

UNPACK THE CIRCULAR ECONOMY

**TOWARDS MORE
RESPONSIBLE
BUSINESSES AND
SOCIETIES**

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TABLE OF

Opening the Box 3

Regulating the Loop
5

Re-Imagine Business
7

Circularity Without
Borders
9

People at the Center
11

Blind Spots
13

End of the Loop, Start of
the Journey
15

CONTENTS

From the Editor

Welcome to “**UNPACK THE CIRCULAR ECONOMY: Towards More Responsible Businesses and Societies**” !!!

This magazine is my attempt to make sense of a big question: **How do we move from today's linear 'take-make-waste' system to one that truly works for people and the planet?**

Throughout my studies, I realised that while the circular economy is often mentioned, it is rarely explained in a clear and accessible way... We hear a lot about recycling, but circularity is much more than sorting and re-using waste, it's about **rethinking how we design products, run businesses, govern supply chains and share responsibility across our society.**

This magazine brings together what I've learned this last months while diving deeper into the social, political, ecological and especially the economic and governance sides of circularity. But the true is that, as I explored the concept of circular economy more deeply, I found myself not only inspired but also full of questions.

Who benefits from circular practices? Can CE really support social justice? And where do these ideas fall short?

In this magazine, I don't hesitate to look at both sides: the exciting innovations, but also the blind spots, trade-offs, and limitations that often get overlooked in optimistic sustainability narratives.



My goal is simple: offer to you, dear readers, a visual, accessible and down-to-earth introduction to circular thinking and to show how businesses and institutions can use circular principles to become both more competitive and more equitable (while, of course, being honest about the challenges along the way).

So, if you're also curious about this new way of living, producing, and doing business... if you're wondering how we can redesign our systems to be fairer, smarter, and more sustainable... and if you're ready to look beyond the buzzwords to understand what circularity really means in practice, then you're exactly where you need to be.

Are you ready to unpack the circular economy with me? LET'S GO !

Vera Oliveira
EDITOR-IN-CHIEF



OPENING The Box



"I think that if we continue with the linear economy, we are, to use a technical term, totally screwed."

The Circular Economy (CE) is often described as the opposite of our current Linear Economy (LE), the classic "take - make - dispose" system. So, people sum it up as "reuse - reduce - recycle".

But actually, it's much more than a nice slogan. It's a complete rethinking of the system, turning today's waste streams into value loops.



So... what exactly is the Circular Economy?

At its core, the CE is a **regenerative** economic model, designed from the start to keep materials in use, prevent waste, and restore natural systems instead of damaging them. It rethinks the entire industrial logic: how we design, produce, consume, and value things. Its key ambition is to keep products and materials at their highest value for as long as possible. This means

- 1. Designing out waste and pollution from the beginning, not fixing problems after they happen !**
- 2. Extending product life through reuse, repair, remanufacturing and high-quality recycling !**
- 3. Regenerating ecosystems by returning nutrients to the soil and avoiding extraction of finite resources !**

But why does it matters?

Well, switching to a circular model isn't a trend. It's a necessity.

Our linear economy is reaching its limits, therefore causing interconnected crises such as...

- **Resource depletion:** We're extracting minerals, biomass, and fossil fuels faster than Earth can replenish them. Material extraction already drives over 90% of global biodiversity loss and water stress.
- **Pollution & climate crisis:** About 70% of global GHG emissions come from how we manage materials. Plastics, toxins, and waste are overwhelming ecosystems worldwide.
- **Inequality:** Current production and consumption patterns deepen global inequalities, with the most vulnerable populations suffering the most from pollution and resource scarcity.

The CE offers a way to maintain ‘modern’ lifestyles without destroying the systems that sustain them. And for businesses, it also brings concrete advantages, if they do their job correctly (lower costs, higher resilience, new revenue streams, and reduced exposure to volatile material prices).

We must go from destruction to regeneration !

And who must take part in it?

Circularity is a TEAM EFFORT ! Its success depends on collaboration across every level of society:

→ **Governments & Policymakers**

They are the ones “setting the rules of the game”. Through regulations like the EU Circular Economy Action Plan, they shape product design standards, waste prevention targets and incentives for recycling and reuse.

