloped. This asymmetry constrains the transformative potential of circularity.

A central explanation lies in rebound dynamics. Efficiency improvements reduce the material intensity of products and services, but may lower prices, increase accessibility and stimulate new forms of demand. Recent evidence suggests that a substantial share of potential environmental gains from efficiency-oriented interventions is offset by behavioural and systemic rebound effects (Guzzo et al., 2025; Mizrachi and Sharon, 2025; Yerushalmi and Saha, 2025). Research on "reboundless design" further highlights that circular solutions that fail to incorporate demand-side safeguards risk amplifying total consumption by improving convenience or social acceptance (Andrew and Pigosso, 2024; Reboundless.eu). This confirms that circularity alone – without sufficiency safeguards – risks stabilising material flows at high levels rather than reducing them.

Resource productivity in the EU has improved over time, indicating more economic value generated per unit of material input (Eurostat, 2024). However, absolute material consumption remains high, and Europe's material footprint continues to reflect strong dependence on imported resources and globally distributed extraction impacts (EEA, 2024b). These trends suggest that efficiency gains alone are insufficient to counterbalance expanding demand in housing, mobility, food and consumer goods.

The uptake of circular business models reflects similar constraints. Repair and re-use activities account for only a small share of economic turnover, and while product service systems and sharing platforms are gaining visibility, they remain concentrated in niche markets and urban centres (EEA, 2026). Although many firms acknowledge circular economy principles, fewer than 10% to 20% report embedding circular business models into core strategies (Baldassarre and Calbretta, 2024).

Scaling of circular business models remains hindered by structural barriers. High upfront costs, limited access to finance, fragmented standards for re-use and refurbishment, restricted access to product information due to intellectual property regimes, and inconsistent reverse logistics systems continue to favour linear production models. Secondary raw materials often struggle to compete with primary materials whose market prices do not internalise environmental externalities (Crippa et al., 2019). These conditions reinforce a lock-in of throughput-oriented linear business models.

Concurrently, circularity is gradually building social and institutional legitimacy. It is no longer confined to a policy or business discourse but is increasingly visible in everyday practices. Repair cafés, community re-use centres, retailer-led repair services and sharing initiatives have expanded across Europe. The EU repair sector turnover reached EUR 25.6 billion in 2017 before stabilising at around EUR 21.5 billion by 2020 (EEA, 2024d). Programmes such as France's repair fund have enabled more than 165,000 documented repairs (Meyer and Molnár, 2024). The EU's Right to Repair initiative further institutionalises durability and reparability.

These developments signal growing public recognition that products should last and be repairable rather than disposable. Survey data consistently show strong citizen support for repairability, durability and resource reduction (EC, 2024b). Although attitudes do not automatically lead to lower consumption, they expand the political and cultural space for more ambitious circular policies.

Uptake of circularity, however, remains uneven and geographically differentiated. Cities with established circular hubs, social enterprises, and re-use and repair infrastructures demonstrate higher adoption rates (ICLEI, 2024), whereas regions lacking enabling

ecosystems face barriers related to affordability and access. Rural areas often retain low technology but socially embedded practices (BBSR, 2022), yet these are rarely integrated into formal circular strategies. This uneven geography mirrors broader inequalities in access to infrastructure and services.

Market uptake reflects similar dynamics. Circular business models have matured but still represent a limited share of economic activity. Many initiatives remain niche, community embedded, and dependent on motivated consumers and intermediary organisations (EEA, 2026). Without structural support and clear wellbeing benefits, circular practices risk remaining socially selective rather than systemic.

Strengthening implementation therefore requires not only technical and financial reform, but also reinforcing the social legitimacy of circularity. Demonstrating that circular initiatives improve affordability, autonomy, job quality and local resilience is essential if the transition is to move beyond incremental optimisation towards structural change.

Europe's circular transition is at a point where further progress requires more than incremental efficiency improvements. It requires aligning material governance with sufficiency, embedding circularity metrics within economic and environmental accounting systems, and linking resource use explicitly to wellbeing, resilience and fairness. With established legislation, growing awareness of resource dependency and strong public support for environmental action (EC, 2024), the institutional conditions for such a shift exist. The direction chosen in the coming years will determine whether circularity remains a technical optimisation strategy or evolves into a systemic transformation consistent with long-term wellbeing.

2.3 Innovation and human dimensions of circularity

Innovation is a central pillar of Europe's circular economy agenda. Advances in eco-design, extended producer responsibility, industrial symbiosis, advanced recycling and material science have demonstrably improved resource efficiency and enabled some circular business models (EEA, 2026; Kirchherr et al., 2023). In several sectors, technological progress has reduced environmental and climate pressures while supporting competitiveness.

Importantly, innovation in circularity is not limited to technological breakthroughs. Many successful initiatives combine technical solutions with new organisational and social arrangements. In addition, innovation in business models plays a critical role in enabling circularity by redefining how value is created, delivered and captured while slowing, narrowing or closing material loops (Coscieme et al., 2022). Examples include service-based models such as renting or leasing, product longevity models centred on repair and maintenance, and resale or take-back schemes that extend product lifetimes. Product service systems in mobility link digital platforms with new ownership models; extended producer responsibility schemes align regulatory design with new business practices; and repair networks and sharing infrastructures integrate engineering standards with community participation. These examples show that circular innovation is most effective when technological, business model and social dimensions evolve together.

Yet research indicates that the social foundations of circularity remain unevenly embedded in governance (Calisto Friant, Vermeulen and Salomone, 2024). Citizens are often framed primarily as consumers of greener products rather than as participants shaping systems of production and consumption (Suárez-Eiroa, 2025; Ortega Alvarado and Pettersen, 2024). Questions of distribution, job quality and adjustment costs receive comparatively limited attention. Workers in transitioning sectors, low-income households and marginalised communities may face disproportionate risks if social safeguards are not explicitly designed into policy and business models.

Earlier visions of a "recycling society" connected material loops to cultural norms and collective responsibility, whereas the language of the "circular economy" increasingly foregrounded efficiency, competitiveness and growth (Kirchherr et al., 2023). In this framing, circular strategies may improve material efficiency without challenging structural drivers of overconsumption.

Research on material stocks further strengthens this perspective. In high-income countries, wellbeing levels are closely linked to accumulated material stocks rather than to continued growth in material throughput (Pauliuk and Müller, 2014). Expanding stocks indefinitely increases environmental and climate pressure, whereas managing, maintaining and optimising existing stocks can sustain service provision with lower resource demand. This insight reframes innovation: progress does not necessarily require producing more, but can instead focus on maintaining, upgrading and using existing infrastructures more effectively.

This also implies a shift in focus and actors: from innovation targeting individual products, technologies or processes, to innovation targeting the interconnected configurations of infrastructures, technologies, institutions, social norms and economic relationships through which needs such as housing,

mobility, nutrition and energy are met (Di Francesco and Schluep, 2026). Innovation in stock management, lifetime extension and service optimisation therefore becomes central to a wellbeing-oriented circular economy.

Promoting standardised solutions that fail to account for place-specific and community-based systems may weaken rather than strengthen circular performance. A socially grounded transition requires adapting strategies to local contexts and integrating existing knowledge.

Aligning circularity with wellbeing implies broadening the purpose of innovation itself across technological solutions, business models and social practices. Progress does not consist only in lowering material throughput, but in improving quality of life. This requires embedding sufficiency, affordability, job quality, equity and participation in the design of circular strategies – ensuring that technical efficiency translates into shared prosperity rather than remaining an end in itself.

2.4 Indicators and metrics

If circular innovation is to support wellbeing, equity and effective management of material stocks – rather than simply improve material efficiency – Europe must be able to measure these broader outcomes. Monitoring systems therefore play a pivotal role in shaping what counts as progress.

Europe has invested in tracking its circular transition, developing increasingly sophisticated systems to monitor material flows, waste trends, recycling performance and product policies (EEA, 2024a). These frameworks have strengthened data quality and reinforced the idea that circularity is measurable. However, it is becoming clear that current monitoring systems in most cases capture only part of the picture. They point to where materials flow, but not where value is created, who benefits, how behaviours shift and whether circular strategies enhance wellbeing.

The European Commission's Circular Economy Monitoring Framework provides the backbone of EU-level monitoring. Its headline indicators include waste generation, recycling rates, secondary raw material use and resource productivity. In 2023, the framework expanded to include material footprint, consumption footprint, greenhouse gas emissions from production activities and material dependency. These were important additions that helped capture Europe's broader impact along global supply chains.

The European Environment Agency's (EEA) Circularity Metrics Lab addresses some further blind spots by highlighting indicators on product lifetime, reparability, re-use, and safe material cycles, as well as zooming in on key value chains such as textiles and plastics (figure 4). The lab represents the ideal starting point for extending circular economy indicators to social impact, including metrics that track health and wellbeing impacts of circular transitions.

These advances signal recognition that circularity extends beyond waste management and should account for demand reduction and global supply chains.

Recent advances in artificial intelligence and Earth observation are also opening new opportunities for circular economy monitoring. High-resolution satellite data from the EU's Copernicus Programme, increasingly analysed with machine-learning techniques, allow environmental and climate pressures, land-use change and resource dynamics to be monitored at unprecedented spatial and temporal scales, complementing traditional statistical indicators and material flow accounts (Dowell et al., 2025). These emerging data capabilities reinforce the need to rethink what circular economy monitoring should measure.

Europe now faces a strategic choice. It can continue refining material efficiency indicators – or expand towards a new generation of metrics capable of assessing whether circularity contributes to a fair, resilient and wellbeing-oriented society, and work to embed these in existing systems of economic and environmental accounting.

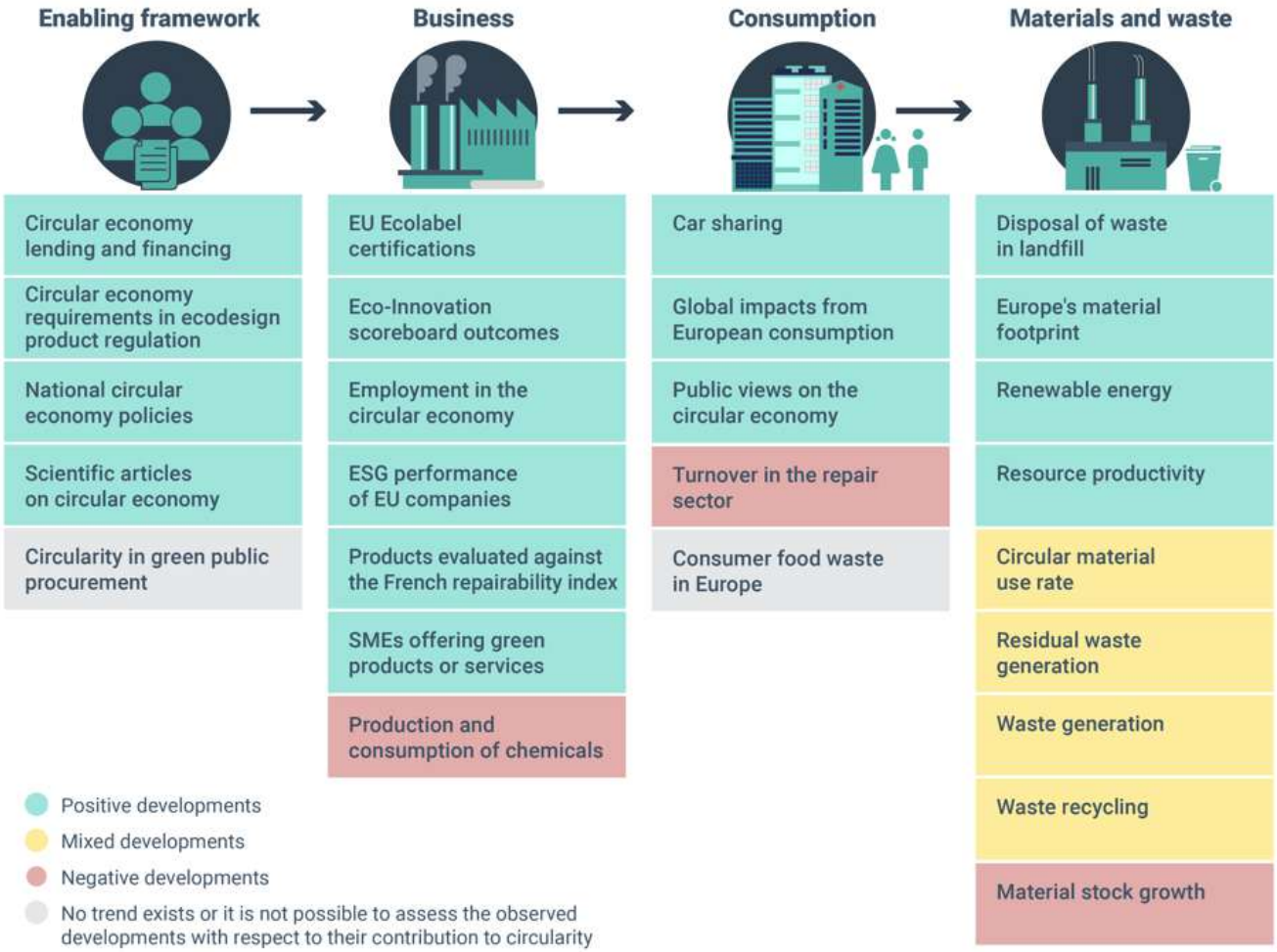
2.5 Lessons learned

Building from the content of this chapter and the academic studies and reports considered, Europe's experience over the past decade reveals several structural lessons.

First, circularity has gained visibility and legitimacy. EU repair sector activity and growing public support for durability and reparability demonstrate that circular principles resonate socially (EC, 2024; EEA, 2022). This growing legitimacy has helped embed circularity within broader business, environmental, climate and political discourses.

Second, policy progress has created important foundations, yet reductions in overall material throughput remain limited. This highlights an opportunity to complement existing progress with stronger upstream interventions addressing supply, demand reduction, sufficiency-oriented design and lifetime extension.

