




ROUND AND ROUND WE GO

The growth of circular systems

H2	ACT	PLAN	TRACK	PARK	OPP	THR	NEU
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With the global population set to reach almost 10 billion by 2050, we need to find ways to make our resources more productive. Looking beyond the current take-make-waste extractive industrial model, [a circular economy aims to redefine growth, focusing on positive society-wide benefits](#). It entails gradually decoupling economic activity from the consumption of finite resources, and designing waste out of the system. Underpinned by a transition to renewable energy sources, the circular model builds economic, natural, and social capital. It is based on three principles:

-  Design out waste and pollution
-  Keep products and materials in use
-  Regenerate natural systems

Increasingly sophisticated data analytics and AI applications are offering exciting ways to track material usage and [accelerate the future of the circular economy](#) - including digitised waste systems and robotic recycling. Innovations are being introduced to [transform sectors such as clothing, plastics and food production](#).

Several large international businesses are already adopting such practices. For example, [Unilever has pledged to make 100% of packaging recyclable, reusable or compostable by 2025](#). This emphasis on greater environmental efficiency and longevity will increasingly be driven by populist opinion, as shown in the recent focus on [plastic waste](#).

Many companies have adopted [Extended Producer Responsibility \(EPR\)](#) as a form of product stewardship, although it is estimated that only 45% of product and packaging waste within the UK and Europe is currently covered by an EPR scheme. The Scottish Government are considering introducing a specific mandatory EPR system – a [national deposit return scheme](#) for drinks packaging. The Scottish consumer pays a small cash deposit, typically 10p, when they buy a canned or bottled drink which is then refunded when they return the item back to the retailer or a central collection point.

In Europe, there is also a developing regulatory focus on implementing circular economy solutions to its food systems. [The European Commission's 'Food 2030'](#) programme focuses on circularity and resource efficiency and the significant reduction of food waste.

INDUSTRY 4.0

Changing the economic landscape

H2	ACT	PLAN	TRACK	PARK	OPP	THR	NEU
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Two powerful forces are transforming the nature of consumption. The empowered consumer and disruptive technologies have sent businesses scrambling to find new strategies and business models for creating consumer value. At the same time, businesses have to overhaul their operating models to drive innovation and increase their market agility. This emerging phase is being termed the 'Fourth Industrial Revolution'.

There will be an unprecedented level of digital disruption that will [affect entire systems of production, distribution and consumption](#). Digitalisation is transforming the way consumers discover, evaluate, purchase and use products and services. Consumers are increasingly demanding experiences, not just products, and have become active participants at every stage of the value chain – acting as innovators, marketers and even employees. Meanwhile, disruptive technologies (e.g. robotics, the Internet of Things, artificial intelligence) are driving a step change in business performance, and allowing businesses to offer once-impossible services. We can expect more and more innovations to take place at the borders of disciplines and sectors.

[The World Economic Forum projects that consumer industries will change more in the next 10 years than in the last 40 – and at an ever-accelerating pace of transformation](#). Businesses that thrive over the next 10 years will be those who embrace the empowered consumer and disruptive technologies. They will be data driven and externally oriented.

Covid has accelerated many of these trends. Even before the pandemic, [e-commerce penetration was projected to grow to approximately 40% in 2026](#). Physical stores will evolve from being a distribution channel to that of a platform for discovery, engagement, experience and interaction.

Automation in the service sector will also be a key driver. [Research from Oxford University argues that 47% of current occupations in the US are at high risk of being automated – including accountancy, legal work and technical writing](#). [Alternative foresight work suggests that 30% of UK jobs face a similar threat](#). But there will be opportunities; an oft quoted figure is that [65% of children entering primary school today will work in jobs that don't yet exist](#).

FURTHER READING