→ **Businesses & Corporations**

We can say that they turn ideas into reality. Companies worldwide are experimenting with new Circular Business Models, from product-as-a-service to remanufacturing to sharing platforms. But, obviously, scaling these models requires aligning innovation with core strategy, not just running small pilot projects.

→ **Consumers & Citizens**

They are just as important as they drive demand for circular products and services. This means embracing new habits such as renting instead of owning, repairing instead of replacing, and returning products through take-back schemes.

→ **Workers & Local Communities**

They keep the loop running. Repair centres, recycling cooperatives, community initiatives, and new green jobs all contribute to making circularity inclusive and rooted in local realities.

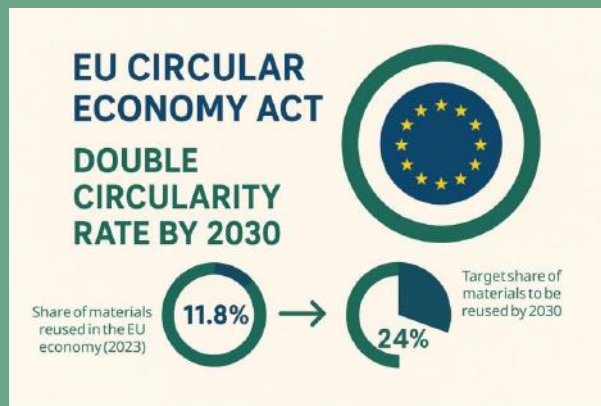
The transition to a circular economy depends on a common understanding that we all share responsibility for shaping a system that works in the long-term for the environment, society, and the economy.



When we talk about the circular economy, we easily picture smart design, new business models or creative reuse. But behind the scenes, policy is one of the strongest accelerators of circular transformation.

In Europe especially, the shift from a linear to a circular economy is not happening by miracle... it's being engineered through a mix of strategic regulation, long-term planning and political leadership.

REGULATING



THE LOOP

How do EU policies spread into the private sector? How they push companies to change?

Nowadays, circularity is not only a market opportunity, it's increasingly a legal expectation!

The European Circular Economy Action Plan (CEAP)

The EU's Circular Economy Action Plan (CEAP 2.0), adopted in 2020, is, I would say, one of the most ambitious regulatory frameworks in the world. It forms a key pillar of the European Green Deal and aims to build an economy that is climate-neutral, resource-efficient and globally competitive.

CEAP doesn't focus only on waste, it addresses the entire **product life cycle** ...

- How products are designed
- How materials circulate
- How consumers use and return products
- How waste is prevented in the first place

Its core ambition is to double Europe's circular material use rate and drastically shrink the EU's consumption footprint.

CEAP frames regulation not as a burden, but as a driver of innovation, cost savings, and resilience.

Other examples of policy and legislation measures to look for: Ethical standards and certifications, extended producer responsibility, corporate social responsibility, product stewardship, taxes on externalized costs, EU Taxonomy, CSRD ...

The EU prioritizes sectors where circularity can make the biggest difference, both environmentally and economically...

Product Design

Ecodesign rules aiming at making products longer lasting, repairable, upgradeable, recyclable, and reusable.

Plastics

Push to eliminate single-use plastics, restrict microplastics, and promotion of responsible bioplastics.

Construction & Buildings

Measures to reduce virgin material use and integrate circular principles across building's entire lifecycle.

Textiles

Encouragement of repair, reuse and recycling, while supporting innovation and competitiveness.

Key value chains

Waste & Infrastructure

Investment in proper collection systems, recycling infrastructure, and return incentives.

Business Models

Support for product-as-a-service, take-back schemes and new circular service models.

Batteries & Vehicles

Requirements of higher recycled content, better collection rates, supply chain transparency, eventual phasing out of non-rechargeable batteries.

? How do Businesses respond ?

For companies, turning circular ambition into profitable reality requires major internal change ...

CORE STRATEGY

Circular business models often fail to scale when treated as "sustainability add-ons".

They succeed when tied to:

- innovation
- customer value
- product quality
- brand differentiation

REDESIGN OF INTERNAL PROCESSES

Cross-functional collaboration is essential. Finance, operations, marketing and R&D must align so circular pilots don't remain stuck in the sustainability department.

Customer experience must be redesigned for services like rental, repair and take-back.

