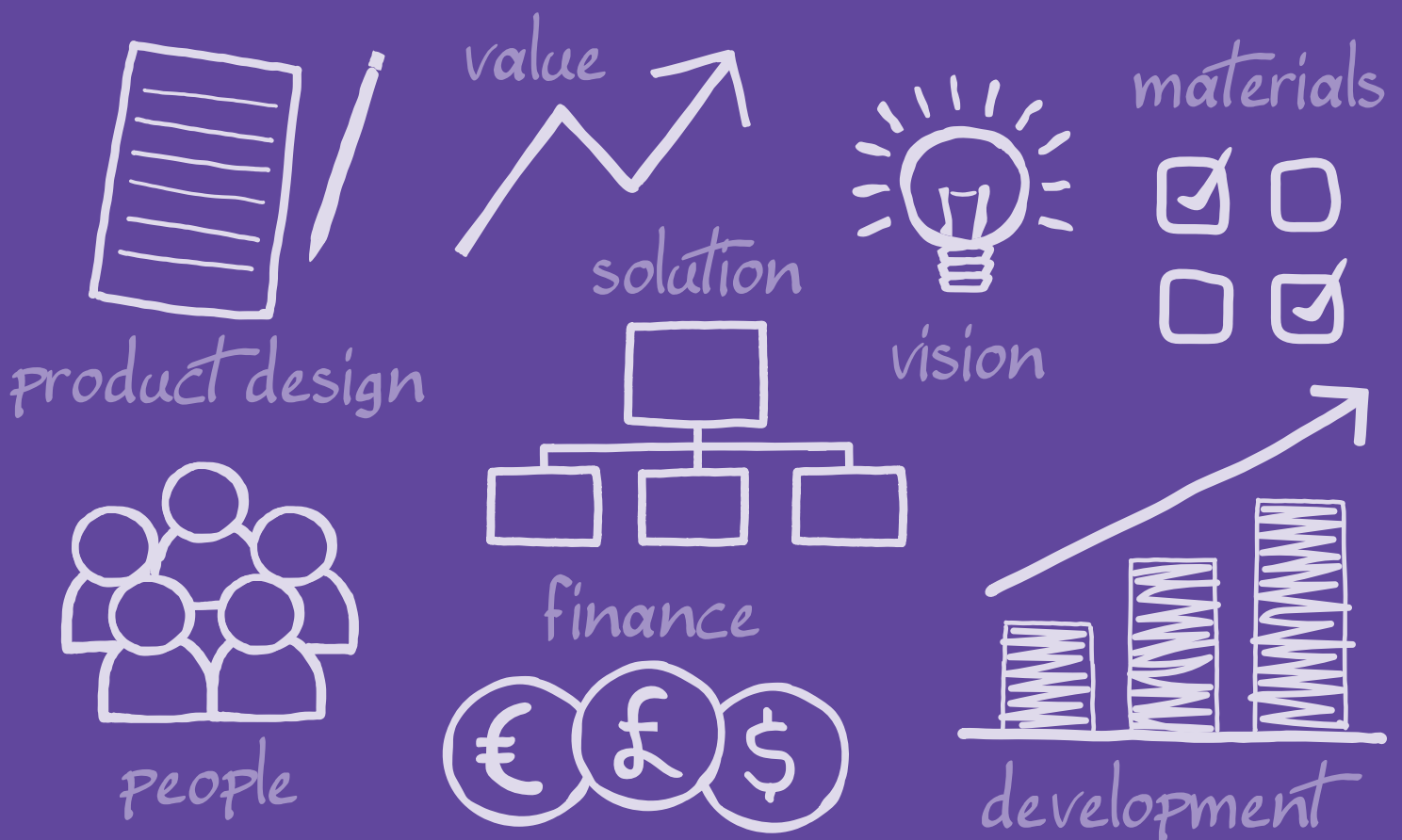


How to integrate circular strategies into your business model



IEMA

Transforming the world
to sustainability

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Acknowledgements

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Introduction

[why read this guide]

How to integrate circular strategies into your business model has been developed by IEMA's Circular Economy Network Steering Group (CENSG) in response to requests from our network to demystify circular economy business models and make it possible for all organisations to make circularity a reality.

While using circular priorities to design more sustainable products, materials and supply chains is essential, carbon emissions reductions and biodiversity benefits will only be fully realised through systems and incentives that have circularity embedded in them.

In IEMA's *Circular Economy 101* guide, we explained that the circular economy aims to reduce pressure on virgin resources and to cut waste and pollution, including greenhouse gases. By **redesigning** products, business models and supply chains, it is possible to **achieve net-zero targets and create more value from less for businesses and society by keeping resources, products and assets in circulation for longer**. We also set out **six goals** to help decision-makers implement a circular economy.

The aim of this guide is to show how the six goals can help develop an overarching circular strategy that will keep your circular products in use for longer, making them more productive and enabling their return and ultimate reuse. Every organisation has a business model – whether written down or not – summarising how it creates, delivers and captures value. In other words: what it provides for those who use it, how it does that, and how it earns money to do that. By integrating circular strategies into their business models, suppliers of goods or services, including businesses, utilities, charities and public services, **can create more value for all their stakeholders and reduce their footprints**.

In this guide, we aim to answer key questions, helping you use **circular strategies** and business models to do better with less.

- Section 1 considers circular strategies and their importance for organisations.
- Section 2 explains what we mean by the term 'business model' and what makes a business model circular.
- Section 3 provides insight into circular business models in practice, including case studies.
- Section 4 sets out the imperative for circular business models, explaining why they are better than 'traditional' business models that generate negative impacts and lost value.
- Section 5 considers how to bring the whole organisation along with you.
- Section 6 explains how and where to find value and revenue in circular business models.
- Section 7 discusses the enablers that move circularity forward.
- Section 8 looks at the barriers to businesses wanting to adopt circularity.
- In sections 9 and 10, we provide you with further reading and key references.

