

# Cracking the circular challenge

Why your business can't afford to ignore the circular economy, and how to get started.



## Why we have written this guide

The Earth's resources are not limitless. With our population expected to rise to 9.7bn in 2050, we need to move beyond a 'take, make, dispose' economy towards one where all materials are treated as precious resources, with nothing thrown away. We wrote this guide to help your business start to think about how it can embrace the circular economy. Because this has to be one of the biggest challenges, yet most exciting opportunities, for today's businesses.

### About Bioregional

Bioregional champions a better way to live. We work with partners to create better places for people to live, work and do business. We have been working on sustainability initiatives with major companies, many of them household names, for more than a decade, and have a track record of engagement in circular economy ideas and projects dating back to the 1990s.

As well as working with leading retailers like Kingfisher and Marks & Spencer on the circular economy we have also brought circular thinking to the construction sector, through

our work on the London 2012 Olympic and Paralympic Games and with the Government's environment department Defra. We were part of the team behind Vision 2020, a roadmap which showed how the UK could end the need to send any food waste to landfill by 2020.

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“We have a finite environment—the planet. Anyone who thinks that you can have infinite growth in a finite environment is either a madman or an economist.”

**Sir David  
Attenborough**

# Re-thinking the economy



## Imagine a circular future...

The circular economy won't just change business - it'll transform our relationships as consumers to the things we buy, from food and drink to electrical goods and clothes - even running shoes...

Imagine you need some new running shoes. You take a few photos of your feet then order new custom-fitted ones through an app that enables 3-D printing. Your shoes will be made entirely from recycled materials, offering high-tech performance and with built-in sensors linked to the internet that enable your shoes to collect and exchange data.

You arrange to collect your bespoke shoes from a local sports store. You bring in your old running shoes for recycling to get a discount code. At the store, you meet with your fitness adviser, who not only checks the fit by filming you and analysing your gait (saving the video for future reference), but also asks you a short series of questions to learn (and permanently store) information about you as a customer.

The store shares this information with your 'shoe manufacturing' brand - as part of their licence to stock that brand's shoes. Your fitness adviser then 'upsells' you some advice and guidance on how to improve your performance, such as diet options and training packages personalised to help you meet your fitness goals. You are encouraged to sign up to ongoing online support and join the growing real-world community of fitness enthusiasts linked to that store who meet regularly to run together.

When you get home, you connect your shoe sensor to your fitness app and start automatically sharing data on how you are using the product. At the same time, you purposefully share your love of running and the shoes on your favourite social media channels, becoming both a de facto brand ambassador and part of an ever-growing online running community.

Based on its understanding of how much you have used the shoes, after a period of time the shoe brand contacts you to suggest it might be time for a new set of insoles - allowing you to extend the life of the product.

Sometime after that, it contacts you to tell you the shoes have reached the end of their useful life. You return the product, free of charge, earning a discount on your next set of running shoes.

It sounds like science fiction, doesn't it? But almost all the ideas above are already happening in one form or another, at varying stages of development. And all of them embody different characteristics of circular thinking.



## About this guide

If our one planet is to cope with a growing human population and economic growth, then ultimately we need to re-think the notion of waste. Nature got that long ago, but we humans are taking a while to catch up.

The term 'circular economy' was brought to prominence by the Ellen MacArthur Foundation when it launched in 2010. It consolidates various schools of thought that have been around since the 1970s, including 'cradle to cradle', 'biomimicry', 'industrial ecology', 'regenerative design' and 'natural capitalism', to name just a few.

It is now one of the hottest of hot topics in corporate sustainability and CSR, with an avalanche of conferences, reports and guidance devoted to the subject. It's clearly neither a fad, nor science fiction – it's an idea whose time has come.

But what is it, and what might it mean for your business? In this guide we:

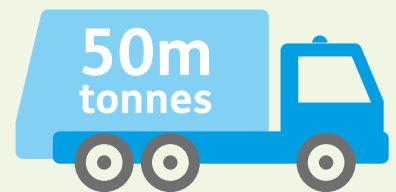
- explain why no progressive business can afford to ignore this revolutionary idea
- summarise the essentials of circular thinking, and
- show you how to get started.

### The scale of the challenge

# 9.7bn

By 2050 there will be 9.7bn people on the planet. Half of them will be in water-stressed regions, requiring 50% more energy.<sup>1</sup>

To stay within a 2°C temperature rise, the world needs to cut its carbon intensity by 6.5% every year until 2100.<sup>2</sup>



50m tonnes of global e-waste (discarded electronic devices) are anticipated in 2018 alone.<sup>3</sup>

That's enough to fill 400 Wembley stadiums to the brim.

# 1.3bn

1.3 billion tonnes of food are lost or wasted each year, according to the UN. Heaped into a pile, this would be roughly the same size as Ben Nevis.