Figure 4: Overview of the current EEA Circularity Metrics Lab metrics.



Source: EEA Circular Metrics Lab

Note: Coloured according to whether the metrics report positive, negative or stable circularity developments.

Third, structural barriers continue to mainly favour linear production models. Financial incentives, regulatory standards, supply chain structures and price signals still privilege high-turnover production. Social dimensions such as affordability, access, trust and job quality are not yet systematically embedded in policy design, limiting both scale and inclusiveness.

Fourth, efficiency gains alone are insufficient. Rebound dynamics demonstrate that improvements in material efficiency can be offset by rising demand. Circular strategies focused narrowly on technical optimisation risk stabilising material flows at high levels if they do not address production and consumption patterns and social norms.

Together, these lessons indicate that strengthening upstream measures, embedding circular metrics within economic governance, supporting socially grounded practices and explicitly linking material reduction to wellbeing outcomes are essential for systemic transformation towards circularity in Europe. Aligning circularity with wellbeing provides a coherent framework through which material sufficiency, social value creation and long-term resilience can be pursued simultaneously.

3

The Wellbeing Economy in Europe

3.1 Definitions and strategies

A wellbeing economy redefines the purpose of economic activity. Rather than treating growth in gross domestic product (GDP) as the primary measure of success, it positions human and ecological wellbeing as the central objective of the economy (WEAll, 2021). Prosperity is understood not as the expansion of output, but as the capacity of societies to secure healthy, safe, meaningful and connected lives for all within planetary boundaries.

Material provisioning is fundamental in the wellbeing economy. Access to nutritious food, stable housing, clean energy, mobility and healthcare is indispensable to wellbeing. Evidence from the International Resource Panel shows that wellbeing improves sharply as material deprivation is reduced, then plateaus once adequate infrastructures are in place, while environmental and climate pressures continue to increase with additional resource use (UNEP, 2016). This asymmetry suggests that beyond sufficiency thresholds, social and institutional factors matter more for wellbeing than aggregate material throughput. Recent global evidence reinforces this diagnosis, as illustrated in figure 5, showing life expectancy and GDP per capita for several countries.

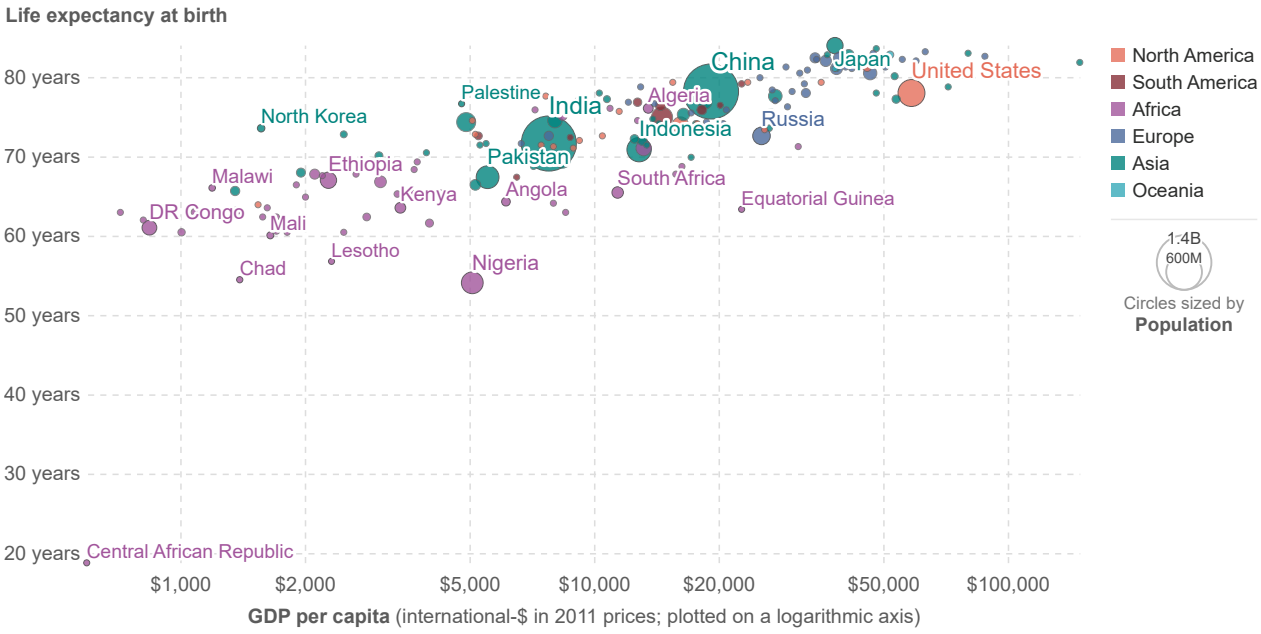
A wellbeing economy shifts attention from output maximisation to how well societies meet people's needs. It asks whether economic and other institutions reliably secure basic needs, distribute opportunities fairly, strengthen social cohesion and operate within ecological limits. In this framing, growth is neither rejected nor pursued as an end in itself; rather, it is assessed according to whether it advances wellbeing objectives and respects environmental boundaries.

Across academic and policy discourse, definitions converge around several core principles of the wellbeing economy. The Wellbeing Economy Alliance articulates these through four interlinked "P-principles" that offer a useful analytical structure (WEAll, 2021). While not exhaustive of all perspectives, they capture core elements present across wellbeing economy scholarship.

Pre-distribution refers to shaping markets and institutions so that income, services and environmental benefits are fairly allocated through design, rather than relying primarily on redistribution after inequalities arise.

Purpose emphasises aligning public and private economic activity with wellbeing outcomes, shifting performance evaluation away from narrow macroeconomic aggregates towards social and ecological value creation.

Figure 5: Life expectancy (years) versus GDP per capita (US dollars).



Data source: Riley (2005); Zijdeman et al. (2015); HMD (2025); UN WPP (2024); Bolt and van Zanden – Maddison Project Database 2023
Note: GDP per capita is expressed in international-$ at 2011 prices.

Prevention highlights the importance of early investment in social and environmental infrastructures, recognising that preventative action reduces long-term fiscal pressures and social harm.

People-powered governance stresses democratic participation and accountability in economic decision making, ensuring that institutions reflect lived experience and intergenerational responsibility.

Across research and policy communities, related frameworks have emerged that advance similar objectives. Work by the Organisation for Economic Co-operation and Development (OECD) on wellbeing measurement, and by the Stiglitz–Sen–Fitoussi Commission, has helped shift policy attention beyond GDP towards multi-dimensional indicators of social progress (Durand, 2015; Stiglitz, Sen and Fitoussi, 2009). Concepts such as Doughnut Economics (Raworth, 2017) and Fair Consumption Space (Akenji et al., 2021) emphasise the need to balance social foundations with ecological ceilings. Complementary work on wealth accounting, including the Inclusive Wealth Report led by the United Nations Environment Programme, emphasises maintaining and enhancing produced, human and natural capital as the basis for long-term wellbeing (UNEP, 2023). Initiatives led by the Wellbeing Economy Governments Partnership similarly emphasise aligning economic systems with human wellbeing and ecological limits.

While differing in emphasis and policy pathways, these approaches converge around the need to redefine prosperity, broaden measurement frameworks, and embed long-term social and environmental objectives in economic governance.

Strategically, a wellbeing economy reorients economic policy along three interlinked directions. It broadens measurement frameworks beyond GDP to capture social and ecological outcomes. It aligns fiscal, industrial and regulatory systems with long-term wellbeing objectives rather than short-term output targets. And it restructures systems of production and consumption to ensure that essential goods and services are accessible within ecological limits. Together, these strategies and the four principles of a wellbeing economy reorient economic systems from expansion towards sufficiency, equity and ecological stability. They also provide a structured lens through which wellbeing strategies can be integrated with circular economy approaches.

3.2 Policy progress

Wellbeing has gradually moved from a marginal concept to an increasingly visible reference point in European governance. The EU's 8th Environment Action Programme sets a 2050 vision of "living well, within planetary boundaries" in a regenerative, climate-neutral economy with reduced inequality (EEA, 2023b). Recent European Semester cycles have gradually expanded from a narrow focus on fiscal discipline to incorporate social, health and environmental dimensions, and the 2024 Annual Sustainable Growth Survey refers explicitly to "sustainable and inclusive wellbeing beyond GDP" (EuroHealthNet, 2024).

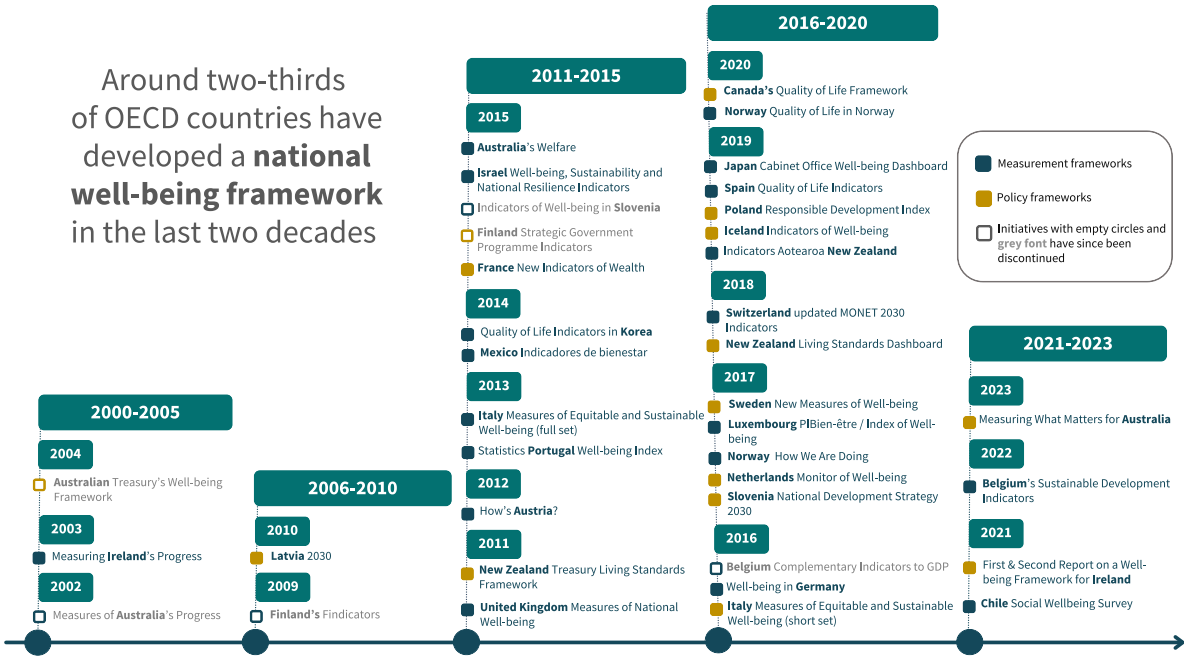
Yet visibility is not translating into concrete and structural transformation. References to wellbeing appear in strategy documents, but integration into core economic governance (including medium-term budgetary frameworks, fiscal rules, taxation, procurement and industrial strategy) remains limited. Wellbeing objectives are typically layered onto existing growth-oriented policy structures rather than reshaping them.

This constraint is reinforced by the broader political economy context. EU policy debates are currently focused predominantly on competitiveness, productivity, security and geopolitical resilience (EC, 2025a; EC, 2025b). In such a context, wellbeing goals are frequently framed as supportive of growth, rather than as criteria that might redefine economic priorities. Social, health and environmental expenditure is not systematically protected under fiscal consolidation, even under revised economic governance rules intended to allow greater investment flexibility. Consequently, preventative and equity-enhancing investments remain vulnerable to short-term budget pressures.

Research on practitioner experience confirms these structural barriers. Mason and Büchs (2023) identify persistent obstacles, including the dominance of growth-oriented macroeconomic models, the perception that employment and welfare systems depend on continuous GDP expansion, short-term political cycles, siloed governance structures and resistance from vested interests. Critics warn of "wellbeing washing", where language shifts without substantive change (McCartney et al., 2023). Long-standing asymmetries in lobbying power further complicate reform efforts, with corporate interests often exerting disproportionate influence on regulatory outcomes (Koretskaya and Grosenbaugh, 2020). Figure 6 illustrates how a wellbeing focus has come across in OECD countries in recent decades.

The tensions between different interpretations of the wellbeing economy is particularly visible in government practice. Some actors frame wellbeing and growth as mutually reinforcing, arguing that investments in health, skills and inclusion enhance productivity and fiscal sustainability (OECD, 2019). Others emphasise the need to address structural growth dependency, i.e. the

Figure 6: Wellbeing economy concepts uptake in OECD countries (2000-2023).



Source:OECD WISE 2024, reproduced with permission of OECD

institutional arrangements that tie employment, public revenue and financial stability to continuous expansion (Jackson, 2020).

The Finnish "economy of wellbeing" illustrates this ambiguity. While it played an important role in advancing wellbeing language within the Council of the European Union (Council of the European Union, 2019), it also framed wellbeing primarily as a driver of growth and fiscal stability. Similar patterns are visible across the Wellbeing Economy Governments (WEGo) network (including Finland, Iceland, New Zealand, Scotland and Wales), where comprehensive wellbeing frameworks co-exist with continued reliance on GDP growth as a central macroeconomic objective (Hayden, 2024; Hayden and Dasilva, 2022).

Despite these tensions, social uptake of the wellbeing narrative is expanding. Public opinion surveys consistently show strong support for affordability, fairness, health and environmental protection as priorities for progress (EC, 2023; EC, 2024). A recent cross-country survey found that more than 80% of Europeans favour using beyond-GDP indicators to guide national policy (Silvi and Bleys, 2024). Cost-of-living protests and rising concern over climate impacts underscore growing public unease with existing economic arrangements (Trebeck, 2024).

