

Thought Leadership Series

# Adopting a Circular Economy Approach



# Adopting a Circular Economy Approach

Environmental, social and governance (ESG) initiatives and reporting remain priorities for supply chains and distribution operations in 2023 and beyond. Part of the overall discussion of ESG practices has been organizations adopting a circular economy approach to design, production and distribution. A recent Gartner report<sup>1</sup> stated that 70% of the top 25 supply chain companies have included circular economy principles as part of their innovation and design. It was also reported that a circular economy could unlock trillions of dollars in the global economy, create hundreds of thousands of jobs and lead to millions of tons of avoided emissions.

If a circular economy shows such promise and positive effects, why has it not become the standard instead of the exception? In this FORTNA insight, we will examine what a circular economy is, its importance and the obstacles to implementing it.

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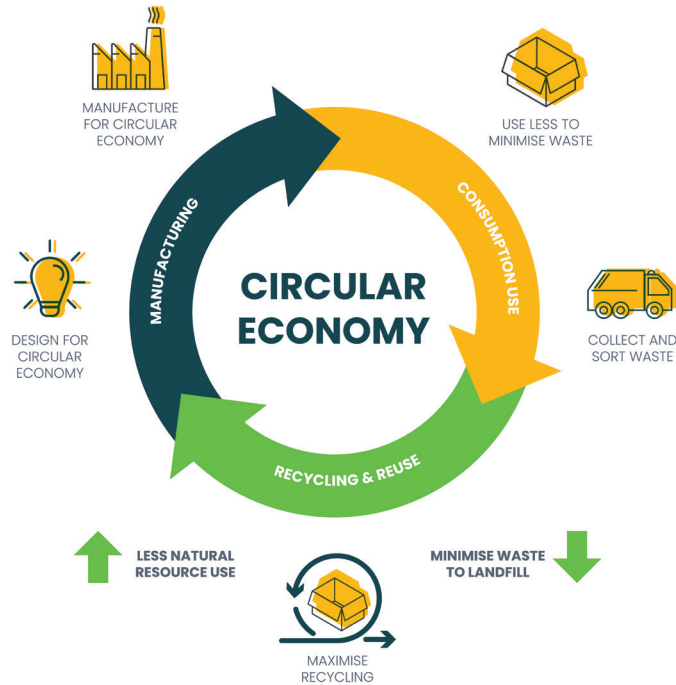
<sup>1</sup> <https://www.gartner.com/smarterwithgartner/3-supply-chain-strategies-to-accelerate-circular-economy-outcomes#:~:text=The%20circular%20economy%20is%20based,and%20at%20their%20highest%20quality.>

## What is a Circular Economy?

Most businesses work from a traditional linear business model:

- **Take:** The accumulation of raw materials.
- **Make:** The creation of a product.
- **Dispose:** The product is used and discarded in a landfill or recycling center.

In a circular economy, each step in the design, creation, usage and disposal of a product is examined to reduce waste and create opportunities for longer use and reuse of the product and the raw materials used to create it. This closed-loop system includes:



- **Reuse:** By creating a system of seamless returns and quality checks, an organization can take new, slightly used or secondhand products and reuse them in an appropriate fashion that creates new streams of revenue as well as cuts production costs.
- **Refurbish:** Keeping circular practices in mind in the design phase can create products with a longer lifespan that can be repaired and resold.
- **Remanufacture:** Eliminating waste, complexity and toxicity from the design and manufacturing process can make it easier for organizations to break down or dismantle returned products to be reused for other products. In mechanical products, this means that parts from a used or older device can be used to create either new or refurbished items.
- **Recycle:** When a product or parts of a product truly come to the end of their useful life, they can be recycled into their core elements and then reformed into new and useful raw materials.

## Why is a Circular Economy Desirable?

In a record-breaking dive in the Mariana Trench,<sup>2</sup> over thirty-two thousand feet under the ocean and widely considered one of the deepest places on the planet, divers found a plastic bag and a candy wrapper. While this is an extreme example of pollution, most experts agree that reducing waste in landfills, rivers and oceans and reducing the population's carbon footprint is worth striving toward as part of organizations being environmentally responsible.