You can find a fuller explanation of the history of the circular economy here: [www.ellenmacarthurfoundation.org](http://www.ellenmacarthurfoundation.org)

## So what exactly is the circular economy?

In a truly circular economy, the concept of waste simply doesn't exist.

In the traditional 'linear' economy we use resources to make products, generating a wide range of wastes and pollutants along the way – including throwing away the product at the end of its life. It's a case of take, make and dispose.

Bioregional's vision of a truly circular economy is one where the concept of waste simply no longer exists.

In a truly circular economy, every element of what we create or produce is recognised as a resource: an input to another part of the system. Thinking in this way means we have to completely design out waste

across all stages of the lifecycle and enable materials to circulate through the economy. This will require all materials, chemicals and products to be designed and used in such a way that they can either be returned to the biological cycle (through biodegradation, or composting) or re-used, re-covered, or recycled in the technical cycle.

A truly circular economy is also powered by 100% renewable energy. As a result, materials and products in the system might end up with radically different functions within new business relationships.



The most well-known diagram of the circular economy was created by the Ellen MacArthur Foundation – follow this link to see it: [bit.ly/CEdiagram](https://bit.ly/CEdiagram)

## What's in your coffee cup?

A staggering **2.5 billion disposable coffee cups every year end up in landfill**. The biggest challenge when recycling coffee cups, aside from them being contaminated with left-over coffee dregs, is that they are made of both 'biological' and 'technical' materials, which complicates the recycling challenge.

Key to circular thinking is understanding the difference between biological (or natural) and technical (or synthetic) materials. Biological materials include things like wood, water and bamboo, which are non-toxic and easily biodegrade. Technical materials include plastics,

alloys (metals), chemicals and other man-made materials that cannot be broken down by nature. These need to be 'recovered' and captured, refreshed and re-used using as little energy as possible – ideally energy from renewable sources – to retain value.

If the elements of a coffee cup could be easily separated, the paper could be easily recycled because it is non-toxic and biodegradable. Unfortunately, plastic coating on the inside of the cup is also needed to make it waterproof. The combination of these materials mean recycling is no longer straightforward.



Watch our short video – Circular myths busted: [bit.ly/circularmythsbusted](https://bit.ly/circularmythsbusted)

## Why should your business care about the circular economy?

The circular economy isn't just an imperative for the planet – it presents a huge business opportunity.

Clearly, we're still a long way from having a truly circular economy. But there are sound reasons why your business will want to get involved – not least the size of this opportunity. A recent study by Accenture concluded that by 2030 the circular economy could cover \$4.5 trillion of global GDP.<sup>4</sup>

### Corporate social responsibility

Concerns about pollution, climate change, habitat loss and natural resource squeezes continue to grow. Businesses are under mounting pressure from investors, employees, civil society and consumers to offer solutions rather than being the cause of the problem.

Circular economy thinking can help companies to use energy and natural resources more efficiently, reduce greenhouse gas emissions and pollution, create and maintain jobs and meet the UN's Sustainable Development Goals (SDGs) – particularly Goal 12, Sustainable Consumption and Production. This SDG goal includes the target of achieving 'the sustainable management and efficient use of natural resources' by 2030.

### Long-term security

As well as reducing waste, the circular economy approach builds long-term relationships with customers and helps to insulate businesses from volatile raw material and commodity prices and resource shocks. Companies which base themselves on this new approach may be highly disruptive – and therefore successful – in their own market sector, but they are also in it for the long game.

### Taking advantage of disruptive new technologies

A wide range of fast-developing new technologies enable businesses to engage with the circular economy, from 3-D printing and biomaterials to cheap photovoltaic electricity and 'the internet of things'. Arguably the most important are the rapid advances in digital technology, which allow companies to process and communicate far more information and data internally and with customers and suppliers – as with our earlier running shoes example.



Read our walk-through of the BSI's new Circular Economy Framework: [bit.ly/BioregionalBSIexplainer](https://bit.ly/BioregionalBSIexplainer)



## Anticipating regulation and policy

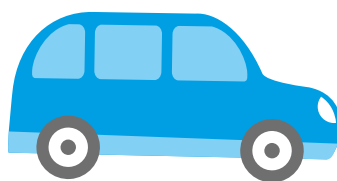
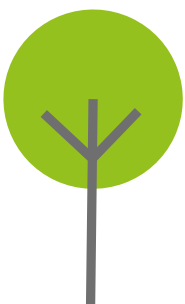
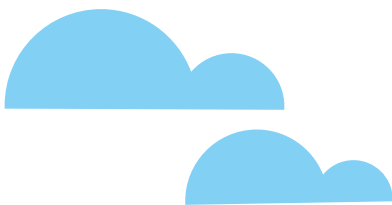
Policymakers and opinion formers are becoming increasingly engaged with the circular economy at a regional and national level. Even at a city level, places such as London<sup>5</sup>, Peterborough<sup>6</sup>, and Glasgow<sup>7</sup> have set out visions and road maps for the circular economy. Regulation and policy, including market mechanisms, are likely to push businesses towards circular economy solutions. Companies which can demonstrate they have already adopted this approach will have less to lose from new regulations and can have more influence on policymakers and legislators.