1. Unlocking value with circular strategies

This guide aims to help organisations identify and implement business models that are more likely to result in circular outcomes – but what does that mean in practice?

We want to help organisations use circular business models to reduce the unsustainable consumption of raw materials, energy, water and land, and thereby produce lower emissions and waste than traditional business models^{1,2}. This is important because there are examples of components of financially profitable business models that might be considered circular (e.g. some leasing models or sharing platforms), which, when implemented in an unsustainable³ way, have negative environmental and/or social impacts. We will talk about these more later in the guide.

We believe that a shift to circularity needs to happen before the business model stage. Business strategy defines how an organisation will operate, compete and deliver value⁴. Without a clear strategy to address an organisation's footprint and reduce our reliance on virgin resources, there is a risk that your circular business model won't make a significant positive impact and could even result in rebound⁴. A circular strategy will help you to articulate how you will create value while also shrinking the footprint of your production and consumption.

In IEMA's *Circular Economy 101* guide, we set out six goals to guide organisations towards positive circular outcomes (see Figure 1).

Three of these goals: **Slow, Intensify** and **Cycle** cover the key principles of a circular economy and can help you define your core circular strategy. We refer to these as the 'key goals' in this guide. The other three goals: **Narrow, Regenerate** and **Shared value**, should be used to support and enhance your circular business models, and help unlock the potential sources of new value that we will explore later in this guide.

Turning Slow, Intensify and Cycle from goals into strategies

To **slow consumption** and help customers use things for longer, our circular strategy can be to make products more durable with long warranties, provide easy ways to

repair and even upgrade products, and perhaps help our customers to resell the product once they no longer need it. Longer product lifetimes mean fewer replacement products each year, reducing the footprint of production and consumption.

To **intensify use** by helping our products to be used more productively, our circular strategy can be to offer convenient and affordable ways for customers to rent, pay-per-use, share or simply reuse those products. That helps increase the intensity of use (i.e. the productivity) of what has been manufactured and reduces the number of objects in the overall economy.

To **cycle** our products, components and materials more, our circular strategy can be to drive their recovery at the end of each use phase, by refilling, refurbishing, remanufacturing and eventually recycling the materials back into something useful.

What about Narrow, Regenerate and Shared value?

To **narrow** the use of material and energy flows, we can reduce production waste and design products that are more efficient and cost-effective in the long term. We can reduce transport packaging, remove unnecessary single-use packaging or opt for reusable packaging⁵.

The **regenerate** goal includes '**make clean**' by phasing out hazardous and toxic materials – such as harmful 'forever chemicals'⁶ used in plastic packaging – and '**make sustainable**' by substituting undesirable materials with regenerative (renewable, reusable and non-toxic), recyclable and/or secondary resources. We can use renewable energy, organic agriculture and production practices that regenerate nature. São Paulo municipality's project 'Connect the Dots' is supporting local farmers to adopt regenerative agriculture practices and reduce their reliance on synthetic fertilisers and pesticides⁷.

The **shared value** goal looks to create value for multiple stakeholders, ensuring that circular practice is beneficial in the long term for all involved, both up- and downstream of core activities, and across all stakeholders. In section 3, we show an example of a circular business model that, for example, develops skills and creates jobs.

ⁱ The 'rebound effect' is when expected efficiency gains from new technologies/approaches fail to materialise, due to behavioural or other systemic responses. For example, increased energy efficiency may lower energy consumption and running costs initially, but when consumers become aware of the savings, they realise they can afford to buy/use energy-consuming products more often, which results in energy consumption increasing back to the original level.