FINANCIAL CASE

Companies only commit when economics are clear :
→ modelling profitability at scale

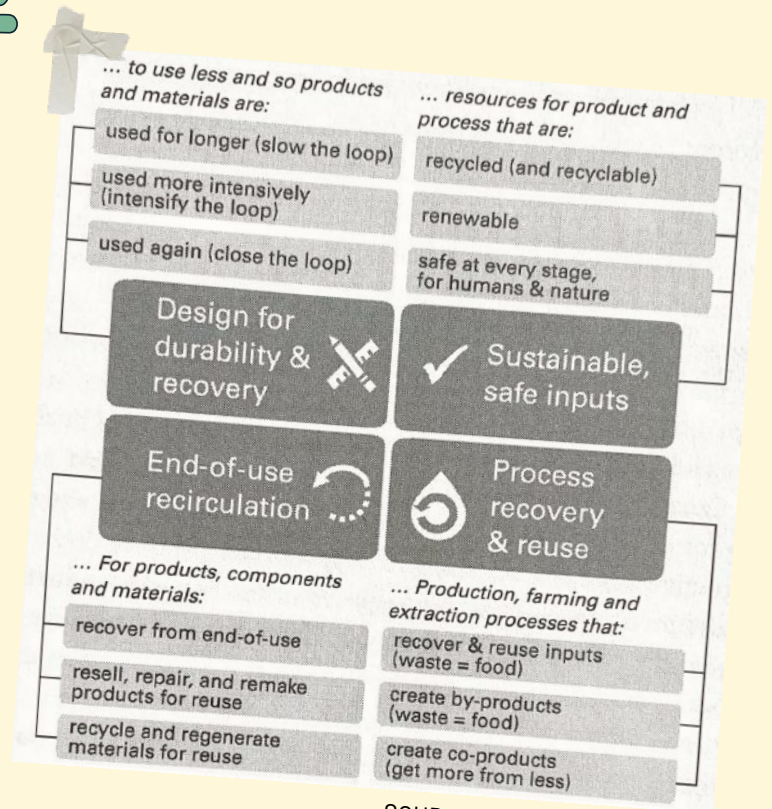
→ showing resilience to raw-material volatility
→ identifying new revenue streams

→ articulating long-term risk reduction

RE-IMAGINE BUSINESS

For companies, embracing the circular economy means more than tweaking a few sustainability practices. It requires reimagining how business works from the ground up. Circularity touches every stage of the value chain, from the materials chosen at the design table to the way a product returns at the end of its life.

This shift is not simple, but widely recognized as one of the most transformative moves a business can make to build resilience, strengthen competitiveness and unlock new sources of revenue!



SOURCE: Catherine Weetman

Dear readers, let me present you the key strategies shaping this shift ...

Rethinking Materials & Designing for Circularity

Circularity starts long before a product hits the market. The design phase determines around 80% of a product's environmental impact, which is why circular businesses redesign products to last longer, be easier to repair, and return safely into the loop.

1. Sustainable Materials and Smart Substitution

Companies must reduce their dependence on virgin resources by shifting to recycled, secondary, or renewable materials. This often requires flexible machinery and adaptable operations, capable of handling multiple material streams rather than relying on a single, homogeneous input.

2. Durability - Quality - Longevity

Circular products need to survive multiple lifecycles. That means that they have to be ...

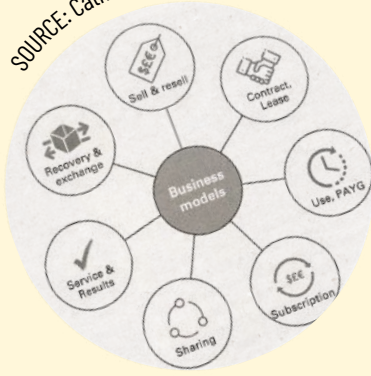
- Durable and repairable
- Easy to upgrade, maintain, and check
- Simple to disassemble for remanufacturing or recycling
- Based on fewer but high-quality materials



Circular design (eco-design) is not a constraint but an opener of new markets !

Techniques like 3D printing, modular design, and digital product passports help companies innovate while keeping materials in use longer.

SOURCE: Catherine Weetman



Circular Business Models (CBMs)

Circular business models aim to preserve value, extend product life, and minimize waste. They rethink ownership, access, and the economic logic behind products.