## What will Brexit mean for the EU Circular Economy Package?



The EU's Circular Economy Package was launched in December 2015. A bundle of bills aimed at reinforcing more ambitious recycling targets, it is relevant to any UK-based company

that wants to trade with Europe. It is widely anticipated that the package will be adopted before the UK has left the EU, and so the UK will be obliged to give effect to the measures outlined in the package for as long as we remain a member state. What happens after that is far less clear – there are concerns around lowering of standards, but there will also be new opportunities for our government to support the growth of the circular economy.

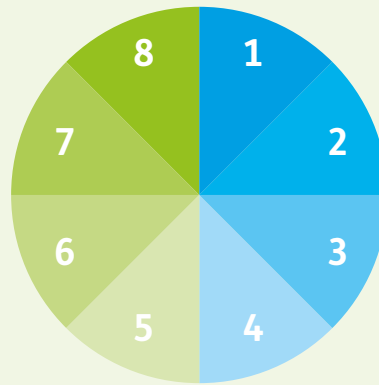




# \$4.5tn

A recent study by Accenture concluded that by 2030 the circular economy could cover \$4.5 trillion of global GDP.<sup>4</sup>

## Eight business cases, eight key materials



In a survey by the World Business Council for Sustainable Development (WBCSD), 40% of companies implementing the circular economy referenced growth and competitiveness as key business cases. In all, eight business cases for going circular are

identified. Read the full report: [bit.ly/WBCSD8cases](https://bit.ly/WBCSD8cases)

In another report, the WBCSD has identified that just eight materials are responsible for 20% of global emissions, 95% of water use and 88% of land use. These materials are: steel, aluminium, plastic, cement, glass, wood, primary crops and cattle. By applying circular thinking to just these eight materials we could go a significant way to addressing climate change as well as water and land use issues. Read its report here: [bit.ly/wbcSDCEOguide](https://bit.ly/wbcSDCEOguide).

## Facts that speak for themselves

- The net economic benefit in Europe alone of the circular economy will be worth €1.8 trillion by 2030.<sup>8</sup>
- More than 200,000 potential new jobs (gross) will be created in UK from the circular economy by 2030.<sup>9</sup>
- There has been a 700% increase in renewable installed capacity over the last 10 years<sup>10</sup> - renewables are the fastest growing energy source.



# Getting to the nitty gritty - circular economy business models



## We're hoping you're now convinced of the benefits of going circular. Let's look at what it might mean for your business, starting with unpicking different types of business models.

The first step to getting to grips with the circular economy is to understand that it's not actually a single business model. At Bioregional, we've reviewed a wide range of circular economy business model frameworks and tools, including those created by Forum for the Future, WRAP, the World Business Council for Sustainable Development and Accenture. We've also reviewed the new British Standards Institute Circular Economy Framework, a new standard to help organisations implement circular economy principles.

From this material we've distilled six simple features of circular businesses that each relate to:

- how things are produced
- extending the lifecycle of products
- services provided to customers

These features are:

- Circular value chains
- Recovery and collection, including industrial symbiosis
- Durability, modularity with repair services
- Personalisation, made to order and lock-in
- Product service systems and dematerialised services
- Collaborative/sharing economy

The matrix overleaf describes each of these features in more detail:

# Six features of circular economy business models

## Process model features

# 1

### Circular value chain

Production cycles aim to close the loop across the entire value chain. They use fully renewable, recycled and/or recyclable or biodegradable materials that can be used in consecutive lifecycles to reduce costs and increase predictability and control. Products are designed efficiently, minimising material use without affecting performance. Low toxicity materials selected where possible; biological and technical materials are easily separated and recovered or renewed.

# 2

### Recovery and collection including industrial symbiosis

The focus is on production and consumption systems in which everything that was previously considered as waste is retained for other uses through tracing and recovering products at the 'end of their life'. This feature also includes reclaiming waste and by-products from the production process, and incentivised return systems. The recycling process can include both up-cycling (into higher value) and down-cycling (into lower value).

Models referenced in the development of this matrix include those created by Accenture; Forum for the Future; WRAP and the British Standards Institute.



## Lifecycle extension model features

# 3

### Durability, modularity with repair services

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The focus is on increasing or extending the life of products across the whole product lifecycle. This could be by maintaining and improving products through repairs, upgrades, refurbishment, remanufacturing or remarketing. The effectiveness of this feature is impacted on through the design process with a focus on design for disassembly; modular design; material selection for durability and design for repair.