Cities and regions are often particularly dynamic arenas of implementation. Amsterdam's Doughnut approach informs housing and procurement decisions. Barcelona integrates wellbeing into mobility and community care strategies. Vienna's long-standing housing model demonstrates how stable material provisioning supports sustained wellbeing. Initiatives such as Paris's school street programmes and Copenhagen's cycling expansion show how place-based interventions can simultaneously reduce environmental and climate pressures and improve daily life (Freemark, 2024). These examples highlight that wellbeing approaches gain traction when linked to tangible improvements in everyday conditions.

Civil society and business actors also contribute to uptake. Alternative certification schemes such as the Common Good Matrix and B Corp standards have expanded across Europe, signalling demand for models that integrate social and environmental performance. Worker co-operatives, community enterprises, and strategies that harness the purchasing power of large public institutions (such as hospitals, universities and local councils) illustrate how ownership and procurement structures can be aligned with wellbeing objectives. Although still modest in scale relative to the broader economy, these initiatives demonstrate operational feasibility.

Overall, wellbeing has gained narrative legitimacy across European governance, public debate and local experimentation. However, legitimacy does not yet equal institutionalisation. Many initiatives remain project-based or advisory, disconnected from fiscal rules, macroeconomic co-ordination and business strategy. The central challenge is therefore to translate rhetorical endorsement into structural embedding. This

implies progressively integrating wellbeing objectives into core economic governance, including fiscal frameworks, public investment strategies, and regulatory systems, so that they shape economic priorities rather than functioning only as complementary reporting tools.

Europe's wellbeing agenda has moved from aspiration to experimentation. The opportunity now is to build on this growing momentum and translate it into durable governance structures that align economic activity with human wellbeing and ecological resilience. If successfully embedded in fiscal policy, investment strategies and institutional decision making, the wellbeing perspective can become a practical compass for guiding Europe's economic transformation in the decades ahead.

3.3 The material foundations of wellbeing

Europe's wellbeing rests on material-intensive systems of housing, food, mobility, energy and consumer goods. A significant share of the environmental and climate impacts associated with EU consumption occurs outside the region's borders. A substantial portion of the EU's biodiversity footprint and roughly one-third to 40% of its carbon footprint are embedded in imports, particularly food, textiles, metals and electronics (Galli et al., 2023; Insee, 2022; WWF, 2021; Zhong et al., 2024). European living standards therefore depend on global supply chains linked to deforestation, soil degradation, water stress, hazardous mining and precarious labour conditions. These externalised pressures reveal a structural disconnection between where wellbeing is enjoyed and where environmental, climate and social costs are borne.

Within Europe, material foundations are also unevenly distributed. More than 7% of Europeans live in households lacking adequate living conditions, and nearly one in ten experiences energy poverty, with significantly higher rates in Central and Eastern Europe (Eurostat, 2025b). Poor insulation contributes to respiratory illness and excess winter mortality. Unequal mobility access limits employment opportunities and social participation for young people, older adults and low-income households, while exposing many to higher pollution levels. Access to durable goods follows similar patterns: lower-income households are often locked into low-quality, short-lived products that increase long-term costs and environmental burdens.

Societies achieving strong social outcomes with comparatively lower resource footprints tend to rely on universal public services, high-quality infrastructure and robust social protection (Fanning et al., 2022; O'Neill et al., 2018).

For "wellbeing for all" to become operational, the wellbeing economy should define and transform its material foundations. This entails universal access to energy-efficient housing, clean and affordable mobility, healthy and sustainable food systems, accessible public services and durable goods designed for longevity and repair. Achieving these goals does not require increasing material extraction, but re-organising provisioning around sufficiency, equity and long-term ecological stability. Reducing demand for virgin materials, strengthening supply chain responsibility, and investing in long-lived, repairable and shared infrastructures are central to this transition.

Yet most existing wellbeing frameworks provide limited guidance on how to reshape these foundational systems. They rarely address the resource implications of large-scale renovation, mobility redesign or food system transformation, nor how to align global supply chains with domestic wellbeing objectives. Integrating material considerations into wellbeing frameworks therefore represents an important next step for translating the agenda into concrete transformation pathways.

Recognising the material foundations of wellbeing also raises a governance question: How can these transformations be systematically tracked and prioritised within economic decision making? If systems of production and consumption and long-lived material stocks shape the conditions for equitable prosperity, then measurement frameworks should capture not only social outcomes but also the sustainability and distribution of the material structures that underpin them. The ability to align wellbeing objectives with material system redesign therefore depends on how progress is monitored and embedded within Europe's economic governance architecture.

3.4 Indicators and metrics

If wellbeing is to guide economic governance, it should be measurable in ways that influence decision making. Over the past two decades, the field of wellbeing measurement has expanded rapidly. Numerous dashboards, composite indices and national initiatives have emerged in response to the recognised limitations of GDP as a measure of societal progress. The Stiglitz–Sen–Fitoussi Commission (2009) marked a turning point by explicitly calling for a shift from measuring economic production to measuring people's quality of life. Since then, initiatives such as the OECD Better Life framework, the United Nations Development Programme's Human Development Index, and the United Nations Sustainable Development Goals (SDGs) have broadened the empirical basis for assessing societal progress.

While this proliferation reflects intellectual vitality, it has also created fragmentation. Different frameworks employ different concepts, metrics and terminologies, which weakens their collective influence on formal political institutions. Recent consolidation work has shown how many initiatives overlap in substance but lack a shared statistical architecture (Rum et al., 2023).

A growing convergence is nevertheless visible. Across initiatives led by the United Nations, the OECD, the European Commission and national statistical offices, a shared conceptual structure is emerging. At its core lies a distinction between three interrelated dimensions: average wellbeing, the distribution of wellbeing, and the sustainability of wellbeing over time.

Average wellbeing refers to the material, social and environmental conditions shaping people's lived experience, including health, education, income security, environmental quality and subjective life evaluation (OECD, 2020a).

Distribution of wellbeing addresses inequalities across income groups, genders, generations, territories and countries. It recognises that aggregate progress can mask widening disparities, a concern increasingly central to both academic research and public debate (Chancel et al., 2022; Stiglitz et al., 2009).

Sustainability of wellbeing concerns whether the stocks of natural, human, social and economic capital underpinning quality of life are being maintained or depleted over time. This stock-based perspective resonates with wealth accounting approaches and planetary boundary frameworks (Dasgupta, 2021; Rockström et al., 2009).

The challenge is therefore no longer conceptual absence, but institutional consolidation. A central weakness of current wellbeing measurement is that it often remains at the level of dashboards detached from formal accounting systems. Indicators are published, yet they are not embedded within the statistical and data architecture that underpins macroeconomic governance. By contrast, GDP derives its authority from its anchoring in the System of National Accounts (SNA), which provides internationally agreed definitions, classifications and accounting identities (UN, 2008; forthcoming SNA revision 2025). The SNA ensures coherence between production, income, consumption and wealth statistics. This technical infrastructure gives GDP institutional durability and policy relevance.

If sustainable and inclusive wellbeing is to function as a genuine policy compass, it requires a comparable statistical and/or data foundation. This could encompass moving beyond indicator dashboards towards the development of wellbeing satellite accounts consistent with, but extending beyond, the SNA framework. The System of Environmental Economic Accounting (SEEA) already demonstrates how environmental assets and flows can be integrated alongside economic accounts in a statistically rigorous manner (UN et al., 2021). Similarly, Distributional National Accounts extend macroeconomic aggregates to reflect income and wealth distribution (Piketty, Saez and Zucman, 2018). Ongoing discussions within the United Nations' "Valuing What Counts" process and the High-Level Expert Group on Beyond GDP further underscore the need to strengthen measurement of human capital, unpaid work and broader wellbeing determinants.

A wellbeing account or data system structured around average wellbeing, inclusion and sustainability could draw on these existing advances while organising them within a coherent accounting and data logic. It would integrate environmental asset accounts, distributional income statistics, health and education accounts, and time-use data into a unified framework that clarifies trade-offs and synergies. Rather than presenting dozens of disconnected indicators, such an approach would enable policy makers to trace how economic activities translate into changes in wellbeing stocks and flows across population groups and over time. This move from ad hoc metrics to systemic accounts and data mirrors the argument developed in the WISE theoretical framework, which stresses that durable narrative change requires embedding new goals within technical infrastructure (Hoekstra et al., 2024).

This shift from measurement proliferation to statistical and data consolidation is not merely technical; it is institutional. Experience with policy indicators and evidence from institutional practice show that metrics gain political traction when they are embedded in accounting and statistical standards, incorporated into data production routines and referenced in governance frameworks. Without such institutional anchoring, wellbeing risks remaining rhetorically endorsed but structurally marginal to fiscal and economic decision making.

3.5 Lessons learned

Building from the content of this chapter and the academic studies and reports considered, Europe's wellbeing-oriented initiatives provide important insights into both the promise and the limits of current approaches.

First, clarity of purpose is decisive. Where wellbeing is articulated as the organising objective of governance (supported by statutory duties, long-term frameworks and independent oversight), it has greater influence on

policy continuity. Where it remains an auxiliary theme, its impact on fiscal and regulatory decisions is limited.

Second, wellbeing gains legitimacy when it translates into tangible improvements in everyday life. Affordable housing, clean mobility, accessible public services, energy security and healthy environments make the concept concrete. These are also areas where circular economy strategies can reinforce wellbeing by lowering material pressures while enhancing social outcomes.

Third, institutional embedding matters more than visibility. Dashboards and strategic declarations are important, but without integration into budgeting, procurement, fiscal co-ordination and regulatory design, wellbeing remains vulnerable to short-term political shifts.

Fourth, distributional design determines political durability. Transitions that reduce energy poverty, improve affordability and expand access to essential services strengthen public support for climate and resource policies. Measures that concentrate costs on vulnerable households undermine legitimacy.

Fifth, participation enhances both effectiveness and trust. Citizen assemblies, participatory budgeting and community-led initiatives improve alignment between policy and lived experience, strengthening long-term resilience.

Sixth, structural growth dependency remains a persistent constraint. Employment systems, public revenues and welfare financing are often tied to expectations of continuous expansion. Without reforms that address these dependencies, wellbeing frameworks risk operating within unchanged macroeconomic logics.

Finally, wellbeing is most operational when paired with concrete transformation pathways. Circular economy strategies (e.g. durability, re-use, repair, sufficiency and regenerative resource flows) provide practical mechanisms for reshaping the material foundations of wellbeing. When wellbeing defines the societal purpose and circularity reshapes provisioning systems, the two together offer a coherent pathway towards equitable wellbeing within planetary boundaries.

Taken together, these lessons suggest that Europe's wellbeing agenda has moved beyond rhetoric but has not yet reached structural consolidation. Its transformative potential depends on embedding wellbeing within economic governance while simultaneously redesigning the material systems that underpin daily life. Chapter 4 builds on this insight by presenting an integrated framework that connects material system redesign with measurable wellbeing outcomes, and by identifying policy levers capable of aligning circular economy strategies with broader social objectives.

4

Circular Economy and Wellbeing Economy Synergies

4.1 Synergies: Circularity with a social compass

Circular economy and wellbeing economy agendas are often described as if they belong to different policy families: one about materials, design and recycling, the other about fairness, participation and social foundations. This separation has shaped how each has advanced in practice. Circularity became the home of waste directives, eco-design rules and industrial strategies; wellbeing became the place for dashboards, participation experiments and alternative development plans.

Yet when these two conversations meet, something interesting happens: both reveal the missing half of their original ambitions. Circularity starts to look like a societal vision rather than a technical agenda, and wellbeing becomes more grounded to the material and resource base of production and consumption. Bringing them together does not create an additional policy theme. It reconnects two strands of thought that were never meant to be separate.

Circularity is therefore best understood not as a neutral efficiency mechanism but as a structuring force that redistributes risks, costs and benefits across societies. Decisions about design standards, ownership models, access, labour conditions and infrastructure determine who gains from circular transitions and who bears their burdens. Without explicit wellbeing orientation, circularity can optimise material loops while leaving underlying inequalities untouched.

A simple way to see this reconnection of circular economy and wellbeing economy is through table 1 and subsequently tables 2-5 in this chapter, which map the familiar nine circular "R-strategies" against the four wellbeing economy "P-principles": Pre-distribution, Purpose, Prevention and People-powered governance.

Together, the tables expose a pattern that has long remained implicit: circular strategies always carry social implications, even when this is not made explicit, and wellbeing principles always rely on how materials, products, services and infrastructures are designed and governed, even when this link is not highlighted. Far from being parallel agendas, the circular R-strategies and the wellbeing economy P-principles are already intertwined in practice, but the lack of an integrated narrative has kept this relationship fragmented and underused.

Table 1. Mapping of synergies between circular R-strategies and wellbeing economy P-principles .

		Pre-distribution	Purpose	Prevention	People-powered
BEFORE USE	Refuse		■	■	■
	Rethink	■	■		
	Reduce			■	■
DURING USE	Retain		■		■
	Reuse and share		■		■
	Repair		■		■
	Remanufacture	■		■	
AFTER USE	Recycle			■	
	Return			■	

Source: Author elaboration
Note: Green indicates strong synergies.

One clear touchpoint is at the level of existing material stocks (e.g. buildings, infrastructures and long-lived goods), which shape both circular opportunities and wellbeing. Because material stocks lock in patterns of energy use, mobility, housing quality and access to services over decades, they also form the potential structural interface between circularity and wellbeing. Policies that extend, adapt and share existing material stocks can generate immediate social benefits while avoiding additional extraction. How these stocks are designed, maintained, adapted and shared largely determines whether circular strategies translate into improved living conditions or merely higher material throughput.

Synergies "before use"

The most potentially wellbeing-related and impactful strategies of a circular economy are those applied before use (Refuse, Rethink and Reduce). These upstream strategies offer the strongest alignment with core wellbeing principles, specifically Purpose and Prevention, because they engage with material flows precisely at the critical moment of production and pre-production (see table 2). This phase is where circularity becomes a profound cultural and political choice rather than a mere technical fix.

