



CLIMATE CHANGE AND SUSTAINABILITY

Seizing the Growing Circular Opportunity

By Trine de Nully and Nanna Gelebo

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Circularity presents a significant economic and green growth opportunity by creating value with fewer resources. In the Nordics alone, circularity could unlock up to ~€48B annually by 2030 (~3% of GDP).¹ Beyond that, circularity can foster innovation, increase resilience and decrease emissions and material extraction by ~30%, respectively,² since circularity enables the reuse, recycling, and regeneration of our increasingly scarce resources. With global emissions projected to rise temperatures by 3.1°C by 2100, humanity consuming resources at 1.7 times Earth's sustainable capacity and scarcity of supply rising, circularity becomes a core enabler for environmental impact and business resilience.³

This is the first of three articles on circularity. We begin with how circularity can unlock new opportunities. The following article will cover scaling circularity into a profitable business, including challenges and key enablers. The final article will explore embedding circularity into traditional linear operations to drive long-term sustainable growth.

Circularity: Sustainability and business growth

Currently, only 7% of the resources extracted yearly are reused or recycled globally.⁴ This leads to significant waste management costs (>\$250B globally) that are projected to increase further and the reliance on raw materials that are increasingly scarce and thus costly.⁵ Circularity addresses this challenge through models like rental, secondhand, recycling, and circular product design by reducing waste and minimizing reliance on new material extraction. (See Exhibit 1.)

EXHIBIT 1

Shift from linear "take-make-waste" to a circular value chain

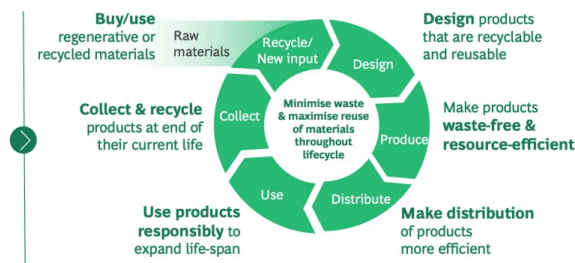
From a traditional, 'linear' value chain,
where products are used until end of useful life...



Take, make & waste

- The current "linear" economy cause growing resource extraction and rising greenhouse gas emissions each year
- In contrast, the circular economy is regenerative by design

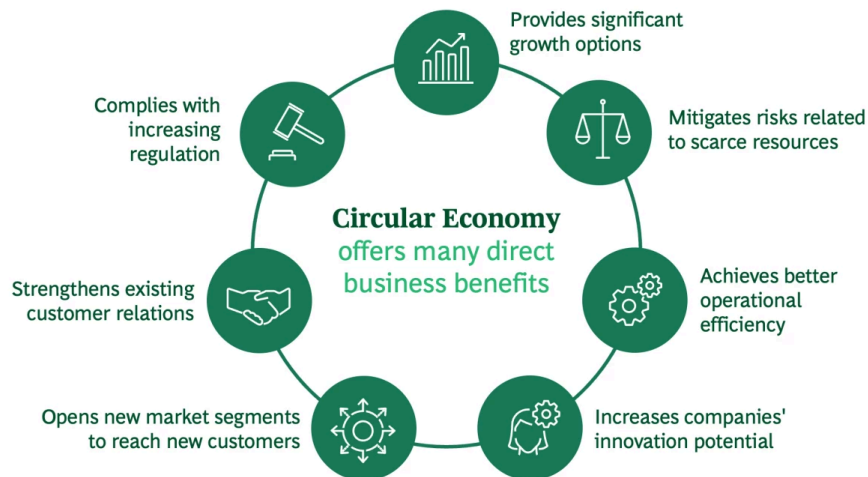
...to a circular one, where entire product lifecycles are designed around circular flow of resources



Source: The Circularity Gap Report, 2020; BCG analysis

At the same time, circular business models are attractive to those looking for growth, profitability, and resilience in a rapidly changing world. By converting from traditional linear systems to circular business models, companies can unlock several business benefits. (See Exhibit 2.)

EXHIBIT 2



Source: BCG Analysis

Tapping into Circularity's €48 billion yearly opportunity in the Nordics by 2030

According to BCG research, approximately 6% of the Nordic economy is circular, meaning 6% of resources used for production comes from recovered materials.

This is significantly behind both the current EU average of 12% and the 2030 target of 24%. If the Nordics reach the current EU average, they could unlock €48 billion in annual economic opportunities by 2030, equivalent to ~3% of the region's GDP.

EXHIBIT 3

Circularity is a ~€48B annual economic opportunity in the Nordics

Currently, **only 6% of production resources are recovered** materials compared to EU average of ~12%

Doubling circularity by 2030 and reaching current EU targets could unlock **~€48 billion annually in the Nordics**



Across industries—both in the Nordics and globally— we are observing significant growth of circular business models and new value pools for companies to tap into.

