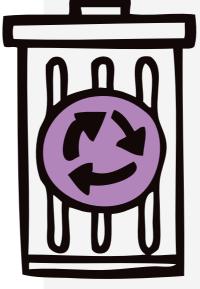


### What is the circular economy, and why should you care?

The average drill is only used 19 minutes in its life, the average person will wear a t-shirt only 7 times before discarding it, pre-COVID almost 50% of all office stock was underutilised, and the examples go on, and on. If we think about your car right now, 8% of its life it's actually in use, 1-1.5% of that is spent stuck in traffic or looking for a parking spot, and despite having 4 seats, most journeys have 1-2 people.

a huge There's amount of inefficiency in the existing system, in part because you can just buy more stuff. We have decoupled utility from cost and built a global economy that is consumptive and extractive by design. Not only that, but our current global economy is also incredibly wasteful. One third of all food produced is wasted before it reaches your plate (that is now closer to 50%). Over 8 million tonnes of plastic enter the ocean every year.



James George Circular Economy Ambassador, Products of Change Now of course we all struggle to point to what is truly good. We've already seen, in the previous paper on the Green Claims code, that even the brands we think are leaders are getting it wrong, so what hope do the rest of us have?

We have been part of a global economic model that has run for hundreds of years in which cash is king, growth is the only measure of success, and above all else we must make profit, limitless, uncapped, profit. Otherwise, what's the point, right? Furthermore, that profit must be created through the selling of "stuff". Old must be replaced with new while marketing and sales campaigns must drive more consumption, putting an endless run of products and services onto the market and into our lives.

It's a true model of through-put economics most often described as linear: a straight line of value extraction; raw material in at the beginning, moving through the supply chain, changing shape and colour, combined with other material and energy until a product is made. Then \$\$\$cha-ching\$\$\$ a sale!! Hooray!! And the product disappears into the world never to be seen again. Where it goes eventually, we don't know, and quite frankly we haven't cared because we made some profit, we made some growth, we made "success".

And let's be perfectly clear, this economic model has served us extremely well as a species. It has lifted millions, if not billions, out of poverty. It has given us the opportunity to find and consume all the marvellous innovations and products that exist within extremely short timelines, and at ridiculously low costs. It's also connected us all to each other and other international markets. While our grandparents shopped in their towns, our parents in counties, we are global shoppers, with tech-enabled unfettered e-commerce access to "stuff".

"But we have a bit of a problem with this centuries-old approach, a problem that for more and more of us is being brought into sharp focus. The entire model is built on finite resources."

# **Economic Inefficiency**

Every material we need to feed our unquenchable thirst for consuming things, with a growing global population that continues to want choice, must come from the system we live in.

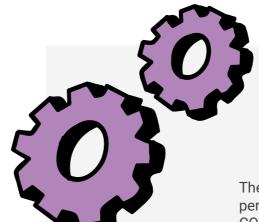
Simply put, the Earth. That ball of rock we live on that gives us the rare earth metals to make smart devises and electrify our world, the oil and gas from the ground that we polymerise into fuel, plastic, chemicals, clothing, the wood from the forests, and the food for our plates. We have got so good at doing this alchemy, bending the natural environment to our will, that our current global economy needs 1.75 Earths to meet our current demand each year. That just doesn't work. Not by anyone's maths. And each year we get better at pushing that ratio higher as a species.

If that wasn't enough, our current global economic model is shortsighted. It doesn't plan for the long term, or account for geopolitical shifts, associated risk, and changes to global commodity costs. It's also hugely inefficient with the products it does create.



### The average car spends 92% of its life parked. That's more than 22hrs a-day....

Ask yourself, where your car is right now?



