



# Circular business models: A new way of thinking

This report was created by the EU-SA Partners for Growth Programme in partnership with the CSIR, and was based on the discussions that took place in a webinar hosted by these organisations and the Black Business Council.



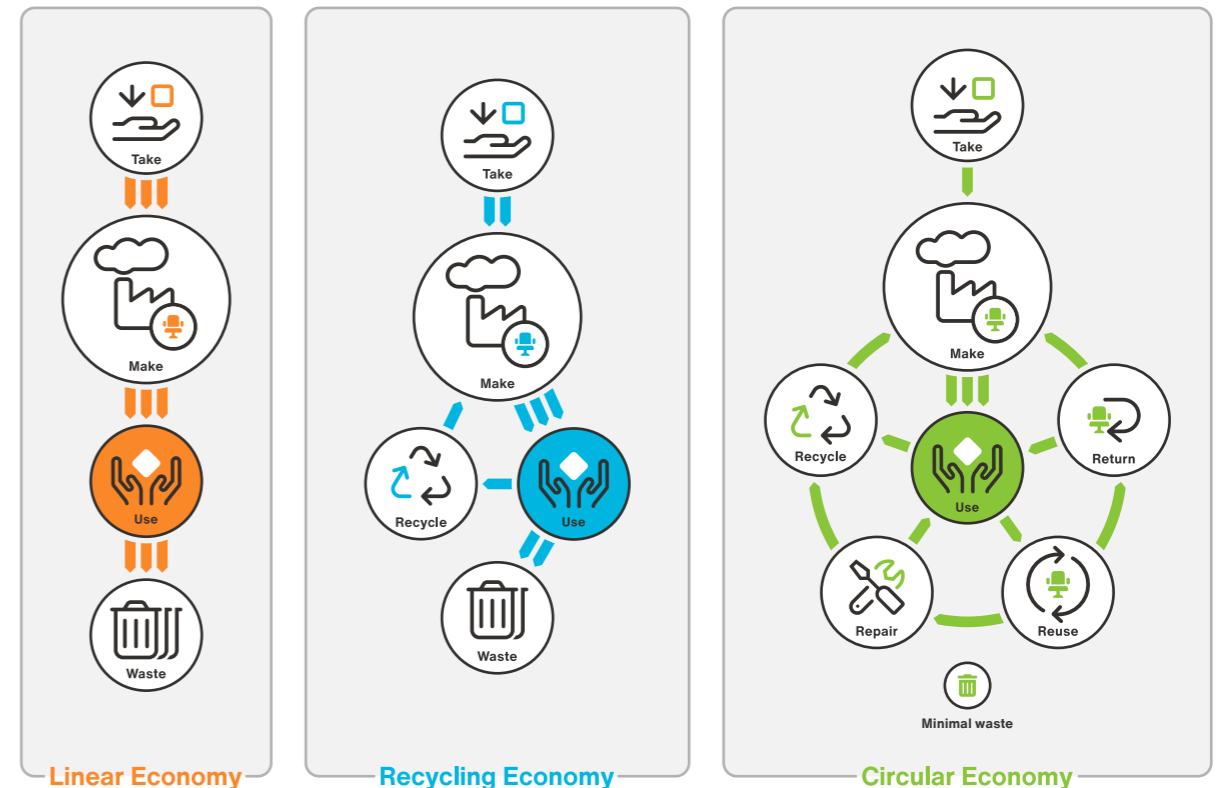
# Introduction

The circular economy is gaining traction internationally for sustained and resilient economic growth and job creation. The most common misperception about the circular economy is that it equals waste management and favours recycling, but in reality the circular economy is about sustainable resource management. A circular economy is one where economic growth is decoupled from economic development, by using resources more effectively. It is about national resource-security in support of socio-economic development. While recycling is an important component, the circular economy goes far beyond this, as Figure 1 illustrates. It challenges us to change the way we think about product ownership, with a greater emphasis on product sharing, renting, repair, refurbishment, upgrading, recycling and reuse (Nahman et al. 2021). It calls for a complete paradigm shift, creating opportunities for entirely new business models based on resource sharing, products-as-services, and access-over-ownership; facilitated through advances in digital technology (Nahman et al. 2021).

The circular economy is based on three principles: Design out waste and pollution; keep products and materials in use; and regenerate natural systems (Ellen McArthur Foundation 2017). Enhancing the application of circular economy principles can contribute to job creation and economic growth. There are significant business opportunities beyond the field of waste management, including for small businesses in product design, product sharing, repair, refurbishment and regenerative agriculture.