Importantly, the relevance of these strategies is reinforced by the well-established contribution of demand-side solutions, including changes in lifestyles and consumption patterns. According to the Intergovernmental Panel on Climate Change, transformations in lifestyles and consumption behaviour could reduce global greenhouse gas emissions 40-70% by 2050 (IPCC, 2023), highlighting the systemic importance of reducing and rethinking consumption. Similarly, recent analysis by the Hot or Cool Institute emphasises that nature-positive lifestyles (such as lower material consumption, sustainable mobility and dietary shifts) can generate substantial environmental benefits while also supporting human wellbeing (Hot or Cool, 2026). The principle of Prevention is particularly powerful, encompassing not only measures to avoid negative environmental, climate and social impacts but also the active work of maintaining, retrofitting and adapting existing material stocks and infrastructures.

Fundamentally, Refuse, Rethink and Reduce represent the highest strategies for a circular economy centred on people's wellbeing. Refusing toxic, unused or unnecessary products, for instance, is more than an ecological measure; it is a direct act of harm prevention. For example, the successful, long-standing waste prevention programme in Flanders demonstrates

Table 2: Synergies before use (Refuse, Rethink, Reduce).

Circular Strategy	Synergies with Wellbeing Principles
Refuse	**Purpose & Prevention:** Aligning consumption to needs enhances smart, safe, and sustainable use of resources. Banning single-use or toxic items prevents harm to human health and nature. **People-powered:** Empowering citizens to co-develop, adopt, and mainstream sustainable norms redefines what is "necessary" for a good life.
Rethink	**Pre-distribution & Purpose:** Shifting from product sales to access models (sharing/leasing) creates value that serves human needs efficiently. Inclusive business models can democratise access to high-quality services, reducing the need for individual ownership.
Reduce	**Prevention & People-powered:** Producing less minimises externalities, directly protecting community health and ecosystems. When framed as "sufficiency", reduction empowers people to prioritise time and connection over accumulation.

Strategies that prioritise designing out waste and questioning necessity offer the strongest alignment with the wellbeing principles of Purpose and Prevention.

how "refuse" can shift from a consumer choice to a societal orientation: by tightening product standards, integrating sufficiency into procurement, and working across municipalities, the region moved circularity upstream, explicitly linking it to quality of life and affordability (EEA, 2016; OVAM, 2017). Such pro-active, upstream action removes harmful goods from circulation while reducing both financial and environmental stress on households.

Similarly, Rethink strategies, which include new shared ownership models, shared infrastructures, and co-operative platforms, actively work to democratise access, including to stocks that are already in place. Examples like Copenhagen's cargo bike sharing schemes and Helsinki's tool libraries show how rethinking mobility and household goods successfully redistributes value locally and builds participation (EIT Urban Mobility and CIE, 2025; Järvinen and Sinervo, 2020). These models go beyond simply reducing material throughput; they co-develop solutions through the active participation of local communities and institutionalise shared benefits for all.

Finally, the Reduce strategy, when framed as sufficiency rather than austerity, can cultivate healthier and more meaningful rhythms of living. In Finland, national debates on reducing the material footprint have pushed policy makers to articulate how reduced throughput can directly support time-rich living, better public services, and establish more stable, sustainable consumption expectations (Nuorivaara, Heikkinen and Laakso, 2025).

Synergies "during use"

Once products are in circulation, the synergies shift to those R-strategies that extend product life: Retain, Re-use, Repair, Remanufacture. These are labour-rich, care-oriented and relational. They depend on skills, trust and local infrastructures, making them particularly aligned with the wellbeing principles of People-powered and Pre-distribution (see table 3).

Examples across Europe illustrate this. Ljubljana's re-use centres combine environmental goals with inclusive employment, dignified consumer access and community participation (City of Ljubljana, 2022). France's repair bonus and the EU's emerging Right to Repair demonstrate how policy can turn everyday repair into a financially accessible practice that eases household budgets. Meanwhile, industrial remanufacturing in Sweden, such as Scania's gearbox remanufacturing, shows how mid-loop strategies can revitalise skilled industrial work, anchoring circularity within regional economies rather than outsourcing gains (Farazee et al., 2024; Meysner and Urios, 2022).

Table 3: Synergies during use (Retain, Re-use and share, Repair, Remanufacture).

Circular Strategy	Synergies with Wellbeing Principles
Retain	**Purpose & People-powered:** Extending product life deepens the relationship between user and product, fostering a culture of care and slowing down impulse buying and unnecessary consumption.
Re-use and share	**Pre-distribution & People-powered:** Community re-use hubs distribute value locally. These spaces build skills and social capital, transforming passive consumers into active participants.
Repair	**People-powered & Purpose:** Repair provides meaningful, skilled local employment. It empowers individuals with technical literacy and agency. Right-to-repair policies prevent waste while distributing economic opportunities.
Remanufacture	**Prevention & Pre-distribution:** Industrial refurbishment prevents resource extraction. It demands high-skill labour, potentially revitalising regional business bases and distributing value across the supply chain.

Strategies that extend product life are labour-intensive and community-oriented, offering strong alignment with Participation, People-ownership and Pre-distribution.

Table 4: Synergies after use (Recycle, Return).

Circular Strategy	Synergies with Wellbeing Principles
Recycle	**Prevention:** Closing material loops supports ecological integrity by reducing the need for virgin extraction. Worker wellbeing is a critical concern, especially in facilities handling hazardous materials; safe conditions and formalised jobs can prevent health risks. Well-regulated recycling plants reduce pollution burdens for neighbouring communities.
Return	**Prevention:** A return strategy prevents landfilling and incineration, acting as a final safety net for ecological health. Sorting and returning items (e.g., deposits) can foster environmental awareness and shared social practices at home. Properly regulated return systems protect workers in handling facilities and reduce pollution exposure for the communities where these sites are located.

Downstream strategies are essential for ecological integrity but offer narrower wellbeing benefits, primarily focused on Prevention. Their social value increases when labour conditions, community impacts and citizen participation are explicitly addressed.

These strategies deepen human–material relationships, shift value locally, and strengthen resilience, but they require supportive governance: equitable access to repair, fair labour conditions and transparent value chains.

Synergies "after use"

Downstream strategies, although less transformative, still play a crucial role in maintaining ecosystem health and ensuring responsible end-of-life management. Their wellbeing contributions emerge when governance addresses labour conditions, community impacts and citizen participation (see table 4).

Europe provides diverse examples. In the Netherlands, high-quality plastics recycling facilities integrate strict worker safety standards, ensuring that handling, sorting and processing hazardous fractions do not come at the expense of workers' physical wellbeing. Lithuania's national deposit-return scheme illustrates how return systems can foster everyday engagement: sorting bottles and cans has become a widely shared social practice that raises environmental awareness in households, including among children. In regions with heavy industrial pollution, investments in clean, well-regulated recycling infrastructure also reduce exposure for nearby communities.

When embedded in fair labour practices and community safeguards, downstream strategies can reinforce trust, reduce local pollution burdens and make responsible end-of-life behaviour accessible to all.

4.2 Risks and challenges: Circularity without a social compass

The scaling of circular economy strategies across Europe creates an important opportunity to ensure that implementation strengthens fairness and social inclusion. Without explicit attention to distributional effects, circular policies may jeopardise environmental and social goals (Pansera et al., 2024). These risks are particularly visible in how material stocks are managed.

Circular interventions that optimise material recovery without improving access to safe, affordable and adaptable housing, mobility or services can risk reinforcing existing inequalities while appearing environmentally progressive. In other words, the efficiency gains of circularity can be captured disproportionately by those already advantaged, while the burdens of transition, such as displacement, rising costs, or reduced service access, fall on more vulnerable groups.

This potential for unfairness is not theoretical, and it extends globally, for instance in re-use chains that export near-end-of-life electronics to Africa, exposing informal recycling workers to hazardous pollutants (Maes and Preston-Whyte, 2022). It also surfaces in subscription-based business models that require stable income and digital access (conditions not universally met) and can unintentionally create new forms of dependence rather than empowerment (Henriques, Figueiredo and Nunes, 2023).

Similarly, proprietary repair ecosystems can trap consumers in costly service channels, while weak labour standards in remanufacturing risk turning meaningful work into precarious employment (OECD, 2020b). Waste-to-energy contracts locking municipalities into high waste volumes further illustrate how circularity can conflict with sufficiency and wellbeing (Zero Waste Europe, 2020).

These examples illustrate why circular transitions benefit from explicit wellbeing safeguards that ensure that fairness, autonomy and ecological integrity are strengthened alongside resource efficiency.

The risks related to wellbeing that arise from circular strategies are outlined in table 5. They highlight that mid-loop strategies such as Retain and Remanufacture, while offering significant potential for reducing resource extraction, require explicit governance to ensure equitable access, fair labour conditions and distributed value creation.

Table 5: Risks related to wellbeing.

Circular Strategy	Risks Related to Wellbeing
Refuse	• Risk of exclusion if essential goods and services (e.g., fossil fuel mobility) are removed without affordable, accessible alternatives for vulnerable groups.
Rethink	• Sharing and subscription models can exclude those without digital access or steady incomes. • Risk of "rentier economy" where households perpetually pay for essential assets.
Reduce	• If framed as austerity, rather than as sufficiency that brings in multiple co-benefits, reduction can burden the poor while the wealthy buy their way out. • Risk of regressive impacts if public services do not expand to fill the gap.
Retain	• Risk of reinforcing unequal access if high-quality durable goods are retained primarily by higher-income groups, while lower-income households remain locked into low-quality, short-lived products. • Without inclusive access models, retention strategies may deepen material inequalities.
Re-use and share	• Global re-use chains often act as waste valves (waste colonialism), exporting near-end-of-life goods to countries with weak labour/environmental protection.
Repair	• High-cost, proprietary repair systems extract profit rather than empowering citizens. • "Repair deserts" may emerge in low-income areas where authorised service centeres are scarce.

Circular Strategy	Risks Related to Wellbeing
Remanufacture	• Risk of value concentration if remanufacturing is controlled by a limited number of firms, reducing local economic benefits. • Without labour and regional safeguards, remanufacturing may replicate precarious work conditions or exclude smaller actors from value chains. • In addition, remanufacturing processes can still require significant energy and material inputs; if not carefully designed, they may increase resource use compared to repair or retention strategies, limiting overall environmental and wellbeing gains.
Recycle	• Waste export to countries lacking safeguards leads to health crises. • Domestic manual sorting jobs can be low-wage and high-risk if labour standards are not rigorously enforced.
Return	• Energy recovery infrastructures (incineration) can lock municipalities into high-throughput systems, creating a disincentive for waste prevention and sufficiency policies.

Without a focus on fairness and dignity, circular strategies can reproduce linear inequalities.

Previous chapters have shown how very early circularity thinking centred on sufficiency, longevity and social equity. Over time, circularity shifted towards industrial optimisation and end-of-pipe recycling. A circularity grounded in sufficiency builds societal support and delivers immediate wellbeing gains: healthier environments and people, lower household stress, strengthened local economies and improved public services (Persson and Klintman, 2021). Reconnecting circularity to these roots ensures that upstream and mid-loop strategies remain at the heart of Europe's transition.

If circularity is to advance wellbeing at scale, it requires further characterisation of its strategies, and the introduction of new ones that explicitly address culture, labour, participation and economic distribution.

4.3 Reclaiming the social ambition of circularity

Circular economy and wellbeing economy agendas have long evolved in parallel, even though their objectives are deeply interconnected. Circular strategies already shape fairness, health, participation and quality of life through the way products are designed, accessed and used. The next phase of Europe's transition therefore lies not in demonstrating the relevance of this connection, but in operationalising it. Integrating wellbeing objectives into circular strategies allows policy makers to align resource efficiency with improvements in affordability, health, meaningful work and community resilience.

When framed as a strategy for improving people's lives within ecological limits, circularity regains its societal legitimacy and political resonance: not as a technical fix, but as a means to deliver stability, health, affordability and connection – in line with its holistic and systemic vision.

This reorientation changes the focus in the implementation of circularity. Instead of asking only how to maximise recycling rates or stimulate new markets, policy makers, business and citizens will also be asking: How do circular measures make housing more affordable, diets healthier, mobility more accessible, jobs more meaningful and communities more resilient? Once asked, these questions reshape how the circular R-strategies are prioritised and implemented.

Refuse becomes a public health and affordability measure, reducing exposure to harmful substances and lowering household costs.

Reduce becomes a shift from energy- and resource-intensive systems of production and consumption towards alternatives that provide access without excess (and within planetary boundaries).

Rethink becomes a governance and business model transition, not merely a design adjustment, in which sufficiency is a guiding principle of innovation.

Repair becomes part of a social infrastructure of care.

Re-use becomes a strategy for dignified access to quality goods, not a second-tier marketplace for those with fewer resources.

European experience confirms that linking circularity to everyday benefits strengthens political feasibility. When circularity is linked directly to wellbeing (e.g. less noise, cleaner air, lower bills, safer streets), upstream and sufficiency-focused interventions become politically feasible in ways they previously were not.

Reconnecting circularity with wellbeing also re-opens space for sufficiency, a concept foundational to early circular thinking but not politically central yet. Sufficiency need not imply restriction. It can be framed as freedom from wasteful spending, from planned obsolescence, from noise and pollution, and from the financial stress of constant replacement. Reframing sufficiency as an enabler of dignity, health and stability gives policy makers a powerful narrative tool.

Figure 7 outlines a pathway for bringing circularity back to its original, more comprehensive vision: a society that flourishes with lower material throughput by strengthening participation, dignity, purpose and ecological connection.

First, it illustrates a continuum of wellbeing potential across the circular R-strategies, with upstream and mid-loop strategies (Refuse, Rethink, Reduce, Re-use, Repair, Remanufacture) offering the deepest alignment with fairness, health and empowerment.

Second, it shows that misalignments emerge when circular strategies are implemented without attention to sufficiency, participation and equity, leading to the "linear circularity" described in chapter 2.