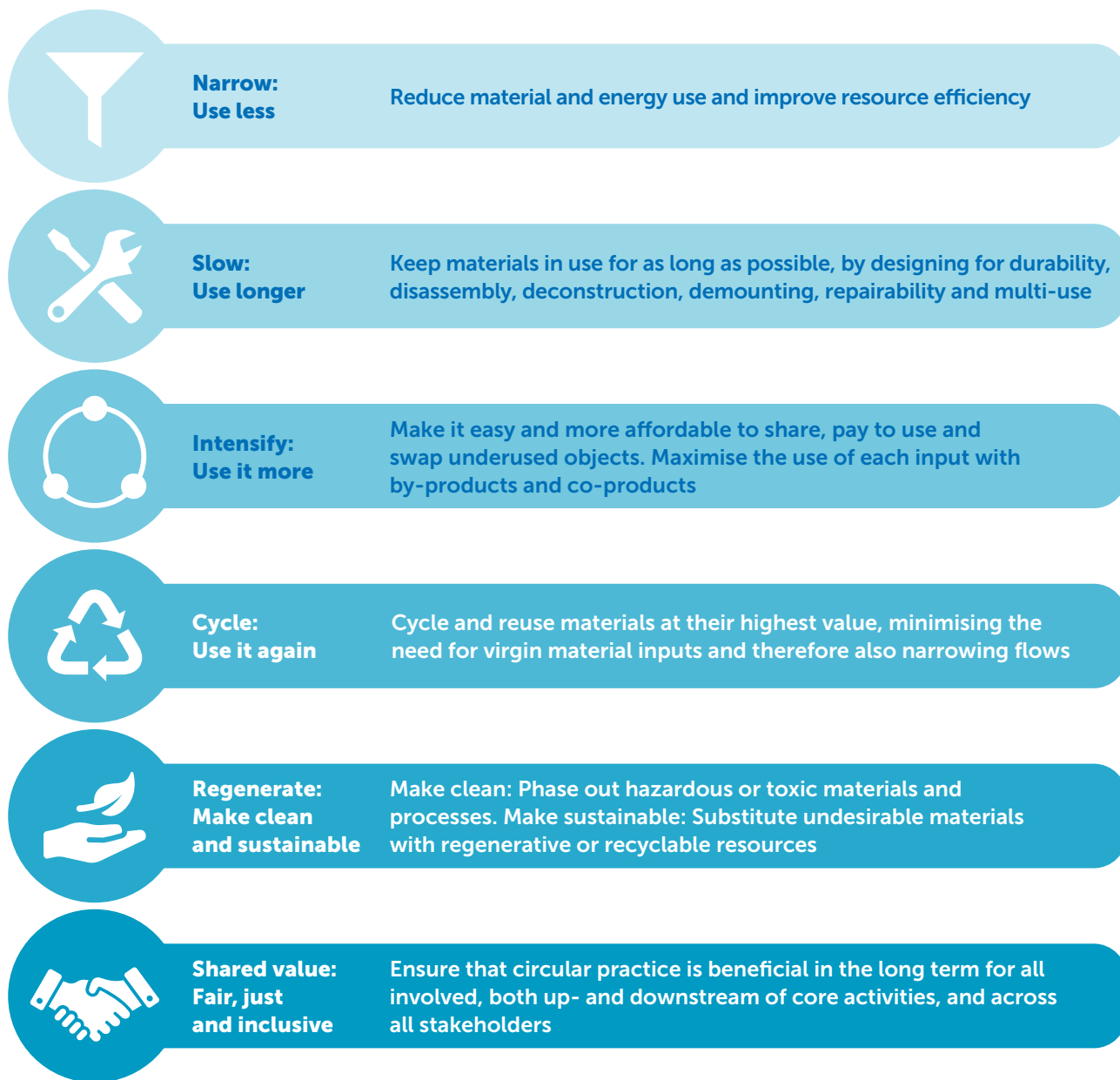


Figure 1

Six goals for a circular economy, based on the work of Bocken et al (2016)⁸, Geissdoerfer et al (2018)⁹, Mulrow and Santos (2017)¹⁰, Weetman (2021)¹¹ and Circle Economy (2023)¹²

2. What is a business model?

Business models summarise how an organisation intends to create and deliver value,ⁱⁱ and they are useful in helping “to capture, understand, communicate, design, analyse and change the business logic”¹³. The process of business model design is part of business strategy, and there are frameworks to help with this, including the **Business Model Canvas** (see Additional resources).

In summary, we can think about a business model having three core pillars:

- **Value proposition:** how do we create value, who do we create it for, and through what kinds of product and/or services?
- **Value creation and delivery:** how are activities, partners, channels (for communication, distribution and sales) and resources arranged?
- **Value capture:** how will the organisation earn money, and what costs are involved?

These pillars can each be expanded, to include the specifics of what you’re selling, your core capabilities and what sets you apart from your competition, together with the related details of sourcing, operations, resources, costs and revenues.

As well as value opportunities within the business, it is important to recognise there are value opportunities across the supply chain (e.g. between the business and its customers, suppliers, employees, shareholders, etc.), that often go unnoticed in conventional business model design. This might include waste materials from products/by-products/co-products during production, loss of reusable components and materials of products post-consumption, lack of/underutilised knowledge and expertise. By identifying these, organisations can better understand how to intentionally design business models that protect our finite resources, cut waste and pollution, and improve wellbeing for people and nature. The **Sustainable Value Analysis Tool** can highlight those opportunities¹⁴.

What is a circular business model?

While there is no accepted definition of a circular business model, many schools of thought including OECD¹ and Ellen MacArthur Foundation¹⁵, focus on those that have greatest potential to improve circular outcomes. These include improving product longevity, supporting activities like resale, repair, and upgrades to keep products in use, helping us share or access things we don’t need to own, or enabling products to have ‘another life’ through refurbishment and remanufacture.

However, some of these models can apply to both circular and traditional take-make-dispose (or linear) economy scenarios. For example, ‘product as a service’ allows customers to lease or pay-for-use, rather than buying and owning the product itself – but this doesn’t guarantee a more circular outcome. While some UK smartphone contracts use the ‘product as a service’ model, they often ‘bundle’ provision of the phone device with monthly allowances for network data and call time. This can encourage users to replace the phone with a new device long before it has become unreliable or suffering from poor performance (compared to equivalent new phones), causing the phone to be discarded when it could be reused or refurbished.

Each of the six circular goals we highlighted earlier can be used to guide business model design. Organisations might refer to just one goal or multiple goals depending on the desired outcomes. All goals can achieve better outcomes; however, as with strategy development, the three key goals below are central to developing a business model with greatest potential to improve circular outcomes.

- Slow: use longer
- Intensify: use it more
- Cycle: use it again

Let’s unpack these further and consider their key benefits before we look at some case studies.

ⁱⁱ We understand ‘value’ to include financial, environmental, social or cultural benefits, meaning that business models can be relevant to all types of organisations.



Slow: use longer goal enables business to develop strategies that encourage longer product lifetimes by offering high-quality, repairable goods, avoiding short-term styles, and facilitating maintenance, repair and

upgrade of these products. Examples of business models in this category are illustrated by MUD Jeans. This company offers **repair services** and a **subscription model** for their jeans; at the end of which, if in good condition, the returned product is **resold** as vintage second-hand jeans¹⁶. Another example is outdoor gear brand Patagonia, which makes high-quality products with a **lifetime warranty**, carries out repairs for free, and helps people resell their used gear¹⁷.



Intensify: use it more goal enables business to develop strategies that encourage us to share, exchange and rent those products we might not need to own. Examples of **sharing** or **renting** business models in action

might include tool hire, car hire, community libraries of things, and much more.

We can also intensify the use of biological materials including food, fibres and timber, by creating value with by-products and co-products. For example, coffee cherries (the protective shell around the coffee bean) also contain nutrients that are useful in food products, with the leftovers used for biofuel and replacement of plastics in products. Business models intensifying use in the coffee sector are being applied in countries such as Tanzania¹⁸.