South Africa, as a developing country rich in natural resources, has an extractive-based economy with large quantities of extracted resources being exported for further beneficiation off-shore. This reliance on raw material extraction and exports puts the country's future development prospects at risk and raises questions as to whether South Africa is using its resources in the best interest of its people and of its development priorities (Nahman et al 2021). The need to “build back better” following

*The circular economy is about **more than just recycling***



the COVID-19 pandemic provides an opportunity to rethink how resources are used and managed (Circular Economy 2021). With a strong focus on the need for a ‘just transition’; and for an inclusive circular economy, we are looking for circular economy opportunities that benefit the economically marginalised members of society, through employment creation and small business development (Potgieter et al. 2020).

Therefore, the focus of this brochure is on circular economy business models and supporting policies showcasing real-life examples of how these business models support sustainable resource management. It features examples of innovative business models in South Africa and the European Union, and has been inspired by a [webinar](#) on this topic organised in June 2022 by the CSIR, the Black Business Council and Team Europe South Africa, with the support of the EU – SA Partners for Growth Programme.

# Innovative business models



## Sharing models

There is a range of products that sit unused for much of their lives. According to Ellen McArthur Foundation, the average European vehicle is parked 92% of the time (2015). Sharing models involve using under-utilised goods and services more intensively, either through lending or pooling. Car-sharing is an example of such a business model. Digital-based sharing platforms are increasingly being used to facilitate transactions between the owners of under-utilised assets and individuals seeking to use them. These platforms can serve both businesses and individuals. In addition, the sharing economy also includes product service system models in which the customer pays for certain functions or performance, while the total costs of ownership remain with the service provider. Revenue is earned through, for example, a leasing or rental agreement.

### **InnoVent™**

InnoVent is a South African company that provides organisations with a cost-effective alternative to IT equipment ownership. The company offers a pay-for-use structure with subsidised financing that allows companies to use the equipment over the leasing term without having to pay the full purchase price. InnoVent also supports companies to manage and make the best use of their IT assets through the end of their useful lives. Lifecycle management tools and an online asset tracking system assist companies in managing their assets. InnoVent gives IT equipment a 'second life' by refurbishing and remarketing used products. The company handles collection, recycling or disposing of any redundant equipment, and assists companies with upgrades.



## Product design

Designing for circularity is the most effective way to reduce a product's environmental footprint. Up to 80% of products' environmental impacts are determined at the design phase (European Commission 2014). Circular product design involves creating products that i) are easier to repair, remanufacture, disassemble and upgrade ii) are durable enough to last long and be reused iii) are made from safe and circular products (including recycled materials) and iv) deliver utility using the minimum amount of material possible (OECD 2019). By considering circularity at the outset of product development, businesses ensure that materials embedded in their products do not go to waste and are used as long as possible. As such, waste is 'designed away'.

### **ahrend**

Royal Ahrend is a Dutch company that manufactures office furniture products with modularity, disassembly, and life extension as core design principles. It starts with modular design, allowing components to be removed or replaced, which facilitates reuse and saves natural resources. All products are designed in product families, which enables the company to reuse parts in new products and facilitates customers with new product designs consisting of the same parts. Ahrend's products are also lightweight and minimise the use of harmful substances. To reduce virgin material consumption, most of the materials contain recycled content. Product value retention is achieved through large-scale refurbishment, re-manufacture or re-purpose activities. Ahrend offers 'Furniture as a Service', maintaining ownership of their products and assisting the user with different services.

***Designing for circularity is the most effective way to reduce a product's overall environmental footprint***

# Innovative business models



## Repair, refurbishment and remanufacturing

Repair and refurbishment business models allow products, and the materials embedded in them, to remain in the economy for longer, which reduces the extraction of new resources. Repair related business models ensure that products are fully utilised for their intended life cycle, instead of being prematurely thrown away. Refurbishment and remanufacturing extend the life of products by 'resetting the clock' as products are given a new life cycle (OECD 2019). At the same time, repair/refurbishment activities provide opportunities for local job creation, including for lesser-skilled workers. Remanufactured products are also often sold at a lower price providing more affordable options for consumers.



SNEW, a Dutch company that also has a branch in Ghana, has developed a circular system in which raw materials of existing equipment are reused. Its mission is to give ICT equipment a second life. Companies that hand over their depreciated ICT equipment receive maintenance for their current equipment or money for their old equipment. SNEW refurbishes ICT equipment, and if equipment is no longer refurbishable, then it utilises parts that are still usable for its spare parts service. Of all the equipment it receives, it reuses 75% and recycles 25%. At least 50% of SNEW's workforce consists of people who have a distance to the labour market.