Taken together, the visual invites policy makers to see circularity not as a set of measures but as a pathway that requires both strong material policy and strong cultural and governance shifts.

4.4 Four new R-strategies for a circular wellbeing economy

The tables in this chapter show how traditional circular strategies can be shaped to address the deeper cultural, economic and political drivers of wellbeing. Certain structural conditions – especially GDP-oriented policy making, the concentration of corporate power, the cultural pull of consumerism, and the undervaluing of care, public goods and community – sit outside existing circular frameworks.

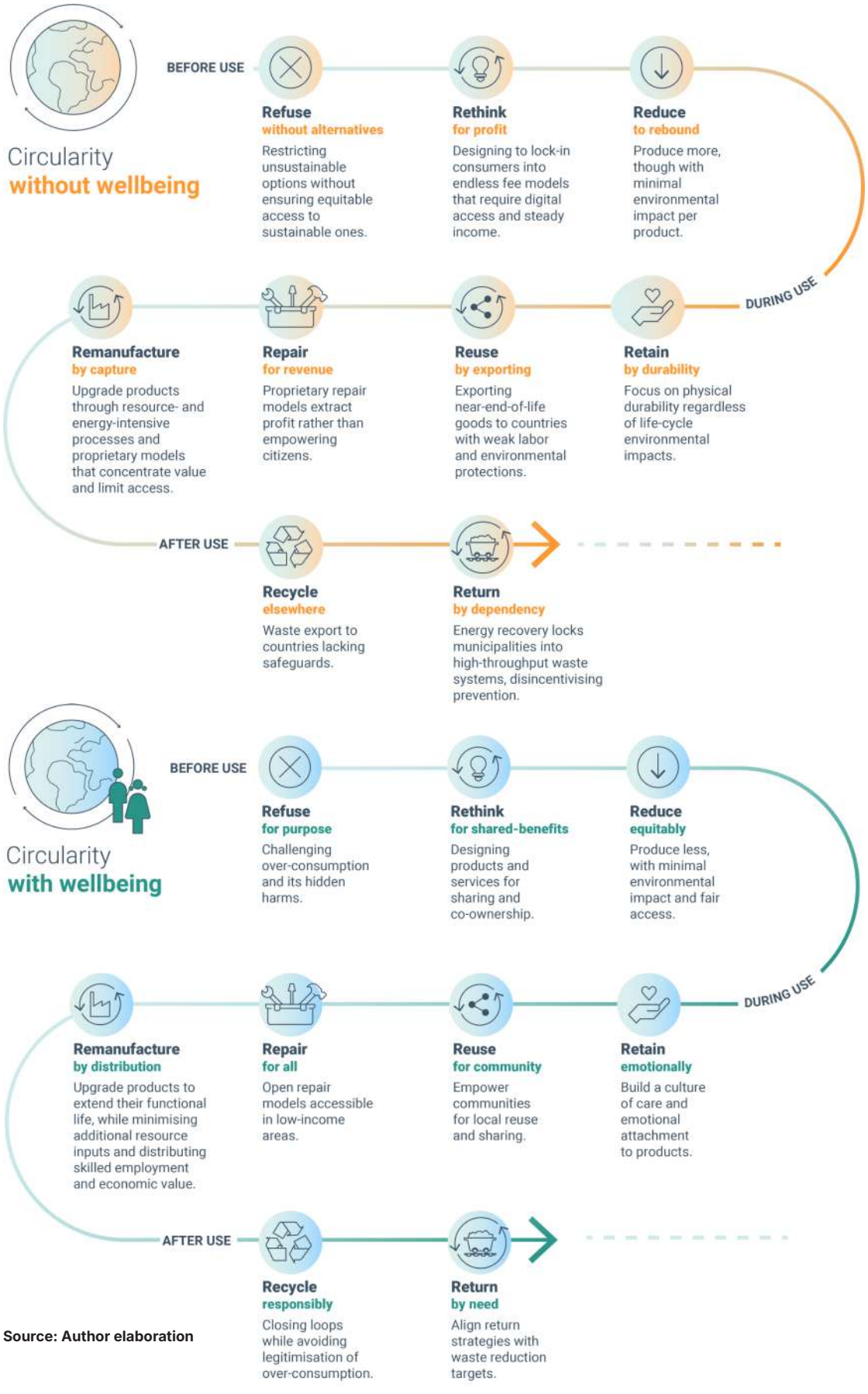
To address these gaps, this report introduces two new R-strategies (Reimagine and Retell) and adds two more (Relocalise and Reconnect) derived from broader reflection. These strategies extend circular thinking into the cultural and societal domains, where much of Europe's wellbeing potential remains locked. Together, these four new "Rs" provide a more complete toolkit for aligning circularity with prosperity and equity.

Reimagine: Reimagine captures the cultural and societal work needed to redefine what a good life means. It shifts aspirations from novelty and accumulation to care, connection, creativity and belonging. Cultural change is central to sufficiency, and Reimagine provides the narrative space where citizens can articulate what they value.

Retell: Retell deals with a different layer; not long-term cultural values, but the immediate communication environment that shapes everyday choices. It focuses on redirecting the advertising, marketing, social media and influencer narratives that currently fuel consumption. Europeans are exposed to thousands of commercial messages each day, most linking success, identity and aspiration with new purchases. By changing these signals (the cues, incentives and stories people encounter constantly), public communication and corporate norms can be shifted towards sufficiency, wellbeing and shared value. This strategy aligns with the wellbeing economy principles of Purpose and People-powered by giving people more control over the signals shaping their choices and reducing the behavioural pressure to consume.

Relocalise: Relocalise focuses on shortening supply chains and anchoring circular practices in specific places, reconnecting production with local communities and their surrounding ecosystems. Regional remanufacture clusters, local bio-based loops, co-operative re-use hubs and community composting networks illustrate how circular infrastructures can be physically rooted in local ecologies and economies. Relocalise supports belonging, resilience and place-based ecological connection.

Figure 7. Circularity without and with wellbeing.



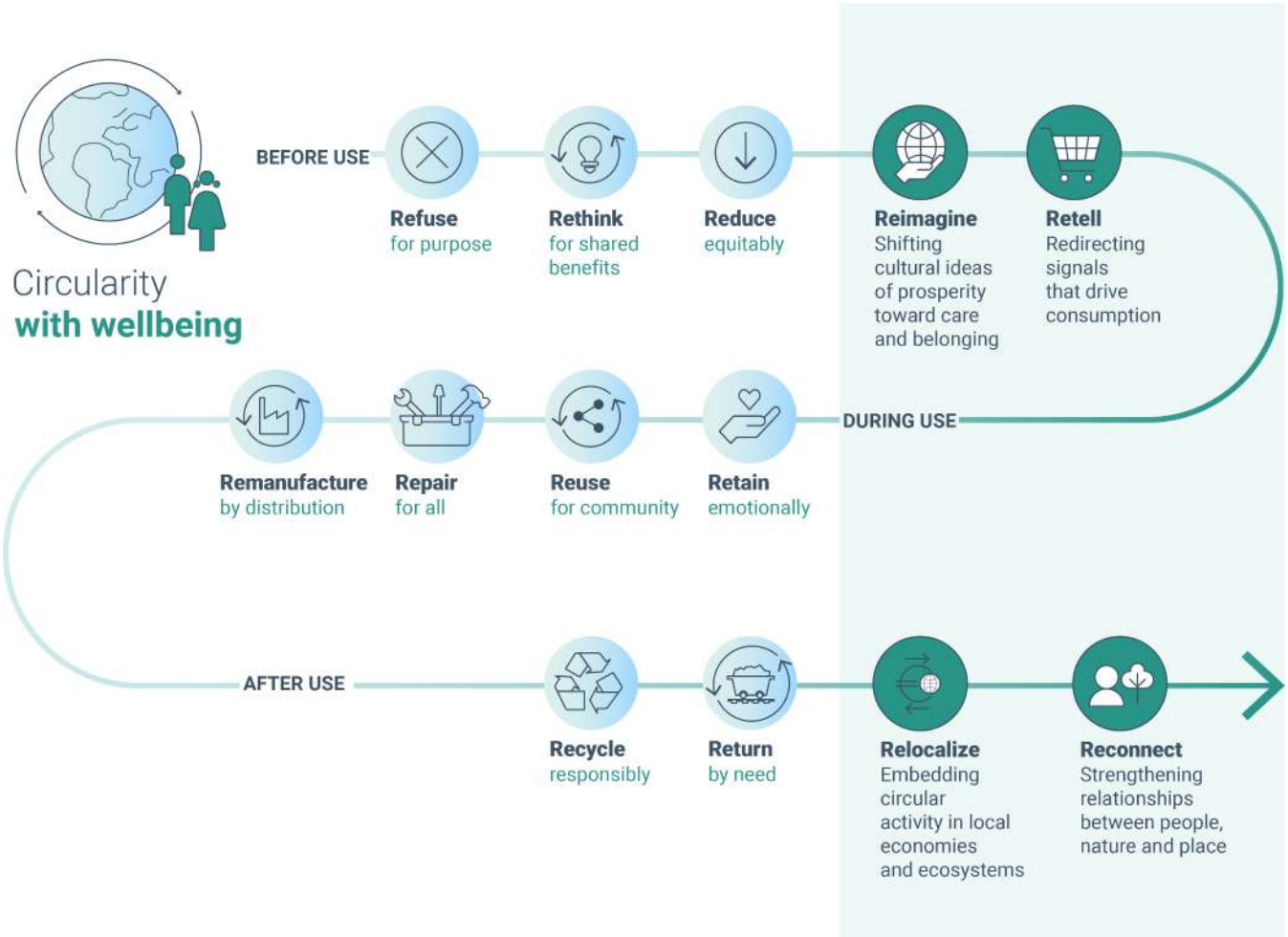
Source: Author elaboration

Reconnect: Reconnect emphasises intangible relationships between people, between people and nature, and between citizens and the cultures they inhabit. Eco-design schools, urban agroecology experiments and nature-positive circular agriculture are examples of Reconnect in action. This strategy fosters care, shared meaning and active environmental stewardship, complementing the place-based grounding of Relocalise.

Together, these new Rs, as illustrated in figure 8, enrich long-standing circular thinking by extending it into areas where wellbeing is formed: culture, identity, skill, power, governance and place.

Integrating circularity and wellbeing is both a narrative and a practical shift. When circular strategies prioritise health, stability, affordability and resilience, upstream and mid-loop interventions that embed participation, equity and sufficiency deliver the deepest impact. Grounding wellbeing in the material systems of daily life (infrastructures, product lifecycles and resource flows) makes the agenda concrete and actionable. The following chapter shows how integrated governance, fairness, sufficiency and an expanded set of R-strategies can turn circular ambitions into measurable social and ecological outcomes, demonstrating a viable pathway to a circular wellbeing economy.

Figure 8. New R-strategies to connect the circular economy and the wellbeing economy.



Source: Author elaboration

5

Ways Forward: From Alignment to Transformation

The preceding chapters demonstrated that circularity and wellbeing are structurally interdependent. The R-strategies direct material security access and allocation of economic value. The wellbeing principles clarify the direction in which circular transitions must be steered.

To move from theory to practice of advancing a circular wellbeing economy, six focus areas were identified by a high-level expert group convened by the European Environment Agency in January 2026. As can be seen in figure 9, policy and governance frameworks, academic research, measurement systems, practical experimentation by firms, citizens and local communities, along with Europe's role in the world each generate valuable insights. When these domains are connected through strong communication and movement building, they create a shared knowledge base capable of accelerating innovation, improving policy design and strengthening collective ownership of the transition.

5.1 Policy and governance

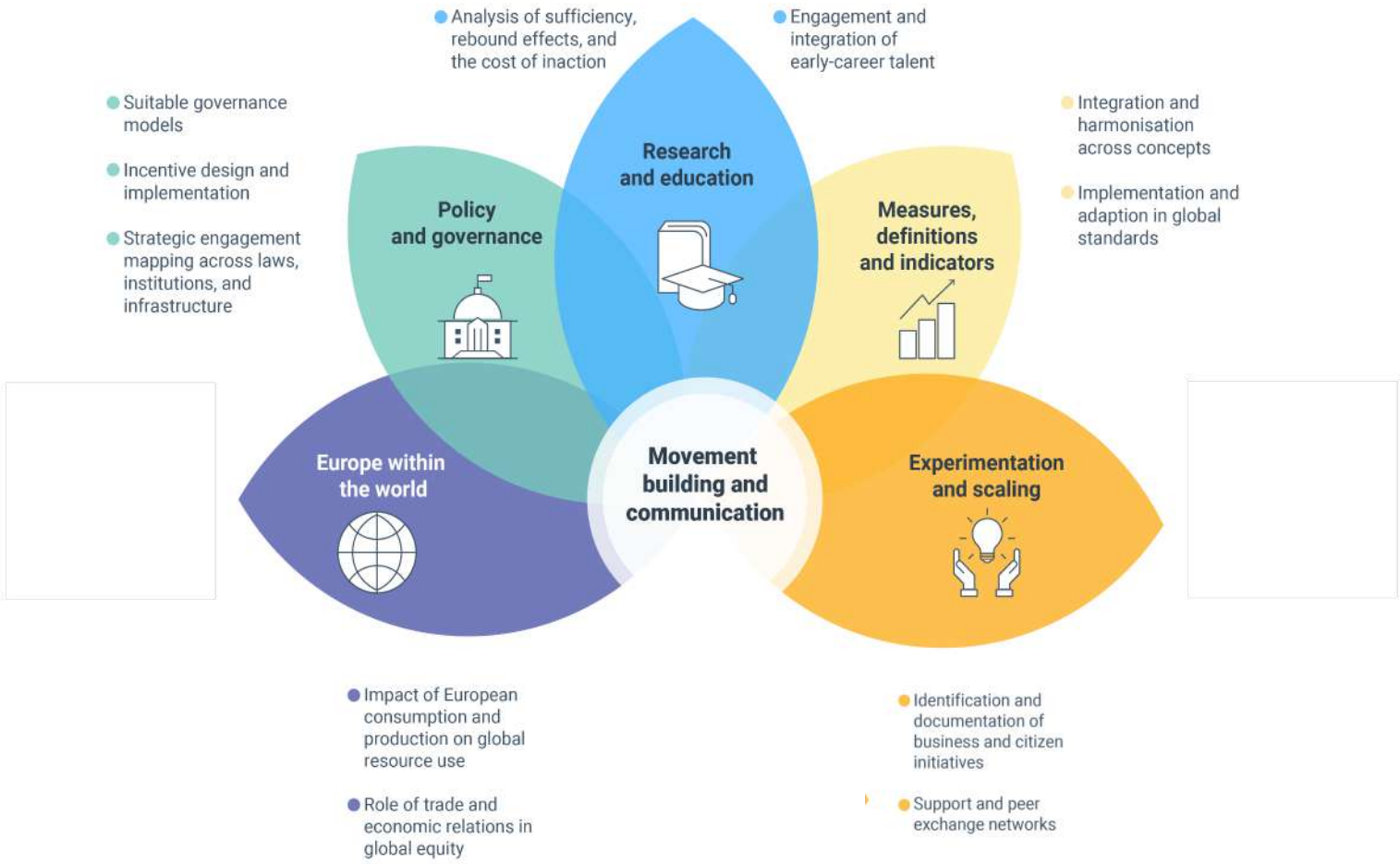
Institutional design and reform

A circular wellbeing economy requires reorienting governance itself. Rather than adding new regulatory layers, the priority is structural coherence: aligning fiscal systems, industrial strategy, social policy, and environmental and climate governance around long-term resource productivity and wellbeing outcomes. Circular advisory bodies and expert groups can incorporate wellbeing expertise so that design standards, extended producer responsibility schemes and infrastructure investments are assessed not only for technical efficiency, but also for social consequences.