Cycle: use it again goal enables business to develop strategies that might include recovering end-of-use items so they can be revived for another cycle of use. **Refurbishment** and **remanufacturing** business models

can lead to recovery of high levels of value from unwanted objects, enabling further 'returns' on the embedded materials, energy and human inputs. We might choose to **refurbish** or **remanufacture** our own products, or a specialist company might refurbish them. Siemens Healthineers sells a wide range of 'ecoline' refurbished scanners and X-ray machines, which meet the relevant standard for medical devices (ISO 13485). Costa Express partners with WEEE Scotland Ltd to remanufacture and certify for reuse refurbished parts within Costa Express machines.

The cycle goal is particularly apt for electronic goods. Circular Computing estimates that 70% of the laptops we dispose of in Europe could be reused. The company has chosen to remanufacture high-performance laptops from brands like Dell, Lenovo and HP, applying a British Standard Kitemark to reassure customers¹⁹. Costing around 40% less than the equivalent new model, these laptops also have a reduced environmental footprint.

We can also **(re)cycle** end-of-use materials, creating 'secondary materials' for the next batch of products. However, the rule of thumb is to **design for disassembly**, so you can recover and revive the product as easily and cost-effectively as possible. Focusing on recycling often means missing out on value from products that could have been refurbished at a much lower cost, with a smaller environmental footprint and a substantially higher resale value.

3. Circular business models in practice

Now let's look at some case studies in a bit more depth. In these case studies, we highlight all the circular goals we believe each organisation is working towards, starting with the key goals (Slow, Intensify, Cycle), but not forgetting the supporting goals (Narrow, Regenerate, Shared value).

Making durable, repairable and upgradable products

In 2022, WEEE Forum estimated that 5.3 billion mobile phones became waste with many valuable materials, such as silver, copper, gold, palladium and recyclable components, ending up in landfill or being incinerated²⁰.

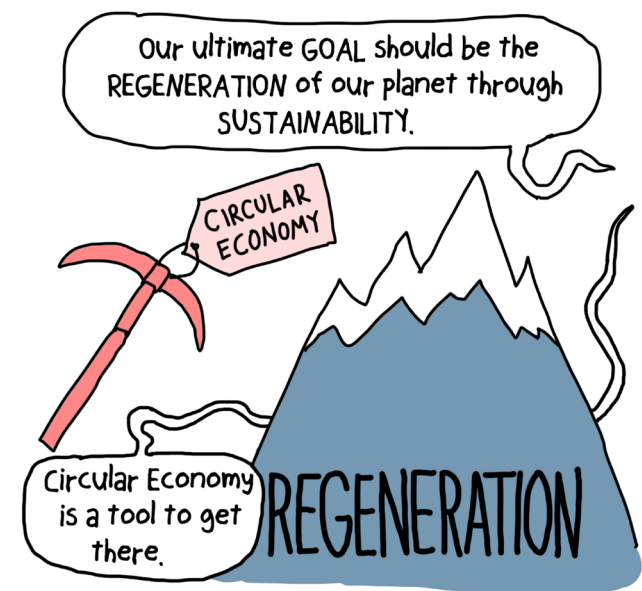
Fairphone is a crowd-funded social enterprise. It aims to understand and inspire change in the electronics industry worldwide²¹. The design of smartphones normally performs poorly in terms of cost-effective durability, repairability and upgradeability.

Fairphone offers an alternative smartphone with do-it-yourself repairs, customisation options, software updates and long-term availability of modular spare parts. The aim is to support phone longevity, and the lifetime of a Fairphone is around 2.5 times higher than average phones.

It achieves this by:

- **Designing for disassembly:** the user can take the phone apart and replace components that can be isolated, so no specialist services or intermediary companies are needed.
- Sending individual modules or new components allowing customers to buy individual modules or new components, which avoids the need for large-scale operations, involves fewer logistical needs and means using far fewer new materials. It also avoids the need to replace a phone, or to send handsets to different factories/countries to be repaired.
- Offering a **take-back scheme** and recycling other handsets.

Fairphone also has an open forum where users can give feedback and ask for improvements, helping them feel part of a movement and enhancing customer loyalty.



Boeschaert, T. 2022

Source: © Christoph Hinske and Harry Lehmann, The Impossibilities of the Circular Economy: Separating Aspirations from Reality (2022), comic story art by Virpi Oinonen, <https://360dialogues.com/360portfolios/ce-impossibilities>. CC-BY-NC-ND 4.0 licence.

Sharing and swapping

In 2022, a survey of more than 3,000 families and carers in the UK found that 40% are struggling financially; with 26% of parents and carers in Great Britain asking their children to borrow more books from their school library. Twenty per cent also said they were spending less on books for their children because of increases in the cost of living²².

The Loop co. introduced Book in Loop, a circular economy platform facilitating the sale and purchase of school textbooks²³. The platform collects used books for resale, **refurbishes** them and lists them on the website, ensuring that each book is in impeccable condition for customers. Sellers have the option to either receive money for their old books or use it directly on the platform to buy new ones for the following year. Families can save up to 80% by buying their textbooks at Book in Loop, which has already circulated more than 300,000 books.

Inspired by the success of Book in Loop, The Loop co. recognised the potential of the circular economy and, in 2019, launched BabyLoop, an e-commerce store for buying and selling secondhand baby strollers and childcare equipment. The platform ensures that all baby products meet the highest standards of safety and quality.

Driven by their commitment to social and sustainability concerns, The Loop co. has also partnered with the Calouste Gulbenkian Foundation to create UniLoop. Using the successful circular business model above, this partnership has extended the **'sharing economy'** to university campuses to support students and staff.



Reuse, refurbish and remanufacture

In Scotland alone, the reuse sector is estimated to be worth around £244m per year, reusing around 89,000 tonnes of material and sustaining more than 6,000 jobs^{24, 25}.