*The circular economy is based on three principles; design out waste and pollution, keep products and materials in use, and regenerate natural systems.*



## Regenerative agriculture

Regenerative agriculture is an approach that focuses on building functional biodiversity and soil health to produce consistent yields without relying on synthetic inputs. It involves holistic farming systems that, among other benefits, enhance ecosystem biodiversity, produce nutrient-dense food, and help mitigate the effects of climate change (See: [Chesapeake Bay Foundation, Regenerative Agriculture](#)). This can include measures such as ensuring water retention, having a mix of crops, and planting trees among the crops. These farm systems are designed to work in harmony with nature, while also enhancing economic viability.



*La ferme biologique du Bec Hellouin*

Umgibe Farming Organics is a small-scale agricultural development enterprise in South Africa that supports agricultural cooperatives of smallholders and women to grow and market organic vegetables. The focus is on organically grown products that provide maximum nutritional value, are reasonably priced and can be grown with no harm to the environment. Farmers are trained in the Umgibe System, which is a farming concept that requires little inputs and physical labour, and can be replicated in every household. Umgibe also offers a platform that supports farmers in accessing markets. As such, food security, employment and circular economy challenges are tackled simultaneously.

The Bec Hellouin Organic Farm is a small (20 hectares) organic farm in France operating according to the principles of permaculture. A permaculture design takes better advantage of all the services rendered by the ecosystems and includes practices such as growing crops between trees (agroforestry), intercropping and combining pastoralism and agriculture (agro-silvo-pastoralism). This makes it possible to produce an abundance of healthy fruits and vegetables. The farm's market gardening production is several times higher than the national average in mechanised agriculture, per unit area, with virtually no use of fossil fuels.



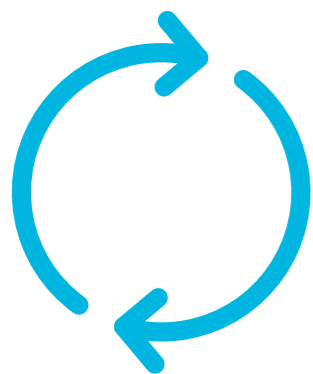
# Making it work

A supportive policy framework is needed to implement and scale up circular business models. The public sector can play a role in incentivising the development of circular business models through appropriate **taxation models**, while supporting businesses to develop appropriate **skills and capacity**. **Funding mechanisms** that facilitate investments in the circular economy are also crucially needed. In particular, support to SMEs is important given their role in disruptive innovation and job creation in South Africa. In parallel efforts to raise **customer awareness** are necessary to create a market for circular goods and services. In addition, policies that mandate **minimum standards of circularity**, for instance, in product design, can also be considered in the longer term. Finally, to ensure coherent policy development it is important to identify an appropriate custodian for the circular economy to ensure coordinated efforts towards a common vision for the circular economy transition.

Given that South African businesses are part of global value chains, collaboration with international partners including the EU is important to promote a more circular economy in South Africa and globally. The EU could facilitate **investments** in innovative circular businesses, while working with the South African government to create a more **enabling policy environment** for more circular value chains. South Africa, as well as the EU, can also benefit from **knowledge exchange and matchmaking** on circular economy issues, engaging both public and private stakeholders. Relatedly, South Africa and the EU can collaborate to facilitate **research** to inform circular economy innovations.

Creating a circular economy requires system-wide innovation to decouple economic growth from resource extraction, but for businesses, this **journey can start anywhere**. It is important for new and existing businesses to begin working towards more circularity in their operations even if it means small steps. For instance, moving towards high-quality durable products already contributes towards less waste and can be less complicated than using recycled content in products. It is an iterative process, where businesses can continue to invest in more circular practices and reduce the environmental footprint of their products. Relatedly, the business models described in chapter 2 are not always easily distinguishable and many businesses can work on several **interconnected aspects of circularity** together. A business producing products that can be refurbished and repaired may also provide repair/maintenance services which generates value both for businesses and consumers.

Circular business models often involve **greater levels of collaboration between different actors in the supply chain**. A network of actors is needed to create an effective circular economy ecosystem. For instance, coordination between producers and recyclers is needed to ensure a flow of waste and recycled raw materials, while actors involved in the sharing economy often rely on firms providing appropriate transport systems and/or networking platforms to coordinate with each other. In essence, a circular economy cannot be created by a single consumer, business or even a country, and requires **collective and coordinated efforts from multiple actors** locally and internationally. *Together, we can create a truly circular economy.*



*Creating a circular economy requires **system-wide innovation** to decouple economic growth from resource extraction, but for businesses, **this journey can start anywhere**.*



## EU INVESTMENT FOR TRANSFORMATION



**DNA Economics**  
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