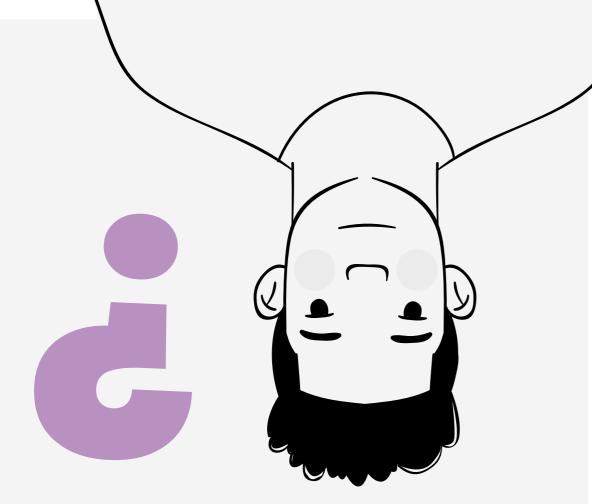
The average drill is only used 19 minutes in its life, the average person will wear a t-shirt only 7 times before discarding it, pre-COVID almost 50% of all office stock was underutilised, and the examples go on, and on. If we think of your idle car a while longer, for the 8% of its life it is used about 1-1.5% of it is stuck in traffic or looking for a parking space, and despite having 4 seats, most journeys have 1-2 people. It's a huge amount of inefficiency in the existing system, in part because you can just buy more. We have decoupled utility from cost and built a global economy that is consumptive and extractive by design.

Not only that, but our current global economy is also incredibly wasteful. One third of all food produced is wasted before it reaches your plate (that is now closer to 50%). Over 8 million tonnes of plastic enter the ocean every year. Now of course, we aren't blind to the fact that this is the case (at least not everyone is). But if we focus on plastics for a moment, what is the common response? Use less, ban plastics, beach cleans, recycle more, etc. But by themselves, none of these will solve the problem, in the long run, because they treat symptoms rather than the root cause.

The Recycling symbol has been around for over 40 years, but we only collect about 14% of material for recycling - and only 2% is truly closed loop. So, we can never recycle our way out of this mess. From an economic perspective, every product, all that material that ends up in a landfill, or an incinerator, or the ocean is wasted money. All the labour, energy, and time that went into making it is thrown away with it.

James George Circular Economy Ambassador, Products of Change "We need a new way to capture this waste, this secondary resource and unlock the economic value."





# Who pays the heavy price of waste?

The environment is suffering too. All over the globe land is being degraded by industrial farming approaches that use chemical fertilizers and pesticides, which run off the land and contaminate water systems.

Global wildlife populations have fallen by 58% since 1970. The Living Planet Report 2022 by WWF showed that the global Living Planet Index indicates an average 69% decrease in monitored wildlife populations between 1970 and 2018. Latin America shows the greatest regional decline in average population abundance (94%). If that wasn't enough, The UN in May 2019 mentioned that on current thinking one million species face extinction.

And if *that* wasn't enough... Over the last two years the Covid-19 pandemic swept across the world restricting the movement of millions of people, impacting lives and jobs, disrupting international supply chains, and bringing global economies to a halt.

In doing so, the pandemic and the lockdown measures have revealed our existing linear system's exposures. Shortcomings of a system in which resource extraction and waste production — which are inherent to the way we make and produce goods — cause untenable environmental degradation, climate change, biodiversity loss, and pollution.

So, a new economic model is now more relevant than ever. We need an instrument to decouple economic growth from resource use and environmental impact. With all its inefficiency, waste and pollution, our current linear way of doing things can no longer support a growing population. The system needs to change entirely if we are to continue building prosperity for all. And changing the system means doing things differently.

Which brings us to the **circular economy**; A way of shifting from value extraction to value creation. Not an anti-growth or de-growth approach, but a way to create growth and profit but in a restorative and regenerative way. One that can create choice and do so with in the material limits of our planet and home.



At its very core the circular economy is an approach and framework to support the choices we make not just in the materials economy but all elements of our lives. And it's based on three defining principles.

- Eliminate waste and pollution
- **Keep materials in use**
- **Regenerate natural systems**

# Eliminate

Rather than treating the symptoms of pollution and finding ways to deal with waste once it's generated, why not stop it being created in the first place?

secondary resource...

Okay, so when a Robin dies, it doesn't become another Robin. However, the biological material does fall to the ground to feed the soil life, that in-turn sustains growth and stability of the ecosystem, and the circle continues.

Businesses are redesigning their production and business models; from material selection to primary and secondary packaging and everything else in-between. Looking at how to create their products so that waste or pollution aren't created in the first place. Remember, waste is cost. It simply doesn't make economic sense.