Incentive alignment and implementation

Investment criteria, budgetary rules and macroeconomic co-ordination should reflect material

Figure 9: Identifying collective opportunities and sharing state-of-the-art knowledge.



Source: Author elaborat

demand reduction and distributional analysis. Strategies in support of circular business models should strengthen strategic autonomy while reinforcing social resilience. Social policy design can be linked to affordability measures, ensuring that material efficiency translates into lower household stress and improved access to essential goods and services.

Policy intelligence, engagement and co-ordination

To achieve the above, it is essential that proposals build on existing initiatives, address political priorities, and are synergetic with each other. For example, embedding "just transition" mechanisms including worker retraining, regional partnerships and participatory planning reinforces legitimacy and political durability. Aligning circular objectives with existing European frameworks reduces fragmentation and strengthens coherence across ministries and levels of governance. Embedding sufficiency and fairness within trade, procurement and regional development strategies ensures that circularity does not remain confined to environmental departments, and incorporating wellbeing considerations into corporate reporting broadens the definition of value creation beyond short-term financial performance.

5.2 Research and education

Analysis of sufficiency, rebound effects and the cost of inaction

Further investigation into rebound dynamics, distributional impacts and intergenerational assessment tools is essential, especially around the cost of inaction and sufficiency. Such research is most valuable when conducted in close collaboration with practitioners and policy makers, and when it focuses on practical implications and solutions.

Engagement and integration of early-career talent

Actively engaging early-career researchers and educators strengthens the pipeline of expertise needed to sustain long-term transformation. Universities, think tanks and statistical offices each play a critical role in attracting and retaining talent in this field to address the above- and below-mentioned conceptual and practical challenges.

5.3 Measures, definitions and indicators

Integration and harmonisation across concepts

Existing monitoring systems often track circularity and wellbeing separately, limiting strategic clarity. Shared definitions and interdisciplinary frameworks can reduce fragmentation between circular economy and wellbeing research. A coherent transition requires integrated indicators linking material flows with affordability, health impacts, employment quality, distributional effects and intergenerational fairness. Strengthening environmental and economic accounts alongside multi-dimensional wellbeing metrics enables systematic assessment of long-term trade-offs and rebound dynamics.

Implementation and adaptation in global standards

Integrating material flow analysis with income and wealth data improves understanding of concentrated consumption patterns and structural inequalities. Participation in international wellbeing measurement initiatives and the development of integrated reporting standards can anchor circular wellbeing principles within broader governance systems. Without shared indicators and metrics that capture both ecological integrity and human outcomes, policy remains fragmented and investment signals remain inconsistent.

5.4 Experimentation and scaling

Identification and documentation of business and citizen initiatives

Businesses across value chains, including manufacturers, service providers, small and medium-sized enterprises (SMEs), social enterprises and financial actors, are central to reshaping production systems, product design and service delivery. Proof-of-concept initiatives that demonstrably improve affordability, employment quality and environmental performance are particularly powerful, as tangible examples accelerate learning and build credibility with investors and policy makers. For example, local repair networks, co-operative housing models and shared mobility systems demonstrate that circular wellbeing is achievable at the community level.

Support and peer exchange networks

Pioneers working on circular and wellbeing-oriented initiatives often face similar barriers, such as regulatory uncertainty, limited access to finance, and insufficient institutional support, yet operate in isolation from one another. Establishing structured peer exchange networks would allow these frontrunners to share practical experience, learn from comparable contexts and collectively identify what enabling conditions are most needed. Public actors at the local, national and European level have a key role in providing that support, not by directing the agenda, but by creating the conditions in which experimentation can be sustained and scaled.

5.5 Europe within the world

Impact of European consumption and production on global resource use

Europe's material footprint remains globally distributed, and the region's consumption patterns continue to shape environmental, climate and social conditions elsewhere. Understanding where and how shifts in Europe's consumption have the most impact, and how the region's actions can be most beneficial to its global partners, is key.

Role of trade and economic relations in global equity

Embedding circular wellbeing principles within trade policy, development co-operation and international reporting frameworks strengthens coherence and prevents the externalisation of resource demand, pollution and labour risks to other regions. Supporting equitable value chains and shared wellbeing metrics anchors Europe's transition within a broader transformation. This approach aligns with the Sustainable Development Goals, particularly SDG 12 (Responsible Consumption and Production), SDG 10 (Reduced Inequalities) and SDG 3 (Good Health and Wellbeing), providing an integrated pathway to advance multiple goals simultaneously while reducing pressures on global resources and ecosystems.

A Europe that advances circular wellbeing domestically while contributing to global and intergenerational fairness enhances both legitimacy and resilience. The transition becomes not merely an internal reform project, but part of a wider effort to align material stewardship with shared prosperity across generations and regions.

5.6 Movement building and communication

Delivering on a circular wellbeing economy requires deliberate convergence across governments, businesses, civil society and research communities, operating across the domains illustrated in figure 9. Across all actor groups, convergence is not automatic. It requires institutional spaces, shared metrics and sustained co-ordination. When governance reform, business innovation, civic engagement and academic research reinforce one another, transformation gains political and economic traction.

Communication is decisive. Translating analytical frameworks into clear narratives and lived examples allows circular wellbeing concepts to resonate beyond expert communities, building a broader constituency for systemic change. Collaboration among circular economy advocates, wellbeing coalitions, climate justice movements and democratic renewal initiatives can create the conditions for sustained collective action. Civil society organisations, community networks, co-operatives and local initiatives bridge fragmented agendas and provide everyday evidence that alternative provisioning systems can enhance wellbeing.

6

Conclusions

Europe is entering a decisive moment for redefining how prosperity is created and sustained through its strong institutions, high levels of capacity, and social, climate and environmental leadership. Current economic and social trends highlight the opportunity to build on Europe's strengths through approaches that translate these capacities into durable wellbeing for citizens and resilience in an increasingly uncertain world. Resource dependencies, environmental and climate pressures, and social inequalities highlight the limits of models that rely primarily on expanding material throughput. These challenges also open an opportunity: to shape a development pathway that strengthens wellbeing while operating within ecological limits.

The circular economy agenda already offers one of the most promising foundations for such a shift. In recent years, circularity has evolved from a primarily environmental policy into a strategic pillar of European competitiveness, climate action and economic resilience. By reducing reliance on imported raw materials and making better use of existing resources, circular strategies can lower exposure to global supply disruptions and price volatility while supporting climate and biodiversity objectives. Europe has already built significant policy momentum in this area, and advances in recycling, resource productivity and innovation demonstrate that progress is possible.

The next phase of the transition is an opportunity to deepen this progress by expanding the focus from downstream efficiency towards the full lifecycle of production and consumption. Recycling and waste management remain important, but the greatest potential gains lie earlier in the system: in product design, provisioning systems and patterns of use. Strategies that prioritise durability, repairability, re-use and more efficient service provision can simultaneously reduce resource pressures and improve everyday life for citizens by lowering costs, extending product lifetimes and strengthening local economic activity. In this sense, circularity is not only about materials but about creating smarter, more resilient systems that deliver greater value from fewer resources.

One important lever in this transition lies in the management of existing material stocks. Europe's buildings, infrastructures and durable goods already embody the resources required to support high levels of wellbeing. Shifting policy and investment from expanding throughput to maintaining, adapting and optimising these stocks offers a pathway to reduce environmental pressures while improving affordability, access and resilience. This perspective, developed throughout the report, highlights that prosperity can increasingly be delivered through better use of what already exists rather than through additional resource extraction.

This report argues that the full potential of circularity emerges when it is connected to the principles of a wellbeing economy. A wellbeing economy places the quality of people's lives, social cohesion and ecological integrity at the centre of economic decision making. When these perspectives are combined, circularity becomes more than a technical strategy for managing resources; it becomes part of a broader societal project aimed at improving health, affordability, security and opportunity.

Linking circular strategies to tangible wellbeing outcomes can strengthen public support for transformation. Policies that enable access to durable and repairable goods, affordable housing, accessible mobility and healthier local environments demonstrate how resource efficiency can translate directly into improved living standards. By stabilising household costs, reducing exposure to resource price shocks and creating meaningful employment opportunities in repair, remanufacturing and local service sectors, circular solutions can contribute to greater economic security while supporting environmental objectives.

Evidence increasingly shows that such a pathway is both desirable and achievable. International comparisons indicate that high levels of wellbeing can be reached with significantly lower material footprints than those currently observed in many high-income economies. This suggests that improving quality of life and reducing resource pressures are not competing goals but mutually reinforcing ones. A focus on sufficiency, fairness and smarter resource use can therefore unlock new forms of prosperity that depend less on material expansion and more on innovation, co-operation and human capability.

Achieving this shift requires supportive economic frameworks that reward long-term value creation. Financial and regulatory environments can be strengthened to make circular business models easier to scale, addressing barriers such as high upfront investment costs or fragmented standards. Public procurement, industrial policy and innovation funding can provide stable demand signals for circular products and services, helping markets develop at the speed required by Europe's environmental and economic ambitions.

At the same time, Europe already possesses valuable social foundations for circularity that can be further mobilised. Community repair initiatives, sharing platforms and co-operative models illustrate how circular practices can emerge from social and business model innovation as well as technological change. Supporting these initiatives alongside digital

technologies can accelerate the transition while ensuring that its benefits reach diverse communities and regions.

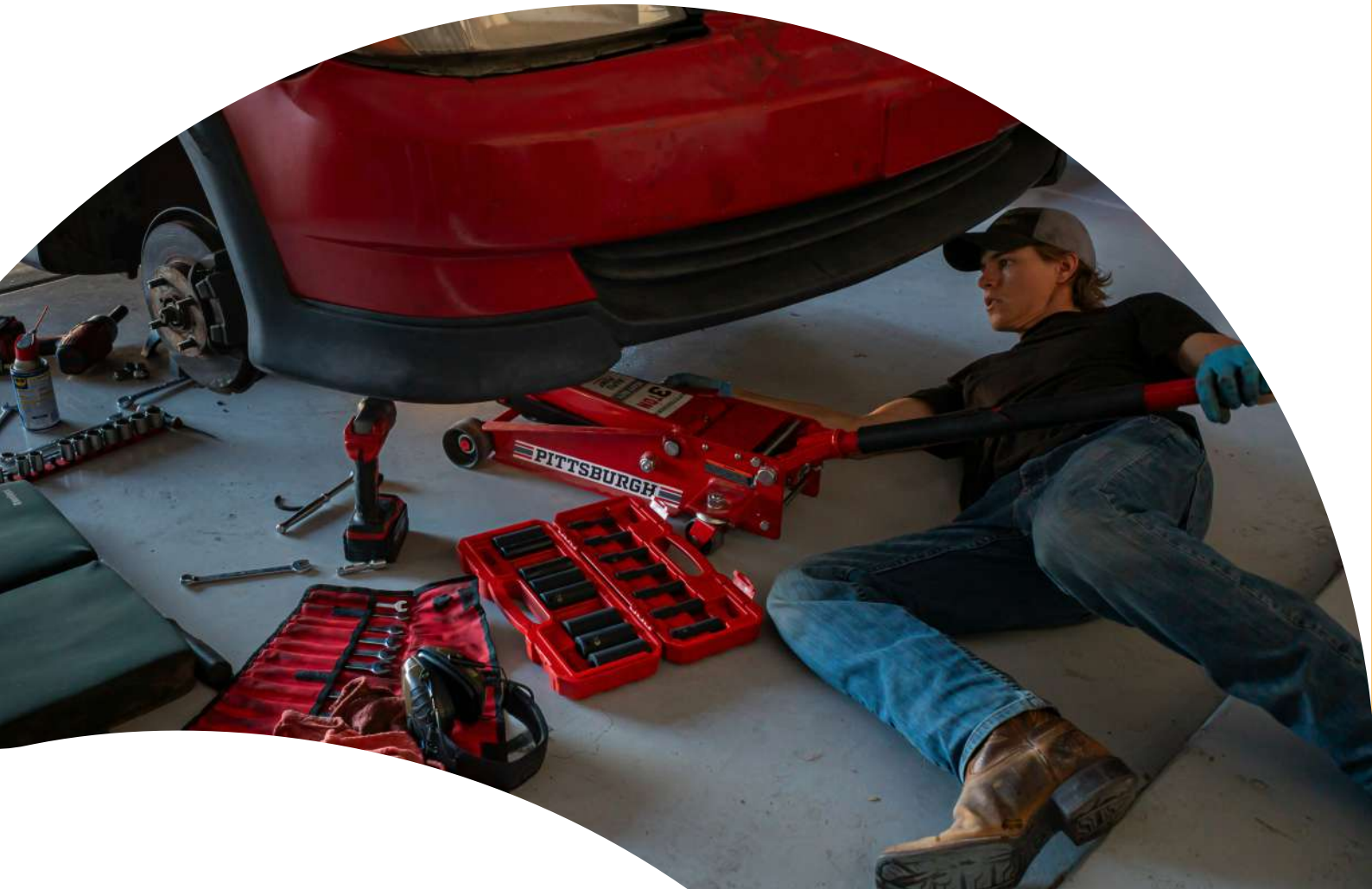
The wellbeing economy perspective also highlights the importance of embedding social objectives within economic governance. Fiscal and policy frameworks that prioritise preventive investment in health, education, environmental quality and social cohesion can generate long-term benefits that extend far beyond short-term economic indicators. Aligning taxation, public spending and regulatory systems with these goals can gradually shift incentives towards activities that strengthen human capabilities and ecological resilience.