"Slow the flow, intensify and close the loop and finally, regenerate"

Remanufacturing and Reuse

Instead of discarding worn-out products, companies refurbish or remanufacture them. In many industries, remanufactured components are cheaper than new ones and generate up to 70% less waste.

Product-as-a-Service (PaaS)

Customers pay for access, not ownership. The company keeps responsibility for maintenance, durability and repair, therefore incentivizing long-lasting design.

Waste Valorization (Looping)

What used to be "waste" becomes an economic input. Residual materials are looped back into production, sold as secondary feedstocks, or turned into new products.

Digitalization is a major enabler here, from mobile apps that support sharing to platforms that coordinate repair, resale or reverse logistics.

Transforming the Supply Chain

Inputs

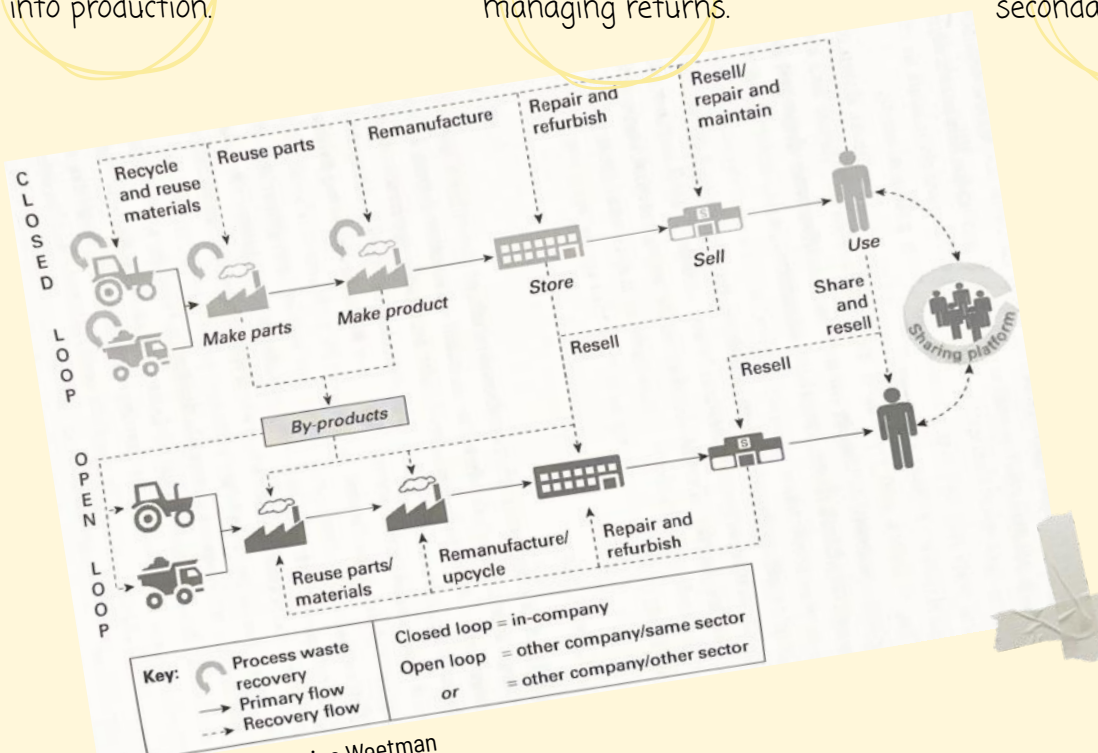
Recycled, recyclable, or renewable materials feeding into production.

Operations

Systems for repair, maintenance, upgrading, remanufacturing, and managing returns.

Outputs

Products designed to return (reuse, recovery, or recycling) into high-value secondary materials.



SOURCE: Catherine Weetman

CIRCULARITY WITHOUT BORDERS

Global innovation is proving that the circular economy is not just possible, but profitable, inclusive, and already happening everywhere...

Over the past 15 years, a wave of creativity (from startups to multinational companies) has shown that circularity can be not only environmentally regenerative but also economically smart! Here are some good examples...

INTERFACE

Material substitution + Regenerative Design

Developed carpet tiles using half the usual yarn, reducing material use while creating a minimalist aesthetic that customers love. Actively sources waste, such as discarded fishing nets and laminated glass waste, to produce high-quality nylon, proving that waste can be a cost-saving resource, not a burden.