Rype Office's furniture sourcing service includes sustainable delivery and installation, project management, take-back, leasing, and multi-life furniture management²⁶. Its business model has been developed around the circular economy to reduce emissions, waste and costs, while creating social value.

The company takes high-quality unwanted items from elite brands and, using a quality-controlled engineering process, **remanufactures** them so they look and perform as new, offering significant economic and environmental savings. In-house remanufacturing avoids extra cost margins from using intermediaries.

It's estimated that remanufacturing more than 18,000 items has saved over 1,000 tonnes of embodied carbon through avoiding virgin materials. Via a collaboration with Connection Crew, which employs people with lived experience of homelessness, Rype Office also provides social value.



4. Why is it vital that organisations adopt circular business models?

There are pressing reasons for businesses to transition towards more circular business models. In our *Circular Economy 101* guide, we saw that the world is already in ecological overshoot, exceeding critical planetary boundaries that have enabled liveable conditions.

In the World Economic Forum Global Risks Perception Survey 2023, six key environmental risks feature in the top 10 risks for the next decade, with **biodiversity loss and ecosystem collapse** viewed as among the fastest deteriorating global risks²⁷. The global **cost-of-living crisis** is seen as the most severe global risk in the short term, highlighting the need for more affordable products and services – and yet ‘business as usual’ in traditional business models relies on increasing consumption of finite resources, land and water.

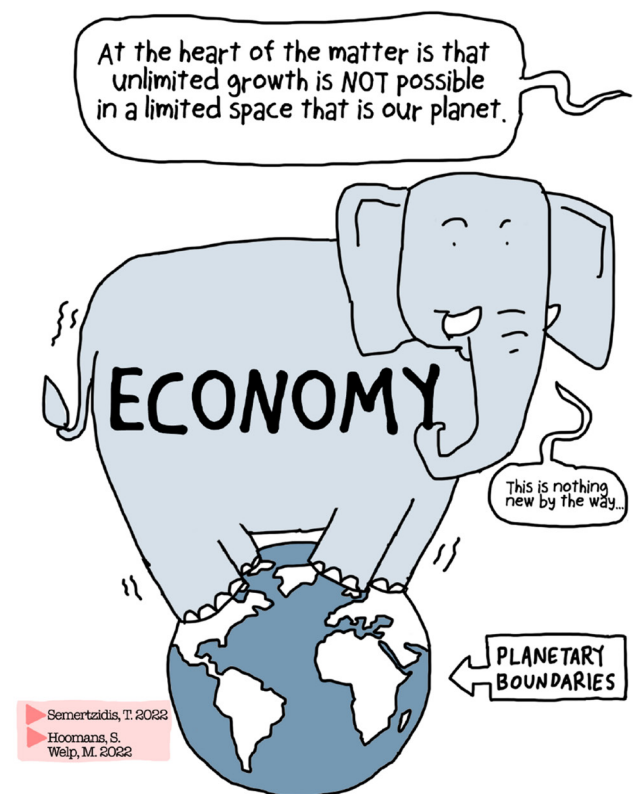
Based on the outputs of several major surveys by Globescan, IKEA realised that customers are changing their priorities²⁸ with a focus on:

- **Value** – people want less stuff and want the things they choose to be as good as possible.
- **Affordability** – this means low prices without sacrificing function, quality, design or sustainability.
- **Less waste** – people do not like throwing things away.
- **Convenience** – which if not considered carefully, can be a barrier to caring for and circulating our stuff.
- Being **good citizens** with a growing awareness about consumption and sustainability.

Whether the product lifetime is shorter than it could be, or we have stuff sitting idle much of the time, or we allow all the embedded resources to be wasted at the end of the product lifecycle, the result is the same: we could have earned much more profit by keeping things in use for longer, getting more use out of them, and recovering and reviving them for another lifecycle.

Circular business models are better for people, planet and prosperity

Transitioning to circular business models means we can do better, with less, with multiple benefits for businesses, the planet and society²⁹. Carefully planned strategies, underpinned by the six circular goals will improve resource productivity, shrink industrial footprints, engage customers, and improve long-term profitability of our businesses^{30, 31}.



Club of Rome 1972:

"The global system of nature in which we all live - probably cannot support present rates of economic and population growth much beyond the year 2100, if that long, even with advanced technology."

Source: © Christoph Hinske and Harry Lehmann, *The Impossibilities of the Circular Economy: Separating Aspirations from Reality* (2022), comic story art by Virpi Oinonen, <https://360dialogues.com/360portfolios/ce-impossibilities>. CC-BY-NC-ND 4.0 licence.

Better for businesses:

New profit streams from developing services to support resale, repair, rental and so on

Reaching **new customer groups** through provision of high-quality remanufactured or refurbished products

New revenue streams from pay-per-use or shared services

Reduced costs by sharing or selling unwanted assets, equipment and consumables

Recovering embedded value from end-of-use objects, through refurbishment, remanufacturing and eventually recycling

Reduced volatility and increased supply chain security from reducing the reliance on virgin materials and dependence on single sources

Reduced material, energy, carbon, and water footprints

Improved customer interaction and loyalty, with longer-lasting relationships, enhanced reputation and visibility in the market

Engaged employees and suppliers, with everyone sharing a purpose for people and planet

Better for the planet and society:

High-quality, durable, and repairable products with lower carbon and material footprints.

Less pressure on land, biodiversity, and water, with reduced pollution and improved health for humans and living systems.

More affordable products and services from easier access to reuse, refurbishment and sharing.

Reduced mining and environmental damage through access to longer lasting and shareable products and equipment.

Meaningful new jobs in core areas, such as repair, refurbishment, renewable energy, waste, and resource management, and enabling areas, such as education, design, and digital technology.

5. Implementation and wider organisation

The ability to successfully implement any strategy requires **knowledge, skills and investment**.