# 4

### Personalisation, made to order and lock-in

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This is about building a more personalised, longer-term relationship with the customer. By doing so, it becomes easier to close loops, recover materials/products and reduce resource use. Made-to-order production minimises material requirements and avoids potential losses from overstocking. Businesses that directly 'lock in' consumers can circumvent the need for a separate retailer, and enable greater insight into the potential demand for the product itself or, where relevant, the product refill.

## Service model features

# 5

### Product service systems & dematerialised services

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The manufacturer or retailer bear the 'whole cost of ownership' with a subsequent focus on the durability, longevity and reliability of the product along with usage rates and reusability. Also, dematerialised services such as Netflix, Spotify and cloud computing play a big role. Here the business provides access to a service for the customer, rather than the product itself.

# 6

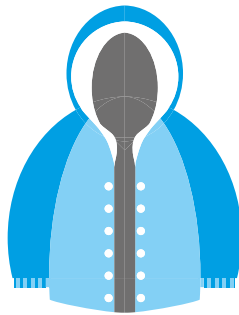
### Collaborative/sharing economy

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Digital technology is used to create new relationships and business opportunities for consumers, companies and micro-entrepreneurs to rent, share, swap or lend their idle goods. Fewer resources are required to make products that are infrequently used, and consumers have a new way to make and save money. This feature requires the platform, and the users of the platform, to function effectively.

## Circular business models in practice

Here's how a number of well-known brands are applying these different aspects of circular thinking to make their businesses more sustainable:



**Patagonia**  
patagonia.com

Patagonia is the outdoor clothing manufacturer which famously told customers not to buy its clothes on Black Friday in 2011. It has incorporated many aspects of circular thinking into its business. These include addressing chemical use in materials, making durable and repairable products, and encouraging customers to make use of its repair service, or to reuse and recycle items through its Worn Wear programme.

**Features:** Circular value chain; recovery and collection; durability and repair.



**Splosh**  
splosh.com

Using plant-derived and low toxicity ingredients this is more than just an “eco-friendly” cleaning products brand. Splosh has set out to disrupt how we buy our cleaning products. Customers first buy a starter pack containing well-designed bottles and add sachets of concentrated liquid – tap water is added to make up the product. The bottles can be used repeatedly, with refill sachets delivered by post. Some sachets dissolve completely in the reusable bottle, others can be posted back to be reused again and again.

**Features:** Circular value chain; recovery and collection; personalisation and lock-in.



## Nike

nike.com

This giant global brand has created its own material, Nike Grind, made from recycled trainers, plastic bottles and off-cuts from the manufacturing process. It is used in over 71% of the range. Nike also offers a personalised, made to order option.

**Features:** Circular value chain; recovery and collection; personalisation and made to order

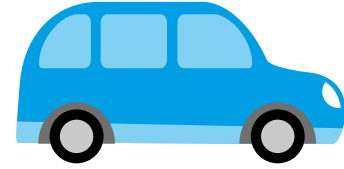


## Philips – pay per lux

bit.ly/Philipspayperlux

In the Philips pay-per-lux model, Philips installs, maintains and upgrades the lighting system, maintaining responsibility for reusing/recycling the equipment. The customer pays a flat service fee for the lease of the lighting system and energy usage of a specified time period. This model has been successfully trialled with high-profile clients.

**Features:** Circular value chain; recovery and collection; product service systems.



## Liftshare

liftshare.com

Liftshare is the UK's largest car-sharing community. The platform enables people to easily share their journeys, either through finding a driver or someone to share their own planned journey. Liftshare also works with corporate clients including big names like JLR, Diageo and National Grid. During a week-long Southern Rail strike in 2016, more people registered for lift shares between Brighton and London than in the whole of 2015.

**Features:** Collaborative/sharing economy and dematerialised services

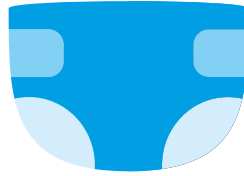


## ECOR

ecorglobal.com

ECOR is an advanced sustainable building and design material designed to be 100% recycled and recyclable, non-toxic and 100% certified bio-based. Made from waste cellulose fibres (from cardboard, paper etc) plus heat and pressure, it can provide an alternative to timber, plywood, corrugated cardboard and plastics. ECOR is already replacing wood-based and plastic materials in many applications including graphics/signage, packaging, construction, architecture and design, furniture, fixtures and consumer products.

**Features:** Circular value chain; recovery and collection including industrial symbiosis.



## GCycle

gcycle.com.au

A subsidiary of GDiapers, GCycle is a new service that includes a 100% compostable nappy/diaper which allows childcare centres to divert around 80% of their waste stream (food waste and nappy waste) from landfill to valuable compost. By replacing the oil-based polypropylene plastic that makes up 80% of a nappy with non-GMO corn starch, the product can be composted. This creates an additional revenue source for childcare centres through compost sales.