— Fashion

Globally, circular practices in the fashion sector are projected to increase and have the potential of growing ~30% annually—from €70 billion in 2021 to ~ €700 billion by 2030 globally—gaining market share from ~3.5% of the global fashion market in 2021 to ~23% in 2030.⁶ The circular fashion market in Europe is expected to reach ~€200 billion by 2030, fueled primarily by the growth of secondhand sales. Notably, ~60% of the growth in the secondhand segment is anticipated to come from online platforms. Vinted, a leader in the circular fashion market, averaged around 100% annual growth from 2017 to 2023, reaching nearly €600 million in revenue.⁷ With over 65 million users buying and selling pre-owned fashion, Vinted is driving the shift toward sustainability and achieving double-digit profit margins.⁸

— Sportswear and Equipment

Latest BCG research suggests that global circular sportswear and equipment market accounts for ~10% of the industry's total market and is expected to double to ~€100 billion by 2030. This growth is primarily driven by the rapid expansion of secondhand and rental options. Secondhand markets, growing at an annual rate of ~20%, are projected to make up ~35% of the circular market by 2030. Rental services, with an estimated annual growth rate of 15%, are expected to contribute ~30% to the market. In addition, repair services, a well-established segment, are anticipated to grow steadily at around ~3% annually, with a ~30% share by 2030. Industry leaders include REI, Intersport, Patagonia, and Decathlon. Decathlon offers secondhand products in 43 countries and operates repair workshops in over 1,700 stores to extend the lifespan of its products.⁹ Between 2022 and 2023, their rental sales grew by 71%, while sales of refurbished items saw a 116% increase.¹⁰

— Electronics

The global market for refurbished electronics was valued at ~\$50 billion in 2023 and is projected to double to \$100 billion by 2030, with an average annual growth rate of ~10%.¹¹ Refurbished smartphones are particularly well-established, with over 43% of Europeans reporting they have owned a secondhand smartphone, according to the Recommerce© Barometer conducted in collaboration with Vodafone.¹² Fnac Darty has capitalized on this trend by introducing a subscription service for repair.¹³ Beyond that, their secondhand sales generated ~ €150M in 2024.¹⁴ EU legislation, such as the Waste Electrical and Electronic Equipment (WEEE) and Radio Equipment Directive (RED) directive, is further promoting this trend.

— Automotive

The automotive industry has long been a leader in circular business models, particularly through secondhand, rental, and leasing solutions. New EU regulations on end-of-life vehicle (ELV) recycling are pushing OEMs to adapt to circularity in new ways. Moving forward, OEMs can differentiate themselves by integrating circular materials, expanding remanufacturing and reuse, advancing battery recycling efforts, and designing vehicles for recyclability. Renault is at the forefront of such efforts to reduce the use of virgin materials, with a strong emphasis on recycling and incorporating recycled materials.¹⁵ Furthermore, Renault Trucks aims for 30% of spare part sales revenue to come from reused parts by 2030.¹⁶ Porsche is making strides toward establishing a sustainable battery value chain in Europe. The company is collaborating with the Norwegian firm Hydro to develop a comprehensive roadmap for recycling battery materials within the region. Together, they are exploring efficient closed-loop solutions to support the recycling and reuse of materials in Porsche's EV batteries.¹⁷

— Industrial Goods

The market for product-as-a-service (such as subscription-based or leasing models for machinery) and remanufacturing (restoring used products to like-new condition) is projected to grow by 5–10% annually up to 2030 globally. Hilti, a global provider of construction tools, software, and services, exemplifies sustainability by collecting over 1 million products annually at no cost to customers. These tools are refurbished and reintroduced through rental programs or donations.^{[18](#)}

— Paper and Packaging

The EU is working on increasing paper and packaging recycling rates with initiatives like the Paper and Packaging Waste Regulation (PPWR), which aims to make all packaging reusable or recyclable by 2030.^{[19](#)} This regulation is also driving companies beyond the packaging sector to adapt. For example, DS Smith is responding proactively by designing packaging that is fully recyclable or reusable.^{[20](#)}

Why now? Cost pressure, regulations, resilience, technology, and consumer demand

The shift toward circularity is driven by several dynamics, such as stricter regulations, cost pressure, supply chain resilience, technological progress, and consumer demand. Within this

context, companies are using circularity both as a driver of innovation and as an opportunity to create and tap into new value pools.