Along with the advantages to the environment, circular economy practices can also have a positive impact on an organization's supply chain by:

- **Reduced waste:** Creating an operational environment where waste at each point of production is held to a minimum or saved for recycling can result in smaller quantities of materials being disposed of, lowering overall disposal costs.
- **Efficient sourcing:** Reclaiming materials returned by customers can reduce the need for raw materials for production.
- **New revenue streams:** Opening an operation to accept used and returned products can open new opportunities for revenue. Companies can offer second-hand or refurbished products. For example, reclaimed products might be broken down into parts that can go to a secondary market and be sold separately. Creativity and ingenuity in the initial design can lead to new revenue and opportunities.
- **Compliance:** While there is still debate on ESG and its merits, one undebatable factor is that sustainability reporting and regulations are coming. By adopting circular economy practices, businesses can stay well ahead of regulatory requirements while garnering a positive reputation as an organization that cares about the environment.

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<sup>2</sup> <https://oceanblueproject.org/plastic-pollution-in-the-mariana-trench/#:~:text=On%20his%20record%2Dbreaking%20dive,it%20does%20not%20end%20there.>



## Circular Economy Flashback – 1970s

Disco music, bell-bottom jeans and rotary phones were all part of the 1970s experience. At that time, soda was delivered to the masses not in easily discarded plastic bottles but in bottles made from glass. Coke, Pepsi, Sprite and even a Tab or RC Cola were all examples of a circular economy that benefited the manufacturer, the distributor and the consumer.

In most households, customers would collect empty soda bottles and return them to a grocery store, receiving a refund, normally 2 to 5 cents per bottle. The vendor then held the empties for the soda company to pick them up, and they could then recycle or reuse the bottles.

While this practice is no longer in use, it does provide a perfect example of how stakeholders drive a circular economy: the consumer has a reason to return the product (deposit money), the vendor or distributor gains an advantage as the customer has to return to their store and will most likely spend the deposit money they just received, and the soda company gets a valuable renewable resource.

## Circular Economy Obstacles

While a circular economy offers multiple environmental and economic benefits, the take-make-dispose model is well established. A true circular economy model will require commitment, planning and change management. Below are some of the obstacles organizations could face:

- **Prioritizing short-term profit:** Organizations can easily make a case for profitability in the current quarter or year instead of committing to investments that might not see a return for years. A step-by-step process that adopts circular concepts and practices within the business can ease an organization into a new sustainable operation and framework.
- **Adopting a new approach:** Adapting product designs for longer use and the ability to be easily broken down could be a significant hurdle that requires an investment in planning. Also, sourcing the right raw materials will require a business to collaborate with partners to control costs and reduce waste.
- **Customer behavior:** While a growing demographic has stated that they will pay more for sustainable products,<sup>3</sup> a large group will continue to buy cheap, disposable products that follow the linear model. Changing the behavior of these customers will be difficult, and many experts believe a generational shift in thinking and buying will bring circular economies to the forefront.
- **Complex supply chains:** While circular practices seem simple, employing them will create a complex supply chain that will need to fulfill orders and receive returning materials seamlessly. Add-in processes for inspecting the returns, selecting where they get reinserted into the operation, and ensuring that they are collected and sent to the correct areas will require a high level of automation, software and processes.

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<sup>3</sup> <https://sustainablebrands.com/read/marketing-and-comms/majority-of-us-consumers-say-they-will-pay-more-for-sustainable-products>





While circular economy practices may seem out of reach or impossible, many companies have already begun to adopt them.

IKEA<sup>4</sup> has launched a program to buy back used furniture to refurbish and resell.

Nike<sup>5</sup> has announced that it will start refurbishing customer-returned sneakers and selling them at cheaper prices.

H&M<sup>6</sup> has a garment collection program that lets people bring old clothes, no matter the brand, to any store and receive a voucher for their next purchase. H&M has also launched The Circulator, a program that assists clothing designers in selecting circular and sustainable materials to design with.

4 <https://www.forbes.com/sites/stevebanker/2021/06/29/the-circular-supply-chain-a-push-for-sustainability/?sh=5f83bdbb37c1>

5 <https://www.forbes.com/sites/stevebanker/2021/06/29/the-circular-supply-chain-a-push-for-sustainability/?sh=5f83bdbb37c1>

6 <https://circulator.hmgroup.com/>

# FORTNA

## FORTNA CAN HELP

ESG, sustainability and circular economies are all concepts that will shape the supply chain over the next 20 to 30 years. The impact on operations and the bottom line will begin to be measured alongside the operation's impact on the environment. FORTNA is the partner that can help guide operations in adopting sustainable processes, circular practices and reporting to the boardroom, customers and regulatory organizations.

Contact us today at [www.FORTNA.com](http://www.FORTNA.com)