**Features:** Circular value chain; recovery and collection including industrial symbiosis; modularity and lock-in.



## i-Fixit

ifixit.com

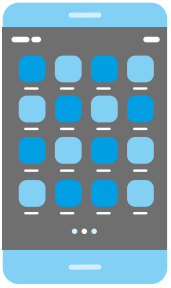
i-Fixit wants to create a world in which everyone would know how to fix the things they own. Its wiki-based website teaches people how to fix almost anything – anyone can create a repair manual for a device, and anyone can improve the existing set of manuals.

i-Fixit collates, curates and supports the creation of the how-to guides to fix things, then ensures free access to this information for everyone. By doing so it is addressing one of the biggest challenges in our make, take, dispose economy: creating the solutions to the problem created by companies that manufacture devices without a suitable end-of-life maintenance and disposal strategy.

To date, the website has over 30,000 manuals and over 110,000 solutions for nearly 10,000 devices.

**Features:** Durability; modularity with repair services.



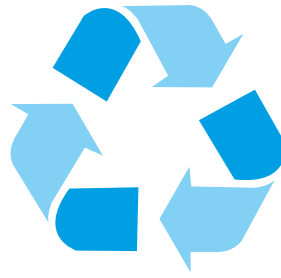


## MBA Polymers

[mbapolymers.com](http://mbapolymers.com)

This company was founded in 1992 to recycle plastics from complex waste streams. Today it runs the world's most advanced plastics recycling facilities and leads the way in demonstrating that recycled plastic can be a valuable commodity and an important contributor to lowering global carbon emissions. It sources 100% post-consumer feedstock diverted from landfill or incineration. Each tonne of recycled plastic saves 80% of the energy consumption and three tonnes of carbon dioxide emissions compared to a tonne of virgin plastic.

**Features:** Circular value chain, recovery and collection.



## Fairphone

[fairphone.com](http://fairphone.com)

Fairphone is a Netherlands-based social enterprise with a mission to build a 'fair trade phone'. Circularity is at the heart of its business philosophy. It has had a very collaborative and open innovation approach to the way it has developed its product, using different elements of circular economy thinking – from modular design through to really understanding what materials go into the phone and making sure they are sourced ethically

and sustainably. Thanks to the supporters who bought 60,000 first edition Fairphones, the company could invest in a modular design for Fairphone 2 which allows owners to open and repair their phones without any special technical skills.

**Features:** Circular value chain; recovery and collection; modularity with repair service; made-to-order.

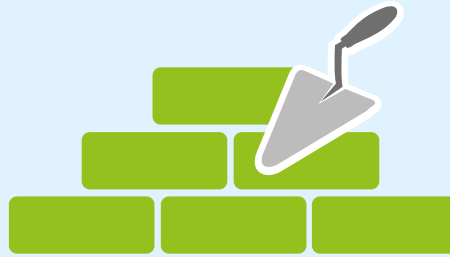


## Bringing circular thinking to the 2012 London Olympics

In 2004 Bioregional, with support from WWF-UK, worked with the London 2012 bid team to write a sustainability strategy for the games. It had a strong focus on reducing waste and embodied carbon emissions, making use of sustainable materials and curbing natural resource consumption.

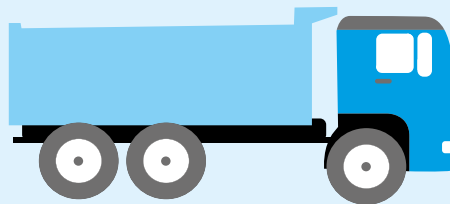
We went on to help maximise reuse of construction and demolition materials as work got underway to create the infrastructure required for the games, working with contractors and the Games' organisers.

# 98.5%



98.5% by weight of demolition materials from the site was reused or recycled, including reclaiming 1,000 tonnes of heritage bricks and seven steel frame buildings.

# 104,000t



104,000 tonnes of concrete was reused on site – crushed to provide foundations for the Olympic Stadium, saving £1m and more than 20,000 lorry movements.

# £68m



On-site soil remediation saved £68m. The Olympic Development Authority set up treatment plants to clean and reuse all contaminated soil on-site during construction, creating huge savings in costs and fuel emissions, compared to sending it off-site for disposal.

# Getting started on circular thinking



# A truly circular economy lies some distance in the future, and no company can get there on its own - but if you take things one step at a time, you can make progress.

Your business' transition to a circular economy is likely to be a gradual and iterative process.

Each business will find its own path that suits its own circumstances, but we'd suggest considering these five steps.

## 1 What are you already doing?

Review current activities to see what you are already doing that could be considered to demonstrate 'circular thinking'. Look across all business units and include operations as well as products and services. You might find our matrix of circular economy business model features on pages 11-12 a useful guide for structuring your review. In any case, you need to begin with a shared understanding of what 'circular economy' means - and a succinct way of communicating it across the business. So on to Step 2...