DUTCH AWEARNESS X WEAREVER

Closed-loop textiles

Created the Infinity fabric, a polyester fibre that can be recycled into a new fabric eight times without losing quality. This model completely opposes fast fashion and shows how long-life design can extend resource use for 40 years with zero waste.

RENAULT BARLOWORLD

Remanufacturing

Remanufactures car parts that cost 30 to 50% less, generate 70% less waste, and reduce demand for steel and iron. Barloworld's remanufacturing facility can return components "as good as new", showing how industry can drastically cut resource use.

LAVAZZA X NOVAMONT

Closed-Loop System + Local Valorization

Turn compostable coffee capsules into mushrooms and nutrient-rich soil that boosts vegetable yield by 30%, turning daily waste into regenerative value.



HELLO TRACTOR

Circular Business Model

A sharing-model platform in Nigeria allowing small farmers to access tractors via remote booking. Supported by EU-funded partnerships, helping farmers reduce costs and increase productivity.

ADIDAS X PARLEY

Recycled Inputs + Advanced Manufacturing

Created the 'Ocean Plastic Shoe', whose upper is made from recycled polyester and recovered fishing nets from marine waste, and the midsole 3D-printed using recycled polyamide. A strong example of open-loop circularity connecting NGOs, fishing industries and fashion. Adidas demonstrates how recycled materials with new technologies create commercially successful circular products while raising awareness of marine pollution.

BURBERRY X ELVIS & KRESSE

Upcycling + High-Value Reuse

Burberry supplies at least 120 tonnes of unused leather scraps to Elvis & Kresse. Fragments are sorted, re-cut and hand-crafted into belts, bags, and homeware. Profits are shared with charities. This partnership turns a reputational liability (waste incineration scandal) into a circular success story and proof that even luxury waste can become valuable products.

REDISA

EPR + social inclusion

Turned waste tires into a valuable resource in South-Africa. Integrated informal collectors into a formal system, giving them stable income and bank accounts. Supported local transport micro-enterprises and improved children's access to school, proving that circularity can reduce poverty.

These cases make one thing clear: circularity becomes powerful when innovation, policy and local action come together. Whether in high-tech European factories or smaller African recycling hubs, circular solutions can create value for the environment, economies and for people.

In other words, the circular economy is not just about "closing the loop". It's about redefining the industrial system itself: "a new industrial revolution"!

People at the Center

The circular economy is often celebrated for its environmental and economic benefits. But to become a truly sustainable system, it also has to work for people. Our current linear model doesn't just waste materials and harm the planet... it also deepens social inequalities, exposing the most vulnerable communities to pollution, unsafe work and the harmful impacts of climate change.

A circular economy that ignores social realities risks becoming a privilege for just a few. On the contrary, one that also puts people at the center can become a tool for fairness, inclusion and long-term prosperity.

Let's explore why the **social dimension** must not be forgotten and how it can drive a fairer circular transition!

Tackle **INEQUALITY**, foster **INCLUSIVITY**

Circularity isn't only about closing material loops. It's also about closing the inequality gap created by the linear system.

For many years now, pollution, exposure to climate risks and poor working conditions have disproportionately affected low-income populations. A circular transition must not reproduce these inequalities. **Poverty reduction** and **access to resources** remain central development goals, and circularity can, hopefully, reinforce them, if designed intentionally.

When circular products are expensive, the transition risks becoming a "green luxury" accessible only to privileged groups. True circularity must be affordable, relevant and beneficial for low-income communities and for countries in the Global South.

Circular systems can reduce environmental harms while creating new opportunities. But they can also change labor demand or disrupt informal sectors... Policies and business strategies must therefore ensure fair access, fair wages and fair participation, rather than shifting burdens onto workers or communities.

Jobs and working conditions

Circularity can be a powerful driver of local job creation, skill development and labor formalisation (especially in waste, repair, remanufacturing and reverse logistics).

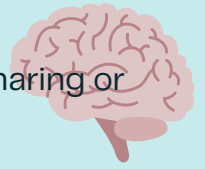
Formalisation improves working conditions, reduces health risks from hazardous waste and strengthens communities. Circular solutions that eliminate toxic practices directly improve public health, reduce pollution and support cleaner environments that allow people to thrive.