— Regulation

With the introduction of the EU Circular Economy Action Plan (CEAP), Extended Producer Responsibility (EPR), and the Ecodesign for Sustainable Products Regulation (ESPR), businesses are facing increasing regulatory requirements. Almost all industries now have their own stringent circularity legislation, such as the PPWR, WEEE, and ELV directives, which are progressively tightening and compelling companies to act. Broader sustainability requirements, such as CSRD, are creating additional tailwinds. Early compliance provides businesses with a first-mover advantage, enabling access to critical materials, influencing market dynamics, and forming key partnerships for essential capabilities like logistics or external repair and recycling networks.

— Cost pressure

Many companies, including business-to-business sectors, are experiencing significant cost pressure with rising raw material prices. By reducing waste and increasing use of recycled materials in production, companies that embrace circularity are better positioned to tackle cost pressure. For example, the price of copper has roughly doubled since 2016.^{[21](#)}

— Resilience

Shifting geopolitical dynamics and disruptions, such as the 2021 Suez Canal blockage, have underscored the critical need for more resilient supply chains. Circular models enhance this resilience by enabling value chain participants to reduce dependence on finite resources. By promoting practices like localized

sourcing of secondhand products and materials, circular strategies foster more stable, adaptable, and sustainable supply chains.

— Technology

Technology has been helpful in decreasing the time to market for circular solutions. Technology aids in, for example, streamlining product returns, which makes circular solutions more accessible and efficient. For example, QR codes enable easy drop-off processes, allowing consumers to return products seamlessly. Practical innovations are further enhanced by advanced technologies. For instance, AI powers remote buyback models that allow consumers to scan products at home for diagnostics and receive instant price estimates in a buyback scheme. Another example of tech application for circularity is 3D printing. The technology boosts flexibility and availability of spare parts for repairs. Additionally, improved recycling technologies and advanced waste stream sorting are increasing the viability of solutions like textile recycling.

— Consumer demand

Consumer demand is a key driver of the circular shift, albeit with a “say-do” gap. In a BCG study on the fashion industry, 32% of luxury consumers reported buying a secondhand item in the past 12 months.²² Out of all participant groups, Gen Z consumers are most likely to engage in such activities. There is a positive consumer sentiment across industries toward circular models. However, a gap remains between sentiment and willingness to pay:

- **Rising awareness and support:** According to a report from the Swiss Re Institute, 43% of respondents planned to support the transition to a circular economy within two years from being asked.²³
- **Positive sentiment, limited action:** According to the same report, 74% of people believe recycling should be a top priority, but only about 35% recycle.²⁴ According to our European consumer sentiment report from 2024,

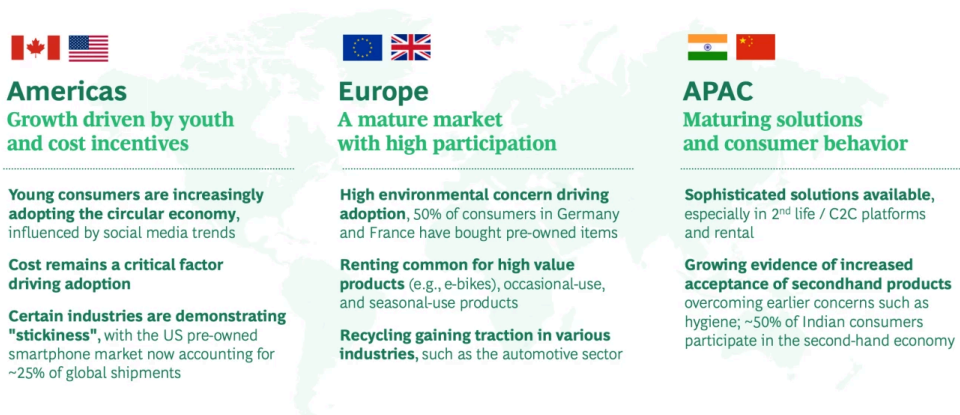
consumers continue to prioritize factors like affordability and convenience over sustainability.

- **High intentions but low willingness to pay:** While 37% of consumers often or regularly consider sustainability in their purchase decisions, only ~19% of consumers are willing to pay more for sustainable products. However, case studies have demonstrated that circular consumers have a higher customer lifetime value driven by increased consumer loyalty, more frequent visits (e.g., they go to the store for a repair and end up paying something), and other valuable traits.

While consumer sentiment for circular models is rising globally, maturity for circular offerings varies by region. Nordic companies that are present in other geographies should be aware of the following regional trends. (See Exhibit 5.)