## 2 Engage your key stakeholders and assess their knowledge and understanding

Engage with stakeholders to assess their understanding of circular thinking. Use our simple matrix on pages 11-12, or others, if you find

them a useful way of communicating ideas about the circular economy. You need to get people to grasp how wide-ranging and powerful a concept this is - as we explained earlier, it's about far more than simply reducing waste and closing loops or leasing products instead of selling them, although these could all be important contributors. It's about eliminating the whole concept of waste. Your company's employees, managers, customers and suppliers need permission - and encouragement - to think outside the box.

One way of getting people engaged could be to get colleagues thinking about where your business currently has high costs - for example, a large waste stream or one that is hard to recycle. For example, it was high volumes of costly treated timber waste at B&Q that got peoples' attention and led to the development of green pallets.

You could also look at other areas of poor performance - like high levels of product returns, or complaints around product durability, which can get negative media coverage.

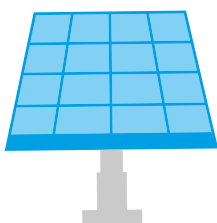
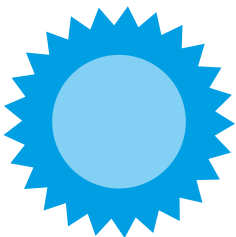


You can read more about B&Q's green pallets here: [bit.ly/BandQgreenpallets](https://bit.ly/BandQgreenpallets)

### 3 Establish circular economy champions

Convene a group that cuts across operations and products/services, including key influencers who can champion your organisation's approach to circularity. This group could:

- Review what has already happened in the circular economy domain, creating a shared understanding of what worked, what didn't and why and what is currently planned.
- Create a shared understanding of what circular thinking means for the business as it is now, and start to develop more visionary thinking about what a fully circular version of the business might look like.
- Identify key areas for collaboration and represent the company on relevant sector taskforces and working groups to help solve common challenges.



### 4 Create short and medium-term plans and a longer-term vision

Working group members could also be responsible for developing circular approaches internally – perhaps in the form of a roadmap with 1 year, 3 year and 10 year destinations.

The **1-3 year plan** would focus on incremental change, piloting ideas that have the potential to be scaled up. This is the opportunity for the organisation to make an immediate start, testing out ideas to see what works and what doesn't.

The **3-5 year plan** could focus on scaling up already successful pilots that were identified in the initial review as well as outlining areas where the organisation could work collaboratively to address particular issues. Having a 3-5 year plan allows for some realistic and achievable targets to be put in place with enough time to develop more complex ideas and collaborative solutions.

Neither of these plans are going to lead to a fully circular business, which is why we would suggest you also put in place a **10-year vision** which sees a deeper circular transformation of your business. This should be based on the best understanding of the forces and changes currently impacting the company, including those disrupting the sector in which it operates. The 10-year vision also needs to be built on a good understanding of the role of different circular economy enablers, such as developments in digital technology and changing consumer preferences.

## 5 Decide where to lead and where to follow

It won't be possible for any business to solve all the challenges it faces to becoming more circular. Many issues can only be solved by collaboration among different businesses and sectors, throughout value chains and even among different national governments. So work out which issues are most relevant for your organisation, and who you could and should be collaborating with.

Decide where you can be a leader – championing a particular issue, bringing real expertise and achievement to the table, and sharing your success – and where you can benefit from learning from others to help take things to scale.

### Kingfisher – developing a tool to assess circular value chains

For a value chain to be truly circular, the whole lifecycle must be taken into consideration, from extraction to disposal. When Bioregional was commissioned to develop a circular value chain tool for Kingfisher<sup>11</sup> we recognised that to drive real change, the project would have to engage various players at a number of stages throughout the product development process.