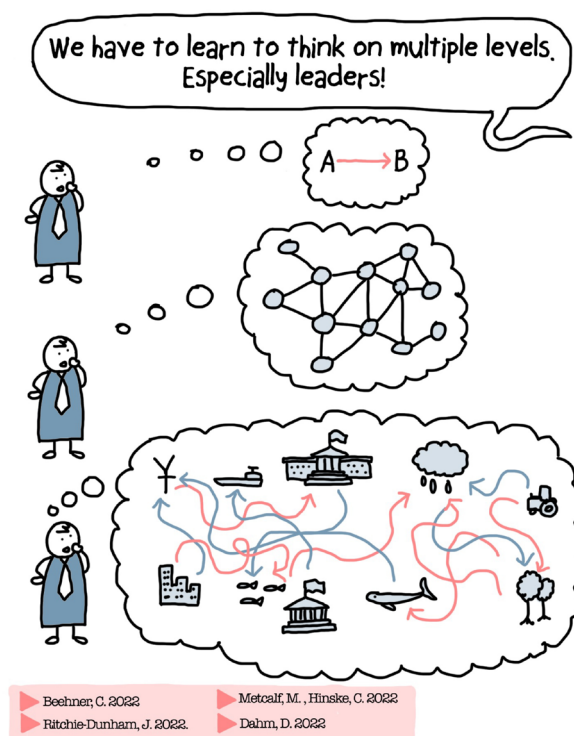
The implementation of circular strategies, and the circular business models built on those strategies, is no different.

Once it is clear which type of circular business model your organisation wants to adopt, you will need to embed it in a way that transforms the whole organisation. Successfully transitioning to circularity requires adapting key organisational levers, including strategy, corporate culture, processes, systems, structures, people management, etc.

Leadership should set a **clear purpose, vision and mission** aligned with the six circular economy goals and translate that into a strategy that informs all decision-making processes at all levels, such as investment-return timescales, suppliers' relationship, mergers and acquisitions, competencies, and staff incentives.

If the circular strategy is not well defined and integrated, with senior commitment, SMART (Specific, Measurable, Achievable, Relevant, and Time-bound) objectives and implementation roadmaps, it risks carrying on with business as usual. For example, although some global fashion companies have adopted circular business models for certain product lines, their marketing strategies are still tied to promoting 'fast fashion'. This practice is partly driven by a failure/resistance to rethink a revenue model that is focused on selling garments at the lowest cost and quality rather than capturing value through alternative commercial models that support circular approaches (e.g. subscription or exchange models)³².

There are tools from a range of organisations, and we've included a useful framework and key questions from Systemiq, to help you design a business operating model that supports your circular strategies (see Additional Resources).



Source: © Christoph Hinske and Harry Lehmann, The Impossibilities of the Circular Economy: Separating Aspirations from Reality (2022), comic story art by Virpi Oinonen, <https://360dialogues.com/360portfolios/ce-impossibilities>. CC-BY-NC-ND 4.0 licence.

6. How to capture value and revenue

In section 2, we outlined the three core pillars of a business model: value proposition, value creation and delivery, and value capture. A crucial part of value capture includes how the organisation earns revenue, and outlines the costs involved. There are a variety of commercial options to consider, including contracts, ownership versus 'usership', whether you expect payment in advance/on delivery/over a 'use period', and more – some of these options may involve legal contracts with the customer.

These revenue options apply to both traditional and circular business models. For example, smartphone bundled contracts use a 'service and results' as the revenue streams, but as we explained earlier, these contracts are often associated with reduced product life and increased waste. This is another example of where you cannot guarantee a circular outcome if your strategy is not underpinned by a circular goal.

Figure 2 below shows the revenue options:

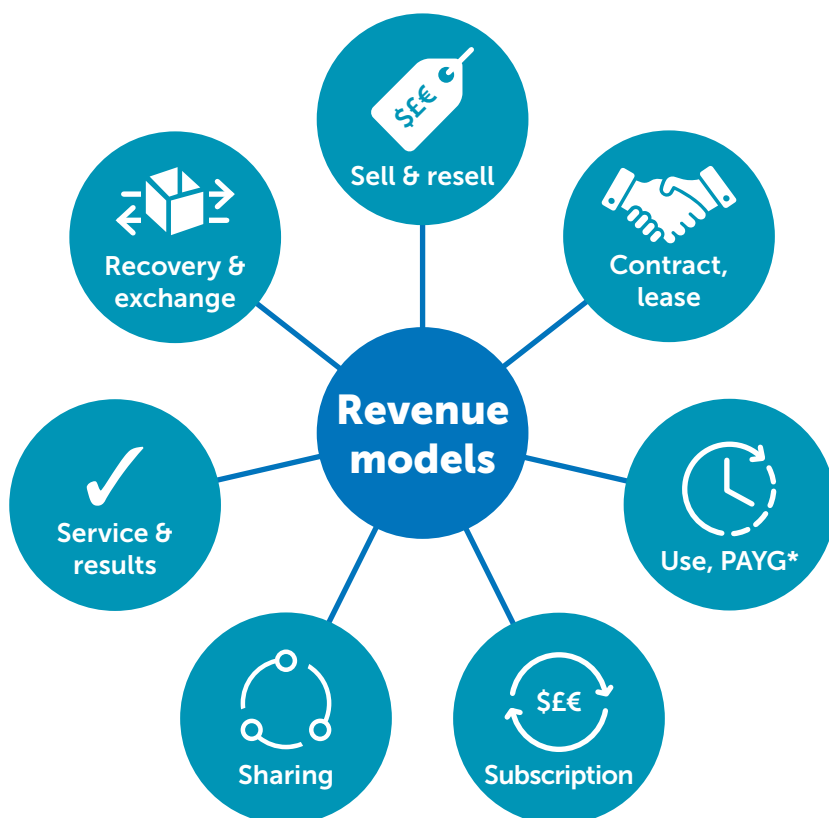


Figure 2
Circular business models: revenue options

*PAYG (Pay as You Go) and Pay per Use refer to short term rental models where you pay for the time or benefits used, for example for hiring city bikes, or PAYG phone service contracts where you pay in advance for airtime or data usage but are not committed to a long-term contract.