Waste is a man-made construct. It's a design flaw. If you take a lead from biological systems, there is no waste in nature, only

# Circulate

Let's, for a moment, re-visit the Car and all that underutilization. 22hrs a-day! If we assume that the average new car in Europe costs €35,000, how can we unlock some of that value? Imagine if you were a car manufacture, and you knew that each time a vehicle rolled off the production line, all that material, labour, energy, IP, that went into making it, disappeared. Given some of the manufacturing pressures that we face in the world today, what if you could recapture that investment? Because let's be honest, with proper maintenance that car could last 20-25 years, yet some change their car on average every 18-24 months in the UK.

What if then, rather than sell one car to one person, you could sell one car to 20 people? 20x €35,000 rather than just once. Okay, this is an over-simplification. We, of course, have to consider depreciating assets, maintenance vs time, leasing vs ownership. But unlock the mechanics of that business model and you can create value from that product in the long term rather than just extract.

Imagine if you took this new approach with your product, how it could revolutionise your bottom line. Not only that, but the relationship with your clients, your customers, your supply chain. In the case above, rather than sell a car, you sell mobility. The ability to get from "A" to "B". This is products as a service (PAAS) and is one of many business models that you can explore to keep materials and products in circulation.

# Regenerate

The final principle is how we begin to regenerate natural capital.

General thinking is that we have around 55 years of topsoil remaining. This has been degraded due to current expansive agricultural techniques and an increase in industrial farming. Moreover, the pressure on small hold and community farms are specifically on year-to-year yields, rather than long term security of the crop. Fertilizers have played an essential role in feeding a growing global population. It's estimated that just under half of the people alive today are dependent on synthetic fertilizers. But it is a mixed picture. While they can - and do - increase crop yields (and by increasing crop yields we can reduce the amount of land we use for agriculture), they also create environmental degradation. In many countries their use is unregulated and excessive, leading to the runoff of nutrients into water systems and ecosystems.

Interestingly, If we were able to capture all the nutrients from food/animal/and human waste in our current system we could provide almost 3x the requirement that we currently have for existing fertilizer needs, without the environmental and production impact that synthetic fertilizers currently create.

### How does this show up in the world?

Nooch footwear

Schleich

Nooch is a 100% vegan and zero waste footwear brand based out of Arnhem in the Netherlands. Part of the Circular Footwear Initiative, a platform developed by the circular economy educators and innovators, Circuthon, the company is devoted to delivering a 'genuinely closed circle product that is completely biodegradable and compostable with minimal negative impact on the planet.' Where the footwear sector has left some large and dirty footprints, Nooch wants to "tread lightly on the planet."

It's why it has opted for plant-based biodegradability over animal-based materials as part of its mission to confine the 'exploitation of animals for their skin' to the history books, alongside plastic waste. The company itself, created by Lotte Mulder, belongs to a foundation that has one job - to evaluate the ceo's ability to represent Mother Earth sufficiently, and not whether the company makes enough money.

"It is our mission to serve our purpose with our profits and our community of co-founders helps us to ensure that," says Lotte.

Closer to our own industries, the international toy maker Schleich has detailed its partnership with the Cradle to Cradle initiative to reduce its carbon footprint by adopting a circular approach to its toy design and making all its figurines from recyclable or biodegradable material by 2027. Under the programme, Schleich will also develop a toy take back system for products that have reached their end of life, for them to be returned and materials used to make new Schleich toys.

Through its Cradle to Cradle approach, the toy maker insists that by 2027, a Schleich toy dinosaur will return to the market as a Schleich toy dinosaur.

# What about policy?

The role of policy, is it a carrot or is it a stick? Well, it seems that policy, while slow to move globally, is starting to create the right shifts within our economic system.

It is of course extremely important when you see that in the context of the system. If businesses are the engines of our economy, then policy and legislation are the boundaries in which we operate. They create order and structure for us to navigate our business model disruption, to help us avoid incorrect action, or greenwashing .... hopefully! Interestingly one of the great unintended consequences of (correct) policy is to create a level playing field between the largest and smallest businesses, removing some of the economic barriers to change, if done right. But it is also difficult when manging so many other factors to keep up to date on changes and regulation. Therefore, we have created a paper for you to explore this in more detail and stay informed.

VIEW REPORT



### What should I do next?



So now you are all-knowing on a circular economic approach. Where do you start?