Changing mindsets

Shifting to a circular economy also requires a real shift in how we individually think about consumption.

Many of us still measure success through accumulation. The idea of renting, sharing or repairing rather than buying new challenges deeply ingrained cultural norms...



Shared responsibility

This is a very important concept in circularity. Families, schools, companies, and governments all have a role. For example, asking children “Do you really need this? Where will it go when you’re done?” helps cultivate lifelong circular habits.

The loop only actually closes when everyone participates !

Social progress and policy support

The true is that a circular economy cannot succeed without solid governance, fair labor conditions and strong community engagement.

Projects thrive when local communities are involved from the beginning. Inclusion strengthens trust, social cohesion and the overall acceptance of circular initiatives.

Contracts, safety, wages and training opportunities shape worker well-being. When management commits to circularity, it often catalyses broader organizational change.

Weak regulation undermines circularity and public motivation. While strong political leadership, through standards, extended producer responsibility and social safeguards, ensures that circular practices benefit society as a whole.

Public pressure also matters: communities and consumers play a role in pushing companies and governments toward fair and inclusive circular systems!

The intention-behavior gap

Even when people want to act sustainably, they don’t always follow through for different reasons, and that is one main issue !

Closing this gap requires...

- Accessible information
- Easy collection and recycling systems
- Clear product labelling
- Strong consumer education

Awareness campaigns and simple take-back schemes can significantly increase this participation !

For the circular economy to scale up to its promise, the social dimension cannot be an afterthought. It must be taken into account in every layer (from waste systems to business models to customer engagement)!



BLIND SPOTS

Until now, I have presented the circular economy as a necessary industrial transformation for a world facing planetary boundaries. But even if the vision is compelling, the path is anything but straightforward...

There are, as with everything else, difficulties that lie both inside organizations (which are still built for linear consumption) and outside them, where structural economic, social and psychological barriers can prevent circular solutions from fully taking off.

The real risk is not that circular business models don't work. But that they fail to scale because companies lack the strategy, alignment and long-term commitment needed to move from small pilots to full systemic transformation.

Let me unpack the most common blind spots that may slow or derail circularity...

Internal Pitfalls

1: No plan for scale from the start

Pilots that are hyper-local or outsourced often fail to generate the 'internal learning' needed to scale. They don't prepare the organization for future needs like reverse logistics, product recovery flows or new stock management systems. Without this early planning, scaling becomes an afterthought and usually doesn't happen.

2: Weak link to core business goals

When CBMs are framed only as sustainability initiatives, they struggle to get crucial executive support. If circularity isn't tied to revenue, risk mitigation, supply chain resilience or customer loyalty... it's easily perceived as peripheral, not strategic.

3: Wrong model for organization

Companies sometimes jump on trends (like rental or resale) without realistically assessing whether they have the operational capabilities, digital systems or personnel to run them. For example, a fashion brand built on fast, high-volume sales can obviously not run a resale platform without fundamentally redesigning its logistics and inventory systems.

4: Poor customer experience design

Circularity introduces new steps (returning, repairing, refurbishing) and if these are inconvenient, poorly explained or hidden on separate websites, well... adoption declines. When a retailer built its resale platform on a standalone site, it lost the advantage of an existing customer base and has to invest heavily in marketing just to drive action.

5: Product misalignment

Circular models depend on products that are designed to circulate, as you can imagine. A rental model requires durable, repairable products. A repair service requires standardized components. A take-back system requires materials that are actually recyclable. If the product doesn't match the model, there is no marketing able to fix it.

6: Only leading with the sustainability narrative

Pitching circularity in environmental terms fails to resonate with financial decision-makers. The business case must start with revenue, margin, customer retention and resilience (not just waste or CO₂ reductions).



7: Using limited KPIs

Many teams only count direct revenue. They overlook secondary financial gains such as customer loyalty, brand strength, employee engagement or supply chain risk reduction, which actually are powerful drivers of long-term value.

8: Short-term thinking

Circularity often requires years of redesign and operational reconfiguration. But companies frequently evaluate success using short timeframes, leading to premature abandonment
→ short-term KPIs kill long-term transformations.

9: Not involving right internal teams

Finance, operations, product design, R&D, and marketing must be part of the early planning. If sales teams fear that circular models will threaten their bonuses, or if operations teams aren't prepared to run reverse logistics, projects quickly lose internal support.