Source: © Catherine Weetman, A Circular Economy Handbook: How to Build a More Resilient, Competitive and Sustainable Business (2021), Kogan Page, London; www.koganpage.com/CircEcon2

Table 1 shows which of the three key circular goals each commercial approach supports, together with some examples of circular business models in practice.

It's worth exploring which option will best support the business model, and how each option will affect cashflow. Here are two examples of creating revenue options for your circular business models.

Moving away from traditional 'ownership' and transactional models: Instead of selling the product, we can sell 'uses', or 'access', providing the 'benefit' of the product to the customer. Organisations can earn profits from multiple short-term rentals or use subscription models and engage with new customers who don't want to invest in ownership. That could bring us more income

in the long run but it will reduce our cashflow in the short term, because we might be waiting for several years to earn the revenue we previously banked at the point of sale. We might choose to roll these changes out gradually, to ask for financial support from lenders or shareholders, or even to share the risk and cost across our supply chain.

Deciding to offer more durable products that are designed for ease of repair, upgrade and disassembly:

We can create value by recovering those end-of-use products and components for resale, remanufacturing, or recycling, using commercial models that encourage or enforce recovery. Businesses can earn higher profit margins from high-quality, longer-lasting, more efficient products, and we can earn revenue from new services to help repair and resell those products.

Commercial model	Description	Circular goals			Examples of circular business models
		Slow	Intensify	Cycle	
Selling	Transfer ownership of the product or asset to the customer for a fee	✓			Fairphone; reusable drinking bottles; Patagonia clothing
Reselling	Connect buyers and sellers and facilitate their transactions, charging fees for successful transaction			✓	eBay; resource exchanges; Excess Materials Exchange; Patagonia's WornWear
Contract, lease	Make high-margin, high-cost products affordable through contracts which may include added-value services. Product generally owned by the provider	✓		✓	Chemical leasing
Use, rent	Enable access to part of a product or service, enjoying many of the benefits of full ownership at a fraction of the price		✓	✓	Grover (consumer electronics); Tulu.io; fashion rental
Pay-as-you-go (PAYG)/pay per use	Enable access to metered services, with fees based on actual usage rates	✓	✓	✓	Car hire e.g.: Stellantis; Free2Move; cycle hire
Subscription	Charge the customer a subscription fee to gain access to a product or service	✓	✓	✓	Thelittleloop and Bundlee children's clothes; The Bike Club
Sharing	Allow other people to use your products or services, generally on the basis of trust and implied reciprocation instead of fees		✓	✓	Lift-sharing; tool-sharing; Libraries of Things
Service and results	Sell the service the product performs. May include contracts based on performance outcomes		✓	✓	Rolls Royce Aero engines; Philips 'pay per lux' lighting; Kaer air conditioning
Recovery & exchange	Recover end-of-use products, components and materials for reuse, remanufacture, recycling. Pay a fee or provide other benefit to user (e.g. reduce their disposal costs)			✓	Fairphone: €50 voucher if end-of-use phone returned for recycling; packaging deposit return schemes, e.g. Algramo

Table 1
Commercial options for circular business models

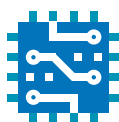
Source: Adapted from A Circular Economy Handbook, 2nd edition, Catherine Weetman.

7. Enablers – inside and outside the organisation

We've mentioned some of the ways to improve circular outcomes, and here we want to highlight some enablers that can further support you on your journey.



Inside your organisation, you will need to understand what changes are needed and to track and report on those changes. For this, you will need to source and collect robust **data**, and agree appropriate **KPIs and metrics**. The type and form that data takes might vary from organisation to organisation, but the requirement for key data around inputs (types, quantities, origin of materials and products purchased and used) and outputs (sales, by-products, waste) applies to every organisation. For business models oriented around products, data on input materials and components within the product, its performance, cycling and end-of-life impact are also crucial. Experience shows that often companies have more data than they know what to do with, or they could have if business management software and supplier contracts were set up to provide it.



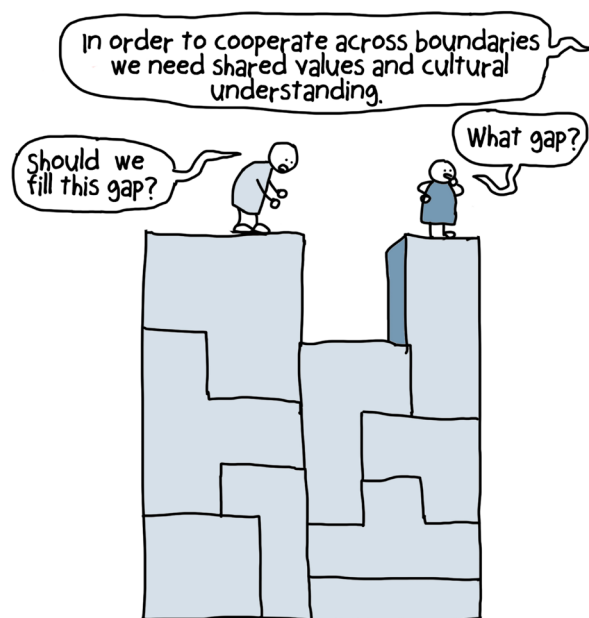
Digital technology can play a key role in supporting circularity and improving value. For example, 3D printing can reduce the need to carry stocks of spare parts; 'Internet of Things' and sensor technology can monitor the condition of equipment for your customer and highlight the need for preventative maintenance; satellite tracking can tell you exactly where your 'pay to use' products are at any moment; and Artificial Intelligence (AI) can help you manage product returns efficiently.