Participation and transparency will be equally important. When citizens and communities are meaningfully involved in shaping economic priorities, policies are more likely to reflect lived realities and to build the trust needed for ambitious transformation. Inclusive governance therefore becomes a key asset in navigating the complex transitions ahead.

Bringing together circular and wellbeing perspectives then allows Europe to anticipate potential risks and design better safeguards. Ensuring that circular strategies promote fairness, avoid shifting environmental and climate burdens to more vulnerable regions and expand access to essential goods and services will help guarantee that the benefits of the transition are widely shared. When equity is embedded from the outset, circular policies can reinforce social cohesion while advancing environmental objectives.

Taken together, the circular economy and the wellbeing economy illuminate complementary dimensions of a renewed European development model. Circularity grounds economic activity in the physical realities of resource use and ecological limits. The wellbeing economy ensures that economic systems remain oriented towards human flourishing, fairness and opportunity. Their integration creates a coherent framework for navigating the challenges of the coming decades while strengthening Europe's resilience and strategic autonomy.

Europe is well positioned to lead this transformation. By aligning circular innovation with wellbeing objectives, the European Union can demonstrate how prosperity, competitiveness and environmental stewardship can reinforce one another. The result would be an economy that delivers greater security, healthier environments and improved quality of life while reducing pressures on the planet. Such a model would not only strengthen Europe's own future but also provide a compelling example of sustainable prosperity in an increasingly interconnected world. In doing so, it aligns European priorities with global sustainability objectives, demonstrating how circularity and wellbeing together can contribute to achieving sustainable development.



References

Abdallah, S., Barberà Mas, E. and Saujot, M. (2026), Unfulfilled Promises? The State of the Social Contract in the 21st Century, Hot or Cool Institute and IDDRI, https://hotorcool.org/wp-content/uploads/2026/01/Unfulfilled-Promises-Final-report.pdf.

Akenji, L. et al. (2021), 1.5-Degree Lifestyles: Towards a Fair Consumption Space for All, Hot or Cool Institute, Berlin, https://hotorcool.org/wp-content/uploads/2021/10/Hot_or_Cool_1_5_lifestyles_FULL_REPORT_AND_ANNEX_B.pdf.

Andrew, E. and Pigosso, D.C.A. (2024), "Multidisciplinary perspectives on rebound effects in sustainability: A systematic review", Journal of Cleaner Production, Vol. 470, p. 143366, https://doi.org/10.1016/j.jclepro.2024.143366.

Baldassarre, B. and Calabretta, G. (2024), "Why circular business models fail and what to do about it: A preliminary framework and lessons learned from a case in the European Union (EU)", Circular Economy and Sustainability, Vol. 4, pp. 123-148, https://doi.org/10.1007/s43615-023-00279-w.

BBSR (2022), "The potential of circular economy for rural development in Germany and Europe", Bundesinstitut für Bau-, Stadt- und Raumforschung, www.bbsr.bund.de/BBSR/EN/research/programs/region-gestalten/projects/2022/circular-economy/01-start.html.

Bertelsmann Stiftung (2024), Advancing the Circular Economy in Germany and the EU: Policies, Perspectives and Pathways, Gütersloh, www.bertelsmann-stiftung.de/fileadmin/files/user_upload/Advancing_Circular_Economy_in_Germany_and_EU.pdf.

Calisto Friant, M., Vermeulen, W.J.V. and Salomone, R. (2024), "Transition to a sustainable circular society: More than just resource efficiency", Circular Economy and Sustainability, Vol. 4, pp. 23-42, https://doi.org/10.1007/s43615-023-00272-3.

Carrara, S. et al. (2023), Supply Chain Analysis and Material Demand Forecast in Strategic Technologies and Sectors in the EU: A Foresight Study, Joint Research Centre of the European Commission, Publications Office of the European Union, Luxembourg, https://dx.doi.org/10.2760/386650.

Chancel, L. et al. (2022), World Inequality Report 2022, World Inequality Lab, Paris, https://wir2022.wid.world/www-site/uploads/2023/03/D_FINAL_WIL_RIM_RAPPORT_2303.pdf.

City of Ljubljana (2022), Circular Economy Strategy, www.ljubljana.si/assets/Uploads/CE-STRATEGY-LJUBLJANA.pdf.

Coscieme, L. et al. (2022), "A framework of circular business models for fashion and textiles: The role of business-model, technical, and social innovation", Sustainability: Science, Practice and Policy, Vol. 18/1, pp. 451-462, https://doi.org/10.1080/15487733.2022.2083792.

Council of the European Union (2019) The Economy of Wellbeing Council Conclusions 13432/19 https://data.consilium.europa.eu/doc/document/ST-13432-2019-INIT/en/pdf

Crippa, M. et al. (2019), A Circular Economy for Plastics: Insights from Research and Innovation to Inform Policy and Funding Decisions, European Commission, Brussels, www.hbm4eu.eu/wp-content/uploads/2019/03/2019_RI_Report_A-circular-economy-for-plastics.pdf.

Dasgupta, P. (2021), The Economics of Biodiversity: The Dasgupta Review, HM Treasury, London, https://assets.publishing.service.gov.uk/media/602e92b2e90e07660f807b47/The_Economics_of_Biodiversity_The_Dasgupta_Review_Full_Report.pdf.

Decision (EU) 2022/591 of the European Parliament and of the Council of 6 April 2022 on a General Union Environment Action Programme to 2030.

Di Francesco, E. and Schluep, M. (2026), Boundless Innovation, Within Planetary Boundaries: A Call for Sufficiency-Driven Innovation, World Resources Forum, Winterthur, www.wrforum.org/wp-content/uploads/2026/03/Sufficiency-Driven-Innovation_WRF-Position-Paper.pdf.

Dowell, M. et al. (2025), Earth Observation in Support of EU Policies for Urban Climate Adaptation, Joint Research Centre of the European Commission, Publications Office of the European Union, Luxembourg, https://publications.jrc.ec.europa.eu/repository/bitstream/JRC140369/JRC140369_01.pdf.

Durand, M. (2015), "The OECD Better Life Initiative: How's Life? and the measurement of well-being", Review of Income and Wealth, Vol. 61/1, pp. 4-17, https://doi.org/10.1111/roiw.12156.

EC (2020a), Critical Raw Materials for Strategic Technologies and Sectors in the EU – A Foresight Study, European Commission Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs, Publications Office of the European Union,

Luxembourg, https://data.europa.eu/doi/10.2873/58081.

EC (2020b), A New Circular Economy Action Plan for a cleaner and more competitive Europe, European Commission, Brussels, 11 March, https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1583933814386&uri=COM:2020:98:FIN.

EC (2023) Eurobarometer, Survey Spring 2023, https://europa.eu/eurobarometer/surveys/detail/3187.

EC (2024) Eurobarometer "Attitudes of Europeans towards the environment", European Union, May, https://europa.eu/eurobarometer/surveys/detail/3173.

EC (2025a), A Competitiveness Compass for the EU, Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions, European Commission, Brussels, https://commission.europa.eu/document/download/10017eb1-4722-4333-add2-e0ed18105a34_en.

EC (2025b), European Economic Forecast Autumn 2025, European Commission Directorate-General for Economic and Financial Affairs, Brussels, https://economy-finance.ec.europa.eu/document/download/34538512-fff6-451a-8bbc-4c8d60e4d132_en?filename=ip327_en.pdf.

EEA (2016), "Waste prevention programme: Belgium, Flanders Region", fact sheet, European Environment Agency, Brussels, October.

EEA (2018), Unequal Exposure and Unequal Impacts: Social Vulnerability to Air Pollution, Noise and Extreme Temperatures in Europe, EEA Report No. 22/2018, European Environment Agency, Copenhagen, www.eea.europa.eu/en/analysis/publications/unequal-exposure-and-unequal-impacts.

EEA (2020), Is Europe Living Within the Limits of Our Planet? EEA Report No. 1/2020, European Environment Agency, Copenhagen, www.eea.europa.eu/en/analysis/publications/is-europe-living-within-the-planets-limits/is-europe-living-within-the-planets-limits/@@download/file.

EEA (2022), "Textiles and the environment: The role of design in Europe's circular economy", European Environment Agency, www.eea.europa.eu/en/analysis/publications/textiles-and-the-environment-the-role-of-design-in-europes-circular-economy-1.

EEA (2023a), "Europe's material footprint", European Environment Agency, www.eea.europa.eu/en/analysis/indicators/europes-material-footprint.

EEA (2023b), European Union 8th Environment Action Programme: Monitoring Report on Progress Towards the 8th EAP Objectives 2023 Edition, EEA Report 11/2023, European Environment Agency, Copenhagen, www.eea.europa.eu/en/analysis/publications/european-union-8th-environment-action-programme.

EEA (2024a), "Europe's circular economy in facts and figures", European Environment Agency, www.eea.europa.eu/en/analysis/publications/europes-circular-economy-in-facts.

EEA (2024b), Accelerating the Circular Economy in Europe: State and Outlook 2024, EEA Report No. 13/2023, European Environment Agency, Copenhagen, www.eea.europa.eu/en/analysis/publications/accelerating-the-circular-economy.

EEA (2024c), "From data to decisions: material footprints in European policy making", European Environment Agency, www.eea.europa.eu/en/analysis/publications/material-footprints-in-european-policy-making.

EEA (2024d), "Turnover in the repair sector", chart (interactive), European Environment Agency, Copenhagen, modified 8 May 2025.

EEA (2024e), "Delivering justice in sustainability transitions", European Environment Agency, www.eea.europa.eu/en/analysis/publications/delivering-justice-in-sustainability-transitions.

EEA (2025), "Circular material use rate in Europe", EEA Indicator, European Environment Agency, Copenhagen, published 28 November 2025. https://www.eea.europa.eu/en/analysis/indicators/circular-material-use-rate-in-europe

EEA (2026), Scaling of Circular Business Models in Europe's Circular Economy, ETC CE Report 2026/3, European Environment Agency, Copenhagen, https://www.eionet.europa.eu/etcs/etc-ce/products/etc-ce-report-2026-3-scaling-of-circular-business-models-in-europes-circular-economy.

EIT Urban Mobility and CIE (2025), Return on Investment in Bike Sharing Schemes, EIT Urban Mobility and Cycling Industries Europe, www.eiturbanmobility.eu/wp-content/uploads/2025/10/ROI-in-bike-sharing-schemes_Final-report-_ENGL.pdf.

European Parliament (2026), "Circular Economy Act", Briefing PE 782.628, Brussels, January, www.europarl.

europa.eu/thinktank/en/document/EPRS_BRI(2026)782628.[1].

EuroHealthNet (2024), A European Semester for the Wellbeing of People and the Planet: Is the Semester Delivering a Wellbeing Economy? https://eurohealthnet.eu/wp-content/uploads/publications/2024/241210_europeansemesterreport.pdf.

Eurostat (2024), "Material flow accounts and resource productivity", Statistics Explained, European Commission, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Material_flow_accounts_and_resource_productivity.

Eurostat (2025a), "Circular material use rate", European Commission, https://ec.europa.eu/eurostat/databrowser/view/cei_srm030/default/table.

Eurostat (2025b), "Living conditions in Europe – material deprivation and economic strain", Statistics Explained, European Commission, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Living_conditions_in_Europe_-_material_deprivation_and_economic_strain.

Fanning, A.L. et al. (2022), "The social shortfall and ecological overshoot of nations", Nature Sustainability, Vol. 5, pp. 26-36, https://doi.org/10.1038/s41893-021-00799-z.

Farazee, A. et al. (2024), Feasibility Study of Integrating Remanufactured Gearboxes in Production Lines of New Trucks (iReGear), KTH Royal Institute of Technology, Stockholm, https://kth.diva-portal.org/smash/get/diva2:1903711/FULLTEXT01.pdf.

Freemark, Y. (2024), "How cities can use Paris as a model for implementing safer street infrastructure", Urban Institute, www.urban.org/urban-wire/how-cities-can-use-paris-model-implementing-safer-street-infrastructure.

Galli, A. et al. (2023), "EU-27 ecological footprint was primarily driven by food consumption and exceeded regional biocapacity from 2004 to 2014", Nature Food, Vol. 4, pp. 810-822, https://doi.org/10.1038/s43016-023-00843-5.

Guzzo, D. et al. (2025), Towards the Prevention of Rebound Effects in Europe and Beyond: Insights for Policymaking, Joint Research Centre of the European Commission and Denmark Technical University, Brussels, https://publications.jrc.ec.europa.eu/repository/bitstream/JRC138704/JRC138704_01.pdf.

