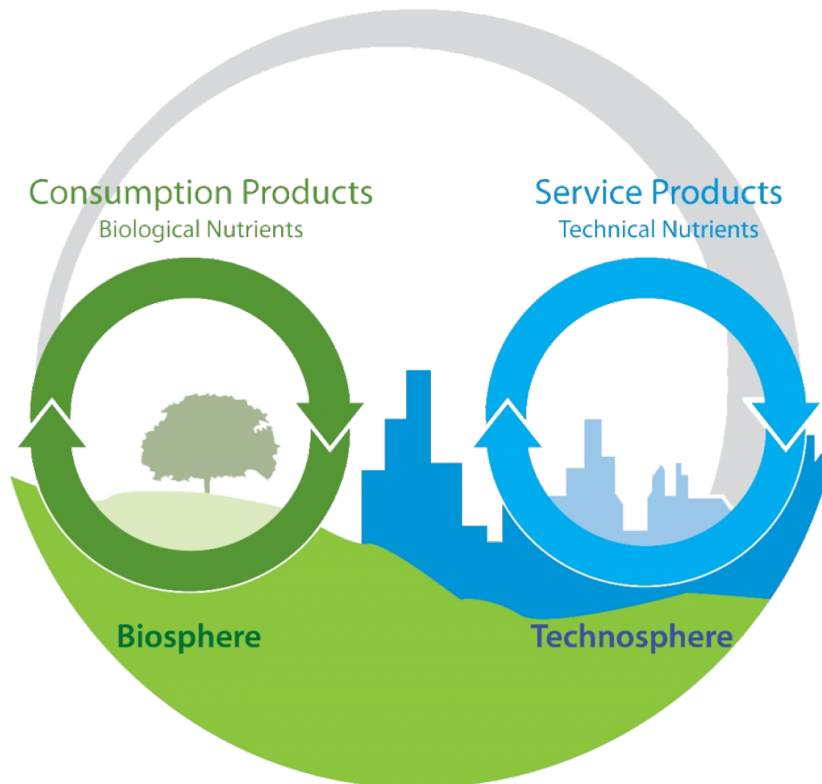


3 Examples of the Circular Economy

Why do we need to consider a Circular Economy?



[Maria Antoanela Ionita Jun 19](#) · 6 min read



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Source: Ellen MacArthur Foundation

Long story short, the current system is reaching its limits. Among others, the circular economy proposes a closed-loop system, circular design, and more sustainable products.

The issue with our economic system resides in its design, which was based on processes, principles, and tools developed during the Industrial Revolution. Although past innovations were highly efficient in fuelling economic growth and societal development, it's

been increasingly evident that we require a transformation of our systems to ensure sustainability for future generations and ourselves.

The foundational assumptions behind the Industrial Revolution were misinformed. We're working with finite raw materials that cannot sustain economic growth indefinitely. Moreover, large-scale, resource-intensive anthropic activities have created shocks that our planet cannot absorb. Finally, although our

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world systems have feedback loops, we keep neglecting the signals.

How does the Circular Economy address these issues? There are three main principles behind a Circular Economy:

1. Designing out waste and pollution from economic activities

- *Reason: Waste and pollution are largely a result of the way we design things*

2. Retaining products and materials in use for as long as possible

- *Reason: We should aim to build a closed-loop economic system that uses things, by making sustainable products*

3. Regenerating natural systems

- *Reason: We could not only protect but actively improve the environment*

The Circular Economy vision and approach to system design has yet to become a Revolution. Nevertheless, its many benefits are attracting more and more actors seeking to secure their future in a volatile, unpredictable, complex, and ambiguous (VUCA) world. Let's look at how organisations around the globe are implementing and reaping the benefits of Circular Economy principles.

Companies Adopting Circular Economy Principles



Source: Unsplash

Ecovative: The Polystyrene Eco-Friendly Alternative

Synthetic materials on which we build much of our comfortable modern lives are hardly recognised by the natural environment once discarded. As a consequence, they decompose slowly, release toxic gases, and interfere with ecosystem health.