Collaboration can act as a multiplier for circular improvements. Earlier, we highlighted the cashflow implications of renting, and suggested asking your suppliers to support you with this. You might look at partnering with specialist refurbishers or remanufacturers to help you recover value from end-of-use products, or with service providers that can inspect, repair and resell your returned products. You could also partner with a company that can make high-quality, upcycled products from your production waste (for example, Burberry's leather offcuts are repurposed by Elvis & Kresse).



Today's complex markets are heavily influenced by **government policies**. Recognition of the opportunities and challenges created by both the presence and absence of policies can help you ground your business models. Government strategies such as Scotland's Circular Economy Bill³³ and Wales's Circular Economy Policy Statement³⁴ clarify government ambition, while regulations such as the delayed Extended Producer Responsibility (EPR), due to come into force in 2025, and bans on the extraction or disposal of critical raw materials, set crucial operating limits for businesses. Financial incentives such as repair bonuses in Austria and Germany³⁵ or China's introduction of significant value added tax (VAT) refunds for products such as recycled tyres and sand produced from recycled aggregate³⁶, can help to de-risk investment for companies looking to make the transition, and mandatory standards, such as the European Union's Corporate Sustainability Reporting Directive, can level the playing field for more sustainable business models.



Anran, L. 2022

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8. What is holding business back?

Despite the benefits of circular economy business models highlighted throughout this guide, we recognise that objections may arise from inside and outside the organisation. Below, we have included some of the more **common objections** that we have come across, **and useful counterarguments** to them.

This list is not exhaustive, and the objections and counterarguments will differ based on your business context, but we hope it will give you a good starting point.

People want new products, not pre-used/shared ones

- Yet, many products that we need periodic access to spend most of their lifespan not being used. According to a 2020 survey, 10% of British people have never used their own household tools (such as hammers, measuring tape or screwdrivers), equivalent to £1.97bn worth of DIY equipment, and 37% only use them every few months³⁷.
- 'New' does not always mean higher quality. Reused or remanufactured products follow certain quality standards, such as British Standard 8887-220:2010, which sets down an 'as new' warranty as a precondition of remanufacturing³⁸.

Circular economy strategies cost more than business as usual

- Changes to the revenue model and price premiums can help bring down the upfront cost. For example, MUD Jeans has set a premium price of €129,95 for selling a pair of jeans and, as an alternative, it offers a lease option for €10.80/month.
- Despite the high upfront cost, in some cases the circular strategies could help de-risk the business from future high costs and shortages of raw materials³⁹ or upcoming regulations (such as UK Packaging Waste Reforms⁴⁰).

We prioritise the cheapest cost-to-buy over the full lifecycle cost

- Raw materials and parts are among the highest costs to any business, but efficiency savings can add to a company's bottom line. For instance, Ricoh UK introduced a toner compactor programme in 1995 that enabled the recycling of waste toner back into the process. This improved efficiency, reducing raw materials costs by almost £300,000 each year⁴¹.



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9. Additional resources

Our summary of circular economy business models comes from IEMA Steering Group member Catherine Weetman's book **A Circular Economy Handbook: How to Build a Resilient, Competitive and Sustainable Business**.

In Chapter 3 on Business Models, Catherine synthesises the work of leading academics and circular economy thought leaders, including Walter Stahel, William McDonough and Michael Braungart.

We would like to thank Christoph Hinske for giving us permission to use the comic illustrations in this guide. Under CC-BY-NC-ND 4.0 licence, these are available to use for free at <https://360dialogues.com/360portfolios/ce-impossibilities>

Below you will also find a range of resources for further reading.

The Sharing Economy and Environmental Sustainability (Chapter 3) – Reengineering the Sharing Economy

This report discusses the impact of the sharing economy on resource consumption and environmental emissions in three sectors: transportation, housing and goods. It highlights that while sharing can reduce material consumption and emissions through shared usage, it can also lead to unintended increases in resource demands and environmental impacts at a systems level.

Strategyzer's Business Model Canvas

The Business Model Canvas is a strategic management and entrepreneurial tool. It enables you to describe, design, challenge, invent, and pivot your business model.

The Circular Canvas: design circular businesses and projects by Circulab

Created by Circulab, this tool is designed to help organisations rethink their business model or projects and create long-lasting impacts through embracing systems thinking and find a balance between economic viability, the ecosystem and sustainability.

Master Circular Business with the Value Hill

The Value Hill is a strategy framework developed by Circle Economy that aims to help businesses position their strategy, product and value chain in a circular context.

Sustainable Business Model Canvas

The Business Model Canvas is a tool that helps practitioners describe, visualise, assess, and change existing business models. It describes how an organisation creates, delivers, and captures value. This adaptation adds a special focus on social and environmental costs and benefits that the business has on people and the environment.

Circular Business Model Design Guide

A practical guide developed by PA Consulting, the Ellen MacArthur Foundation and the University of Exeter to help practitioners find new value opportunities and design circular business models. It supplies interactive templates for mapping existing value flows, finding circular value opportunities, new customers and key partners, and understanding capabilities, etc.

Organising for Circularity

A framework developed by Systemiq that helps practitioners question and rethink the effectiveness of their business operating models in support of circularity. The framework provides insights into eight key organisational areas – spanning organisational strategy, structures, processes and people – that businesses need to transform and illustrates some best practices.

The Impossibilities of the Circular Economy: Separating Aspirations from Reality

The fifth Factor X publication from the Federal Environment Agency (Umweltbundesamt, UBA), *The Impossibilities of the Circular Economy* provides an overview of the limits to the circular economy, emphasising the relationship between integrated resource use and more systemic leadership-management approaches.

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Further information

The use of this guide will be reviewed, and future iterations published if, and when, required.

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