10: Weak external partnerships

External partners can accelerate pilots, but without clear agreements on scaling, data sharing, or capability transfer, companies remain dependent and unable to replicate the model elsewhere.

External and systemic limitations

11: Systemic inertia

"We are still facing a world built for linearity..."

Circular models face "friction" because the current economic system, from regulations to infrastructure, is still optimized for fast, disposable consumption. Some retailers face immense complexity simply because of the diversity and volume of products they offer.

12: Affordability challenges

Many (almost all) circular products and services remain more expensive than linear alternatives. And as said earlier, if prices stay high, circularity risks becoming a system for the wealthy, not a global solution.

13: Psychological attachment to ownership

Also mentioned earlier, circularity challenges deeply ingrained cultural norms. People are used to link ownership with status, security and personal identity. Moving from "I own it" to "I have access to it" requires a cultural transformation that the CE community has only begun to address.

14: Policy and infrastructure gaps

Even strong business cases fail without supportive regulation and public infrastructure. For example, although anaerobic digestion could handle massive amounts of food waste in the UK, much of it still ends up incinerated or landfilled because policy and collection systems lag behind.

15: What does "social impact" really mean?

The thing is that employment numbers alone do not capture social value. The quality, stability and safety of new jobs matter more than the quantity. With these blurry boundaries between social, environmental and economic metrics, measuring social progress remains quite challenging.

16: Isolated stakeholders

The CE movement suffers from fragmentation. Without collaboration across policymakers, investors, industry and technology providers, scaling circularity becomes slow, disjointed and inconsistent.

END OF THE LOOP

Well, here we are at the end of our 'circular journey' (which actually just started). If there's one thing this magazine has shown, it's that the Circular Economy is not just about recycling your yogurt pots with more enthusiasm. It's a full-on rethink of how we design, produce, consume and collaborate (and I hope it pushed your reflection!).

We've together opened the box, reimagined business, traveled the world through circular success stories, put people back at the center and even dared to stare into the blind spots. And the lesson? Circularity is brilliant... but only if we get the social, economic and human parts right. It is complex, can be frustrating, but remains full of real innovation and big opportunities. Not just for the planet, but for businesses and communities.

If this magazine aroused your curiosity (or slightly disrupted your worldview), I suggest you to look at the valuable references on the next page.

And please don't forget to fill out the feedback form at the back :)

Thank you so much for reading ... now go close some loops!

START OF THE JOURNEY

RETHINK

YOUR CHOICES



REFUSE

WASTE AND SINGLE USE

REDUCE

CONSUMPTION

REUSE

AS MUCH AS POSSIBLE

REFURBISH

OLD STUFF

REPAIR

BEFORE REPLACING

REINVENT

BEING CREATIVE

RECYCLE

EVERYTIME





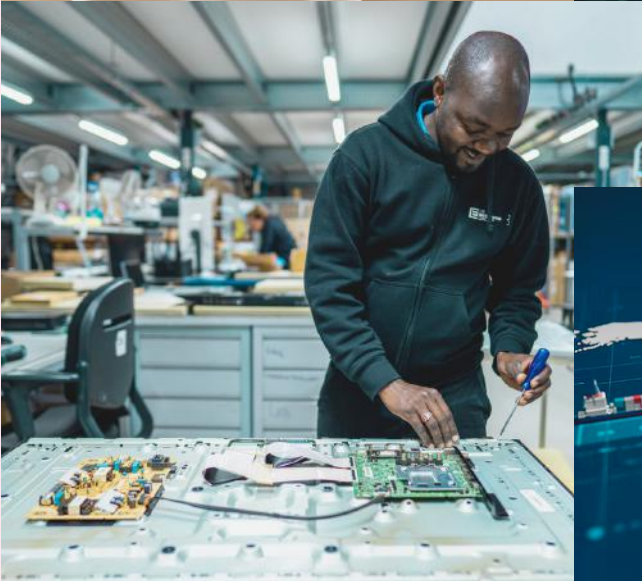
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<https://internationalpartnerships.learning.europa.eu/mod/page/view.php?id=791>





THE
FUTURE
OF FASHION
IS SLOW





FEEDBACK FORM:

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