However, we need the properties of synthetic materials in many areas of our lives. We use

plastics in packaging, clothing, and even skincare for their protective capabilities. We're also accustomed to produce and buy them cheaply.



Source: Ecovative

In response to these issues, Ecovative offers consumers an alternative to synthetic materials with the same benefits, while avoiding any negative environmental footprint.

Looking at nature for inspiration (a sort of biomimicry), they use hemp and mushroom roots grown on agricultural by-products to create high-performance foams and glues with numerous applications. The mycelium takes

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only 5–7 days to grow, doesn't cost much, and requires minimal processing. At the end of life, the mushroom-based packaging or other products can be safely composted.

Since it launched in 2010, Ecovative has experienced considerable and consistent growth and has developed licensees and partnerships for its innovative technologies everywhere around the world. If not yet, mushroom packaging may soon be available in your region as well.

[Check out Ecovative](#)

Gerrard Street: Circular Headphones

When it comes to electronics, we're faced with the dire consequences for the pressure we partly place on corporations to lower prices and roll out updates fast. One such consequence is that products lack durability. Another is that we end up producing a lot of waste because companies are not incentivised to use quality materials and recover their products at the end of life.

To address these issues for consumers with unequivocal benefits for the environment, companies like Gerrard Street have implemented circular economy principles into their business models. Gerrard Street produces and purchases headphones, but [sells headphone subscriptions](#). It's a clear example of a use-oriented service, by which consumers get access to a sustainable product without actually owning it.



Source: Gerrard Street

It's simple to see how this circular design can help customers who are always on the look for the next innovation. However, it also works with more traditional customers. They may want to hold on to the products for a long time because these are durable and serve multiple uses. What if a part of the product breaks? Another great thing about their design is that it's modular, meaning parts can be easily disassembled and replaced in order to prolong usage.

[Check out Gerrard Street](#)

Balbo Group: Scaling Regenerative Agriculture

In the field of agriculture, issues with traditional practices include the use of toxic substances and intrusive machinery that lead to soil degradation and biodiversity. Another practice that destabilises the environment, stripping it from its natural resilience, is monocropping, i.e., growing a single crop on the same land extensively.

Regenerative agriculture is yet another example of a practice inspired by natural processes that have already been adopted at scale in several parts of the world. For farmers, a key benefit of using regenerative farming practices is the reported increase in farm productivity. It can also mean a decrease in costs, depending on several factors, since one doesn't rely on expensive pesticides and fertilisers anymore. Consumers, on the other hand, get healthier, naturally grown products.

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Source: *Unsplash*

Native, formerly Balbo Group, is [one of the leaders in the field](#). This farm produces 75,000 tonnes of organic sugar annually, covering 34 percent of the world market. Maybe even more impressive, they supply 100 percent of the required energy to produce sugarcane from their own thermoelectric power plants run on sugarcane residue. This is yet another example of a closed-loop system, where little to no resources go to waste.

The practices embraced by the group include non-intrusive harvesting practices and equipment that avoid damaging the soil, while also returning bi-products, as well as the use of safe, natural fertilisers and chemical-free pest and weed management systems.

[Check out Native](#)

Final Thoughts

The Circular Economy brings a new way to design, make, and use sustainable products within safe planetary boundaries. In a linear system, the one we are still endorsing by avoiding change, resources are taken from the ground, used to make products, and soon discarded as toxic waste.

With a circular design and economic model, we prevent these issues. Everyone, from organisations and consumers to the natural environment, benefits. Producers such as Ecovative, Gerrard Street, and the Balbo Group, joined by many others not mentioned here from lack of space, have already proved the economic viability of the model.

I'll leave you to consider these “small” benefits estimated by the Ellen MacArthur Foundation:

- 700 million dollars annual material cost savings in the FMCG industry;
- 550 billion dollars reduction in health care costs associated with the food sector;
- 3,000 million euros increase in disposable income per annum for EU households;
- 48% reduction of CO2 emissions by 2030.

Originally published at <https://sustain-community.com> on June 19, 2020.