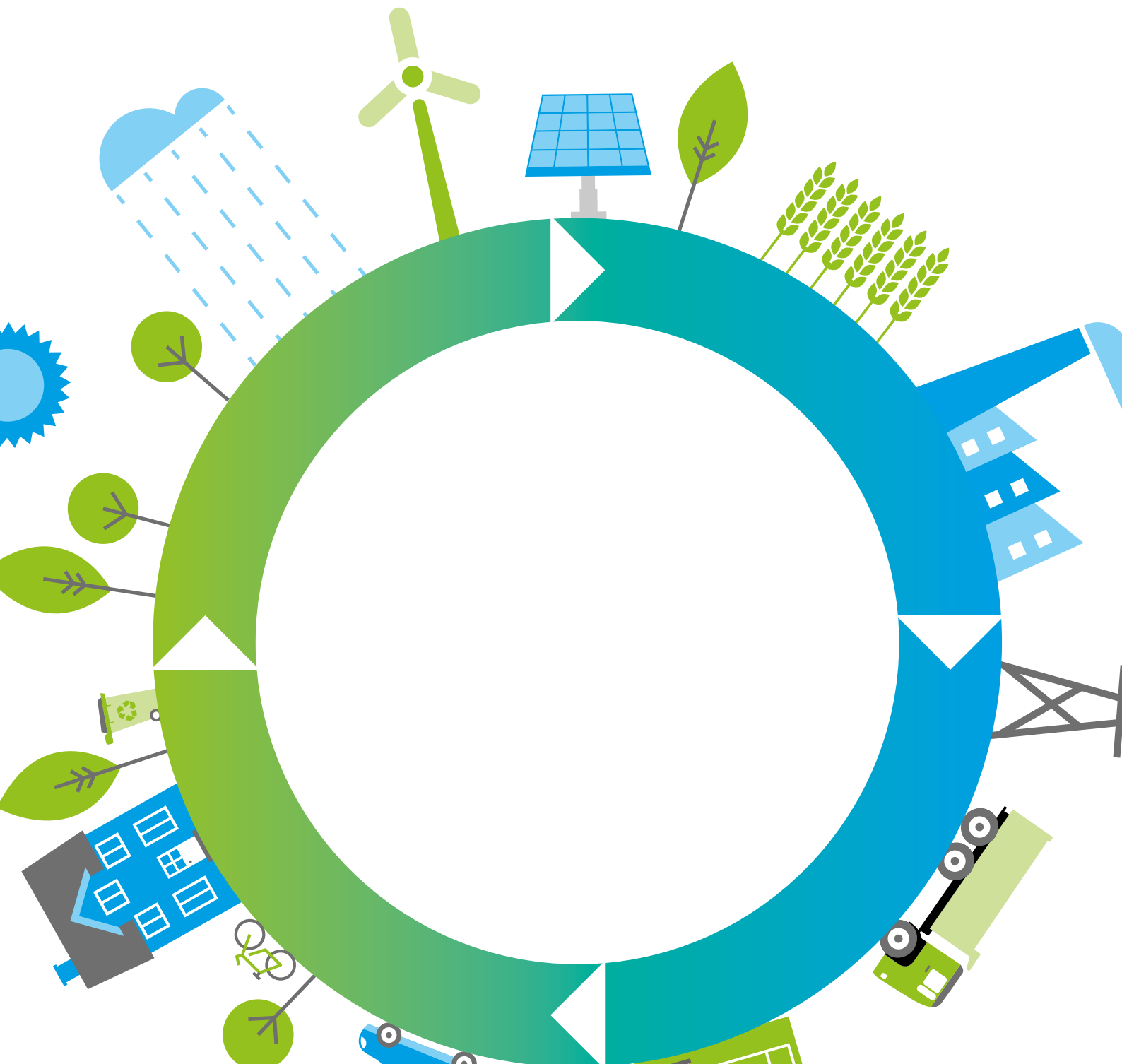
We identified six key impact areas across the retail value chain: safe materials, sustainable materials, utility and function, energy and carbon, water stewardship and ethical responsibility. We extensively reviewed best practice for each impact area and developed criteria. Following this

we developed criteria for developing or identifying and assessing the circularity of a value chain. We made sure the criteria were accessible to a non-technical audience and compatible with existing Kingfisher guidelines, policies and processes where possible, to reduce the burden on data collection and knowledge required by staff. The assessment methodology has three tiers of assessment to allow Kingfisher to easily identify ways to make a product or service more circular.

Since the tool's inception it has been tested using examples within Kingfisher's product offer – including with Pro Grow, a 'circular' compost<sup>12</sup>, and B&Q's green pallets<sup>13</sup> used by its logistics team.



# Some useful resources



We hope this short guide has helped you start to work out what the circular economy could mean for your business, but of course there's far more on offer if you have the time to digest it all.

## Bite-sized chunks

If you are still getting to grips with what the circular economy means for your company our circular economy blog series may help answer your questions: [bit.ly/BioregionalCEblogseries](https://bit.ly/BioregionalCEblogseries)

## Influencing tools

If you need to influence a senior leader in your company we recommend the WBCSD CEO guide to the circular economy, which sums up the key issues and business opportunities in a five-minute read: [bit.ly/wbcSDCEOguide](https://bit.ly/wbcSDCEOguide)

If you prefer video content these eight videos from WEF about the circular economy are well worth a watch: [bit.ly/8CEvideosWEF](https://bit.ly/8CEvideosWEF)

## Design tools

The next big thing in design is circular. If design is your thing, The IDEO Circular Design guide is a really practical tool to help you start thinking in a more circular way, with lots of great practical resources: [bit.ly/IDEOCircularDesignGuide](https://bit.ly/IDEOCircularDesignGuide)

## Collaboration

If you're after collaboration and innovation opportunities, these are facilitated through the EMF Circular Economy 100 programme – a “pre-competitive innovation programme established to enable organisations to develop new opportunities and realise their circular economy ambitions faster”:  
[bit.ly/CE100EMF](https://bit.ly/CE100EMF)

For individual networking opportunities, news and potentially even jobs, it's worth looking at the Circular Economy Club: [circulareconomyclub.com](https://circulareconomyclub.com)