Hayden. (2024), "The wellbeing economy in practice: sustainable and inclusive growth? Or a post-growth breakthrough?", Humanities and Social Sciences Communications. 11. 10.1057/s41599-024-03385-8.

Hayden and Dasilva (2022), "The wellbeing economy: Possibilities and limits in bringing sufficiency from the margins into the mainstream", Front. Sustain, Vol. 3 https://doi.org/10.3389/frsus.2022.966876

Henriques, R., Figueiredo, F. and Nunes, J. (2023), "Product-services for a resource-efficient and circular economy", Sustainability, Vol. 15/5, p. 12077, https://doi.org/10.3390/su151512077.

HMD. Human Mortality Database. Max Planck Institute for Demographic Research (Germany), University of California, Berkeley (USA), and French Institute for Demographic Studies (France). Available at www.mortality.org.

Hobson, K. and Lynch, N. (2016), "Diversifying and de-growing the circular economy: Radical social transformation in a resource-scarce world", Futures, Vol. 82, pp. 15-25, https://doi.org/10.1016/j.futures.2016.05.012.

Hoekstra, R. et al. (2024), Tilting the Scale: A Theoretical Framework to Re-Direct Public Policy Away from Economic Growth Towards Sustainable and Inclusive Wellbeing, WISE Horizons, https://wisehorizons.world/cms/wp-content/uploads/2023/09/WISE_Horizons_Tilting_the_Scale_Full_Report.pdf.

Hot or Cool (2025), A Climate for Sufficiency: 1.5-Degree Lifestyles Report (2025 Update), Hot or Cool Institute, Berlin, https://hotorcool.org/wp-content/uploads/2025/10/A_Climate_for_Sufficiency_report_FULL_REPORT-1.pdf.

Hot or Cool (2026), Nature-Positive Lifestyles: Unlocking Opportunities for People and Planet, Hot or Cool Institute, Berlin, https://hotorcool.org/wp-content/uploads/2026/03/Nature-Positive-Lifestyles_Full-Report.pdf.

ICLEI (2024), Circular Cities Declaration Report 2024, ICLEI–Local Governments for Sustainability, https://e-library.iclei.org/uploads/CCD-Report-2024-FINAL-compressed.pdf.

IEA (2022), Solar PV Global Supply Chains, International Energy Agency, Paris, www.iea.org/reports/solar-pv-global-supply-chains, Licence: CC BY 4.0.

Insee (2022), "One third of the European Union's carbon footprint is due to its imports", Insee Analyses No. 74, July, www.insee.fr/en/statistiques/6478761.

IPCC (2023), Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, H. Lee and J. Romero (eds.)], Geneva, pp. 35-115, www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_FullVolume.pdf.

Jackson (2020), Wellbeing Matters—Tackling growth dependency, CUSP, https://cusp.ac.uk/themes/appg/briefing-paper-no3/

Järvinen, L. and Sinervo, R. (2020), How to Create a National Circular Economy Road Map, Sitra Studies 170, Sitra, Helsinki, www.sitra.fi/wp-content/uploads/2020/09/how-to-create-a-national-circular-economy-road-map.pdf.

Kirchherr, J. et al. (2023), "Conceptualizing the circular economy (revisited)", Resources, Conservation and Recycling, Vol. 194, p. 107001, https://doi.org/10.1016/j.resconrec.2023.107001.

Koretskaya and Grosenbaugh. (2020) Wellbeing Business: 8 ways that businesses are challenging the corporate mindset to ensure social and ecological wellbeing for all. Wellbeing Economy Alliance. https://weall.org/wp-content/uploads/WeAll-BRIEFINGS-Wellbeing-Business-def.pdf

Maes, T. and Preston-Whyte, F. (2022), "E-waste it wisely: Lessons from Africa", SN Applied Sciences, Vol. 472, https://doi.org/10.1007/s42452-022-04962-9.

Mason, N., & Büchs, M. (2023), "Barriers to adopting wellbeing-economy narratives: comparing the Wellbeing Economy Alliance and Wellbeing Economy Governments". Sustainability: Science, Practice and Policy, 19(1). https://doi.org/10.1080/15487733.2023.2222624

McCartney et al. (2023) McCartney G, Hensher M, Trebeck K. (2023) "How to measure progress towards a wellbeing economy: distinguishing genuine advances from 'window dressing'". Public Health Research & Practice 33, e3322309. https://doi.org/10.17061/phrp3322309

Meyer, K. and Molnár, M. (2024), "A comprehensive overview of the current repair incentive systems: Repair funds and vouchers", Right to Repair, 12 February, https://repair.eu/news/a-comprehensive-overview-of-the-current-repair-incentive-systems-repair-funds-and-vouchers.

Meysner, A. and Urios, J. (2022), The Right to Repair, Institute for European Environmental Policy, Brussels, https://ieep.eu/wp-content/uploads/2022/12/Policy-brief_The-right-to-repair_IEEP-2022.pdf.

Mizrachi, M.P. and Sharon, O. (2025), "Secondhand fashion consumers exhibit fast fashion behaviors despite sustainability narratives", Scientific Reports, Vol. 15/34968, https://doi.org/10.1038/s41598-025-19089-1.

Nuorivaara, E., Heikkinen, M. and Laakso, S. (2025), Acceptability of Sufficiency Consumption Policies by Finnish Citizens, University of Helsinki.

OECD (2019) "The economy of well-being: Creating opportunities for people's well-being and economic growth", OECD Statistics Working Papers 2019/02. https://dx.doi.org/10.1787/498e9bc7-en

OECD (2020a), How's Life? 2020: Measuring Well-Being, Organisation for Economic Co-operation and Development, Paris, www.oecd.org/content/dam/oecd/en/publications/reports/2020/03/how-s-life-2020_b547d82c/9870c393-en.pdf.

OECD (2020b), Green Jobs and Skills: The Local Dimension of Green Job Creation, Organisation for Economic Co-operation and Development, Paris.

OECD (2021), The Inequalities-Environment Nexus: Towards a People-Centred Green Transition, Organisation for Economic Co-operation and Development, Paris, www.oecd.org/content/dam/oecd/en/publications/reports/2021/03/the-inequalities-environment-nexus_858891e9/ca9d8479-en.pdf.

OECD (2025), "Resource efficiency and circular economy", Organisation for Economic Co-operation and Development, www.oecd.org/en/topics/resource-efficiency-and-circular-economy.html.

OECD WISE (2024). 'How's Life? 2024: Well-being and resilience in times of crisis. Key findings' Presentation. Retrieved on November 10, 2025 from https://www.slideshare.net/slideshow/how-is-life-2024-well-being-and-resilience-in-times-of-crisis-key-findings-pdf/27323965

O'Neill, D.W. et al. (2018), "A good life for all within planetary boundaries", Nature Sustainability, Vol. 1, pp. 88-95, https://doi.org/10.1038/s41893-018-0021-4.

Ortega Alvarado, I.A. and Pettersen, I.N. (2024), "The role given to citizens in shaping a circular city", Urban Geography, Vol. 45/4, pp. 611-630, https://doi.org/10.1080/02723638.2023.2221097.

OVAM (2017), Implementation Plan for Household Waste and Comparable Industrial Waste, Mechelen,

https://ovam-english.vlaanderen.be/implementation-plan-for-household-waste-and-comparable-industrial-waste.

Pansera, M. et al. (2024), "Toward a just circular economy", Sustainability: Science, Practice and Policy, Vol. 20/1, https://doi.org/10.1080/15487733.2024.2338592.

Pauliuk, S. and Müller, D.B. (2014), "The role of in-use stocks in the social metabolism and in climate change mitigation", Global Environmental Change, Vol. 24 (January), pp. 132-142, https://doi.org/10.1016/j.gloenvcha.2013.11.006.

Persson, O. and Klintman, M. (2021), "Framing sufficiency: Strategies of environmental non-governmental organisations towards reduced material consumption", Journal of Consumer Culture, Vol. 22/2, https://doi.org/10.1177/1469540521990857.

Piketty, T., Saez, E. and Zucman, G. (2018), "Distributional National Accounts: Methods and estimates for the United States", The Quarterly Journal of Economics, Vol. 133/2, pp. 553-609, https://gabriel-zucman.eu/files/PSZ2018QJE.pdf.

Potting, J. et al. (2017), Circular Economy: Measuring Innovation in the Product Chain, PBL Netherlands Assessment Agency, The Hague.

Raworth (2017), A Doughnut for the Anthropocene: humanity's compass in the 21st century, The Lancet Planetary Health, Volume 1, Issue 2, 2017, Pages e48-e49, ISSN 2542-5196, https://doi.org/10.1016/S2542-5196(17)30028-1.

Reboundless.eu (n.d) https://reboundless.eu/

Riley, J. C. (2005). Estimates of Regional and Global Life Expectancy, 1800–2001. Population and Development Review, 31(3), 537–543. https://doi.org/10.1111/j.1728-4457.2005.00083.x

Rockström, J. et al. (2009), "A safe operating space for humanity", Nature, Vol. 461, pp. 472-475, https://doi.org/10.1038/461472a.

Rum, I. et al. (2023), Are Beyond-GDP Metrics Converging? Consolidation of the Measurement of Sustainable and Inclusive Wellbeing, MERGE, https://mergeproject.eu/publications-consolidation-metrics.

Silvi, M. and Bleys, B. (2024), Public Support for Beyond GDP Indicators and Policy Frameworks in the European Union, MERGE, https://mergeproject.eu/wp-content/uploads/2025/04/MERGE-Policy-Brief.pdf.

Stiglitz, J.E., Sen, A. and Fitoussi, J.-P. (2009), Report by the Commission on the Measurement of Economic Performance and Social Progress, Paris, https://ec.europa.eu/eurostat/documents/8131721/8131772/Stiglitz-Sen-Fitoussi-Commission-report.pdf.

Suárez-Eiroa, B. (2025), "The social importance of researching action-oriented circular futures, Journal of Circular Economy, Vol. 3/1, https://doi.org/10.55845/OYKZ1486.

Trebeck, K. (2024), Getting Wellbeing Economy Ideas on the Policy Table: Theory, Reality, Pushback and Next Steps, Club of Rome and Earth4All, www.clubofrome.org/wp-content/uploads/2024/01/Earth4All_Deep_Dive_Trebeck.pdf.

UN (2008), System of National Accounts 2008, United Nations, New York, https://unstats.un.org/unsd/nationalaccount/docs/sna2008.pdf.

UN et al. (2021), System of Environmental-Economic Accounting: Ecosystem Accounting, United Nations, European Commission, Food and Agriculture Organization of the United Nations, International Monetary Fund, Organisation for Economic Co-operation and Development, and World Bank, New York, https://seea.un.org/sites/seea.un.org/files/documents/EA/seea_ea_f124_web_12dec24.pdf.

UN et al. (2025), System of National Accounts 2025, United Nations, New York, https://unstats.un.org/unsd/nationalaccount/docs/2025_SNA_Pre-edit.pdf

UNDESA (2024). World Population Prospects 2024, United Nations, Department of Economic and Social Affairs, Population Division. Online Edition.

UNDESA (2025), The Sustainable Development Goals Report 2025, United Nations Department of Economic and Social Affairs, New York, https://unstats.un.org/sdgs/report/2025/The-Sustainable-Development-Goals-Report-2025.pdf.

UNDP (2025), Human Development Report 2025 – A Matter of Choice: People and Possibilities in the Age of AI, United Nations Development Programme, New York, https://hdr.undp.org/system/files/documents/global-report-document/hdr2025reporten.pdf.

UNEP (2016), Global Material Flows and Resource Productivity: Assessment Report for the UNEP International Resource Panel, United Nations Environment Programme International Resource Panel, Paris, https://wedocs.unep.org/bitstreams/1b9afef6-963d-4aa8-b2b6-cc7b997cbd03/download.

UNEP (2023), Inclusive Wealth Report 2023: Measuring Sustainability and Equity, United Nations Environment Programme, Nairobi, https://wedocs.unep.org/bitstreams/da6e6162-9a9c-4d3b-b9b7-3676cc9808df/download.

UNEP (2024), Global Resources Outlook 2024 – Bend the Trend: Pathways to a Liveable Planet as Resource Use Spikes, United Nations Environment Programme International Resource Panel, Nairobi, https://wedocs.unep.org/bitstreams/d196c011-a90e-4fe3-b249-e3204a2ded4a/download.

WEAll (2021), Wellbeing Economy Policy Design Guide, Wellbeing Economy Alliance, https://weall.org/wp-content/uploads/Wellbeing-Economy-Policy-Design-Guide_Mar17_FINAL-1.pdf.

Wilkinson, R.G. and Pickett, K.E. (2024), "Why the world cannot afford the rich", Nature, Vol. 627/8003, pp. 268-270, https://doi.org/10.1038/d41586-024-00723-3.

World Bank (2024), The Changing Wealth of Nations 2024: Revisiting the Measurement of Comprehensive Wealth (English), Washington, D.C., http://documents.worldbank.org/curated/en/099100824155021548.

WWF (2021), Stepping Up: The Continuing Impact of EU Consumption on Nature, WWF European Policy Office, Brussels, April, www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/WWF-Report-Stepping-up-The-continuing-impact-of-EU-consumption-on-nature-worldwide-FullReport.pdf.

Yerushalmi, E. and Saha, K. (2025), "How circular economy innovation can backfire on the environment: Quantifying the rebound effect of the textiles and clothing sector", Business Strategy and the Environment, Vol. 34/8, pp. 10495-10512, https://doi.org/10.1002/bse.70135.

Zero Waste Europe (2020), "The false solution of waste-to-energy", Brussels.

Zijdeman, Richard and Filipa Ribeira da Silva (2015). Life Expectancy at Birth (Total). http://hdl.handle.net/10622/LKYT53, accessed via the Clio Infra website.

Zhong, H. et al. (2024), "Global spillover effects of the European Green Deal and plausible mitigation options", Nature Sustainability, Vol. 7, pp. 1501-1511, https://doi.org/10.1038/s41893-024-01428-1.

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