Well, this is where it gets interesting. Changing the way you operate is tricky, especially if you plan to swim against the existing tide. But here are some points to focus on.

### 1. Understand your why?

This may sound obvious, but unless you harness your true motivation, everything that follows will be built on false reasons. Also, be honest. Is it because you see and economic opportunity? Because you want to be a more ethical business? Because your competitors do it? Or your supply chain needs you to? Whatever your motivation is, own it. Ultimately this work is tough and there are no short-cuts, so you need to start with being honest.

### 2. Think big, start small

The concept - or the framework - of circular economy can be a lens in which we see the world, therefore your business can operate that way. But there is a natural tension here between how you operate today and how you might want to operate in 12 months time. Ultimately, how do you pay for that transition? That requires a clear strategy and roadmap to get there, and a recognition that not all those steps will be immediate. It is, as many say, a journey. But that journey does need a destination and that starts with a robust, well thought-out strategy, looking at which products and processes and in which order.

### 3. Don't lead with the story

Still too many brands lead with the marketing story. Making amazing claims about how they plan to operate in 5, 10, 20 years' time. This is wrong. We should all be our best advocates and storytelling is extremely important, but don't lead with this. That is the path to joining club "greenwash". Instead, focus on getting the internal mechanics correct of your business model, and once you have proven those results, go big on your marketing landscape.

### 4. Ask for help, learn from others

This is a complex landscape, but it's not a new one. Businesses large and small have been innovating and experimenting on new business models, new materials, new relationships for over 10 years (if not more). Leverage that. And potentially avoid folks who call themselves experts with "20 or 30 years' experience in the industry". This conversation has evolved so quickly in the last 3-4 years, and especially in the last 12 months, that you can't always rely on what happened 15 years ago. So, be selective and find those organisations and individuals that you see doing great work today, then learn from them. While you can't blueprint solutions, you can learn faster and take the benefits of mistakes that others have made. Also, in doing so, you become part of the conversation that will push the topic and the acceptance of the topic forward.

### 5. No ison business is an island

Even if you are Google, you don't control all your supply chain, you also probably don't create all your product raw material, or where it ends up on the market, so collaborate, precompetitively. Build new relationships, with your value chain, in both directions. Your solution or new product only works if the system that surrounds it is circular. Otherwise, you end up just "doing less bad", so learn to be open with new relationships to forge holistic success. Remember, your solutions are someone else's unsolved problems, we don't need everyone to be perfect, just for the value chain to all be pulling in the same direction.



### 6. Come and find us at Products of Change

So, you've worked out your 'why, and you've identified your starting point. You know who your allies are and you have a pretty good handle on what others have done. Now comes the 'how?' How do you make this real? How do you make real change?

Well, you can come and find us at Products of Change - a membership community to set you on your path towards making change happen.

You'll find us at Spring Fair working alongside the Power of One campaign to run circualr economy surgeries thoughout the show.



### Conclusion

If you typed the phrase "Circular economy" into Google in 2012, you probably would have got between 10 or 20,000 results. However, if you type that same phrase into Google today (January 2022), you churn up over of 1.3 billion search returns.

This demonstrates that the concept is being discussed more widely than ever before. While the principles of a circualr economy - eliminating waste and pollution, keeping materials in use, and regenerating natural systems - aren't new ideas, what is readily apparent is the translation of this thinking into everyday business applications is more vibrant than ever. The shift towards a new economic model is starting to happen.

The circular economy then is now more relevant than ever, as an instrument to decouple economic growth from resource use and environmental impact, it opens the way for a resilient recovery. It not only addresses the negative impacts of the linear economy, but more importantly it represents a systemic shift that builds long-term resilience, generates business and economic opportunities, and provides environmental and societal benefits for all.





If you were to redesign your business model today, knowing everything we know from 2-300 years of economic development, would you do it in the same way? Asking the right questions, the difficult questions, is always the first step. Rather than, "this is just how it's always been", what if you had approached it based on what is the best solution given the current climatic and external impacts for the long term? Rather than a 3-5year strategy, you had a 10, 20 or even 200 year strategy? This must always remain an economic argument, but one that looks at growth based on restorative and regenerative growth, rather than consumptive and extractive.

Afterall, you can't do any business on a dead planet!



Products of Change is here to help support you on your sustainable journey, please do come join our community...