## Digging deeper

- Towards a Circular Economy – Ellen MacArthur Foundation: [bit.ly/EMFTowardsaCE](https://bit.ly/EMFTowardsaCE)
- Achieving Growth Within – Ellen MacArthur Foundation: [bit.ly/EMFAchievingGrowthWithin](https://bit.ly/EMFAchievingGrowthWithin)
- New Plastics Economy: rethinking the future of plastics – Ellen MacArthur Foundation: [bit.ly/EMFNewPlasticsEconomy](https://bit.ly/EMFNewPlasticsEconomy)

- Global material flows and resource productivity – UNEP International Resource Panel: [bit.ly/UNEPmaterialflows](https://bit.ly/UNEPmaterialflows)
- Circular Economy Practitioner guide – WBCSD: [bit.ly/wbcSDCEguide](https://bit.ly/wbcSDCEguide)
- Circular Advantage – Accenture: [bit.ly/AccentureCircularAdvantage](https://bit.ly/AccentureCircularAdvantage)
- Rethinking Finance in a Circular Economy – ING: [bit.ly/INGRethinkingFinance](https://bit.ly/INGRethinkingFinance)
- The new BSI standard on the Circular Economy – British Standards Institute: [bit.ly/BSIstandardCE](https://bit.ly/BSIstandardCE)

## Celebrating success

If you have developed a new circular product, service or business model that you think is worth shouting about, then for all things circular there is only one awards show in town - The Circularity Awards: [bit.ly/circularsawards](https://bit.ly/circularsawards)



## References

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- 1 Ernst & Young Megatrends – Resourceful Planet, [bit.ly/EYmegatrendsresourcefulplanet](http://bit.ly/EYmegatrendsresourcefulplanet)
- 2 Climate Change & Resource Scarcity – PWC, [bit.ly/pwcClimateChangeResourceScarcity](http://bit.ly/pwcClimateChangeResourceScarcity)
- 3 Environment Waste Must Peak this century, Nature, Hoornweg, Bhada-Tata, and Chris Kennedy, [bit.ly/NatureWastePeakThisCentury](http://bit.ly/NatureWastePeakThisCentury)
- 4 Accenture – Circular Advantage, [bit.ly/AccentureCircularAdvantage](http://bit.ly/AccentureCircularAdvantage)
- 5 London Waste & Recycling Board – London: The Circular Economy Capital, [bit.ly/LondonCEcapital](http://bit.ly/LondonCEcapital)
- 6 Future Peterborough – Circular Peterborough, [bit.ly/CircularPeterborough](http://bit.ly/CircularPeterborough)
- 7 Glasgow Chamber of Commerce & Circle Economy Netherlands – Circular Glasgow, [bit.ly/CircularGlasgow](http://bit.ly/CircularGlasgow)
- 8 McKinsey & Company ‘Europe’s Circular-economy opportunity’ September 2015
- 9 Green Alliance & Wrap: Employment and the Circular Economy: (2015), [bit.ly/GreenAllianceEmploymentCE](http://bit.ly/GreenAllianceEmploymentCE)
- 10 Ernst & Young Megatrends – Resourceful Planet, [bit.ly/EYmegatrendsresourcefulplanet](http://bit.ly/EYmegatrendsresourcefulplanet)
- 11 Kingfisher plc – Products and innovation [bit.ly/KingfisherProductsInnovation](http://bit.ly/KingfisherProductsInnovation)
- 12 Kingfisher plc – Products and innovation: B&Q’s ProGrow, [bit.ly/BandQProGrow](http://bit.ly/BandQProGrow)
- 13 Kingfisher plc – Products and innovation: B&Q’s green pallets, [bit.ly/BandQgreenpalletsKingfisher](http://bit.ly/BandQgreenpalletsKingfisher)

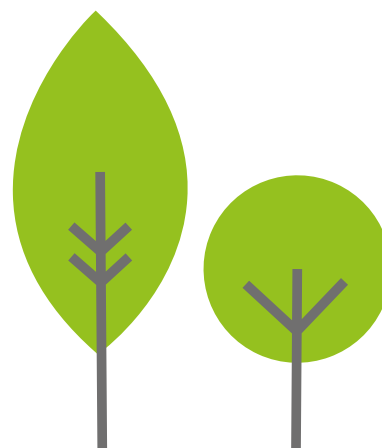
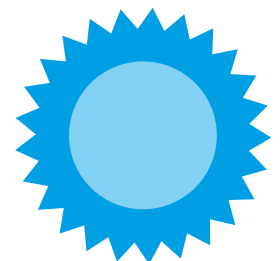
We’d love to hear from you if you are successfully developing a new product, service or business model so we can increase our collection of great examples of circular economy thinking. And if you are looking for advice on creating or implementing your circular economy strategy, we’d be happy to help too.

## Contact

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