EXHIBIT 5

Circular business models are gaining popularity across the globe



Sources: The US Chamber of Commerce, The World Intellectual Property Organization (WIPO), Harvard Business Review, Euromonitor, Statista, The Guardian, BBC, Deutsche Welle, Eurobarometer, expert interviews, BCGxTencent, IDC, statista

Start the journey towards circularity today

Building a circular business model is often simpler when starting from scratch than transitioning from an existing linear operation. This is because circularity requires a different approach to many aspects of a company's operations when scaled. As a result, many companies launch circularity separately from traditional operations. Circular initiatives may begin by accounting for only a small share of revenue, with linear operations remaining the primary income source. However, for an established company to fully unlock the potential of circularity, it must eventually scale and integrate circular practices into its core business and strategy—a topic explored further in this series.

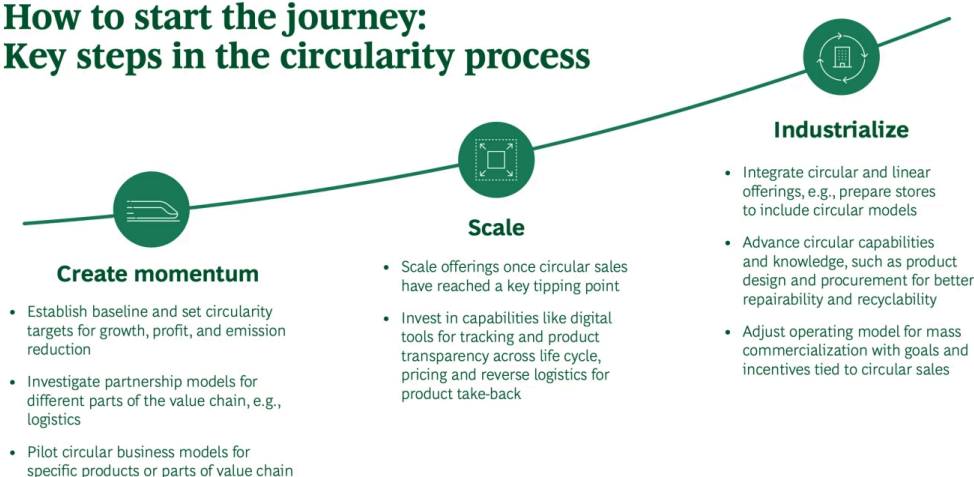
Launching a pilot project is a practical way to explore circularity by focusing on a single product, service line, or specific part of the value chain. Key approaches include:

- **Single product or business line:** High-value products and products designed for periodic usage are often ideal for circular models. Decathlon, for example, began with bicycles for their rental schemes.
- **Targeted value chain interventions:** Circularity can also begin with specific processes, such as switching to recyclable or biodegradable materials, reducing waste, or introducing take-back programs. For instance, Renault²⁵ and Stellantis²⁶ aim to use 33% and 40% recycled or green materials per vehicle by 2030, respectively.

Treating pilot projects as isolated initiatives—even when successful—can lead to conflicts with traditional operations and a greater reliance on ad-hoc solutions, such as costly logistics for product returns. So, while beginning with a pilot project can be a practical first step, the full benefits of circularity are realized at scale. Scaling and industrializing circularity across business lines requires integration with traditional operations. It involves investing in circular capabilities and tools, such as pricing engines capable of handling diverse sales models, combining circular and traditional product offerings, and aligning organizational goals and incentives to ensure seamless execution. (See Exhibit 6.)

EXHIBIT 6

How to start the journey: Key steps in the circularity process



In summary, circularity offers a transformative opportunity for businesses to achieve sustainability goals while driving innovation and growth in response to evolving consumer demands and regulatory changes. Though the journey requires strategic investments and shifts, the benefits are compelling: reducing emissions, unlocking a €48 billion market opportunity, and decreasing dependence on finite resources.

In the next article, [Scaling Circularity into Profitable Business](#) , we will dive deeper into how companies can practically capture the circularity opportunity and scale it into a profitable business model.

ARE YOU READY TO TAKE THE FIRST STEP? LET’S START THE CONVERSATION! →

This article is written by the Nordic Circularity Team, a group of professionals dedicated to advancing circular economy solutions in the region. The team includes: Nanna Gelebo (Managing Director and Partner, Stockholm), Peter Jameson (Managing Director and Partner, Stockholm, Copenhagen), Davide Urani (Managing Director and Partner, Stockholm, Milan), Elina Ibounig (Partner, Helsinki), Trine Filtenborg de Nully (Principal, Copenhagen), Marcus Bruns (Project Leader, Oslo), Marie Holtorf (Consultant, Copenhagen) and Johanna Ihrfelt (Associate, Stockholm).


Authors



Trine de Nully

Principal
Copenhagen

✉



Nanna Gelebo

Managing Director & Partner
Stockholm

✉

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