

An aerial photograph of a large, intricate maze made of green hedges. The maze is shaped like a stylized dollar sign (\$). The paths are dark, and the hedges are a vibrant green. The maze is set in a flat, open area.

Circular Economy: A Solution to the Covid-19 Crisis?

PART OF THE ACRE RISING SUN SERIES



HARCO J. LEERTOUWER

Managing Director, Europe
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Welcome to the second instalment of Acre's Rising Sun series. The aim of the Rising Sun series is to provide, over time, commentary and context relating to the direction that the sustainability professions and sustainable industries are taking, and by doing so we hope to inform and drive forward their relative agendas.

While countries across Europe seem to struggle in dealing with repeated waves of the coronavirus pandemic, society is still evolving and adapting at an exponential pace.

As recruitment and talent development specialists, we feel uniquely placed to provide insight into the direction that our core markets are taking as we work our way through this changed environment.

Project Rising Sun shares with you a term we have adopted within Acre which describes our internal initiatives aimed at emerging from this pandemic in better shape than when we entered. This second instalment looks ahead and aims to explore a possible solution to the Covid-19 crisis; the circular economy.

After the initial excitement about reduced air-travel, clear water in the canals of Venice and blue skies in urban areas, most people are now looking for long-term solutions, even more so since the world is returning to its pre-Covid-19 (bad) habits.

Although European countries have started their vaccination programs, supporting the most vulnerable members of our society, we still seem to be far away from a Covid-19 free world.

In this issue of the Acre's Rising Sun series, we will dive deeper into the concept of circularity and why we feel it could be a long-term solution to the pandemic, economic crises, the climate crisis and the dramatic changes in biodiversity that are about to follow.

We also are thrilled to include expert perspectives from Robbert Slooten, Signify, Dr. Christina Raab, Cradle to Cradle and Max Russell, Circle Economy on how both businesses and cities can embrace a circular economy.

We trust you will enjoy reading this and that it inspires you to take part yourselves in our common goal to make the world a better place!

**Yours with hope and optimism,
Harco**

THE AUTHOR



TABEA MÜLLER

Research Consultant, Europe

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As a member of the millennial generation, the current economic crisis is impacting us more than ever. Having accumulated large amounts of study debt already as a lasting impact of the great depression, millennials have delayed rates for homeownership, marriage and childbirth compared to previous generations at a similar age. However, the circular economy gives us hope. Not only to fix the current climate issue but also to provide us all with better economic prospectives.

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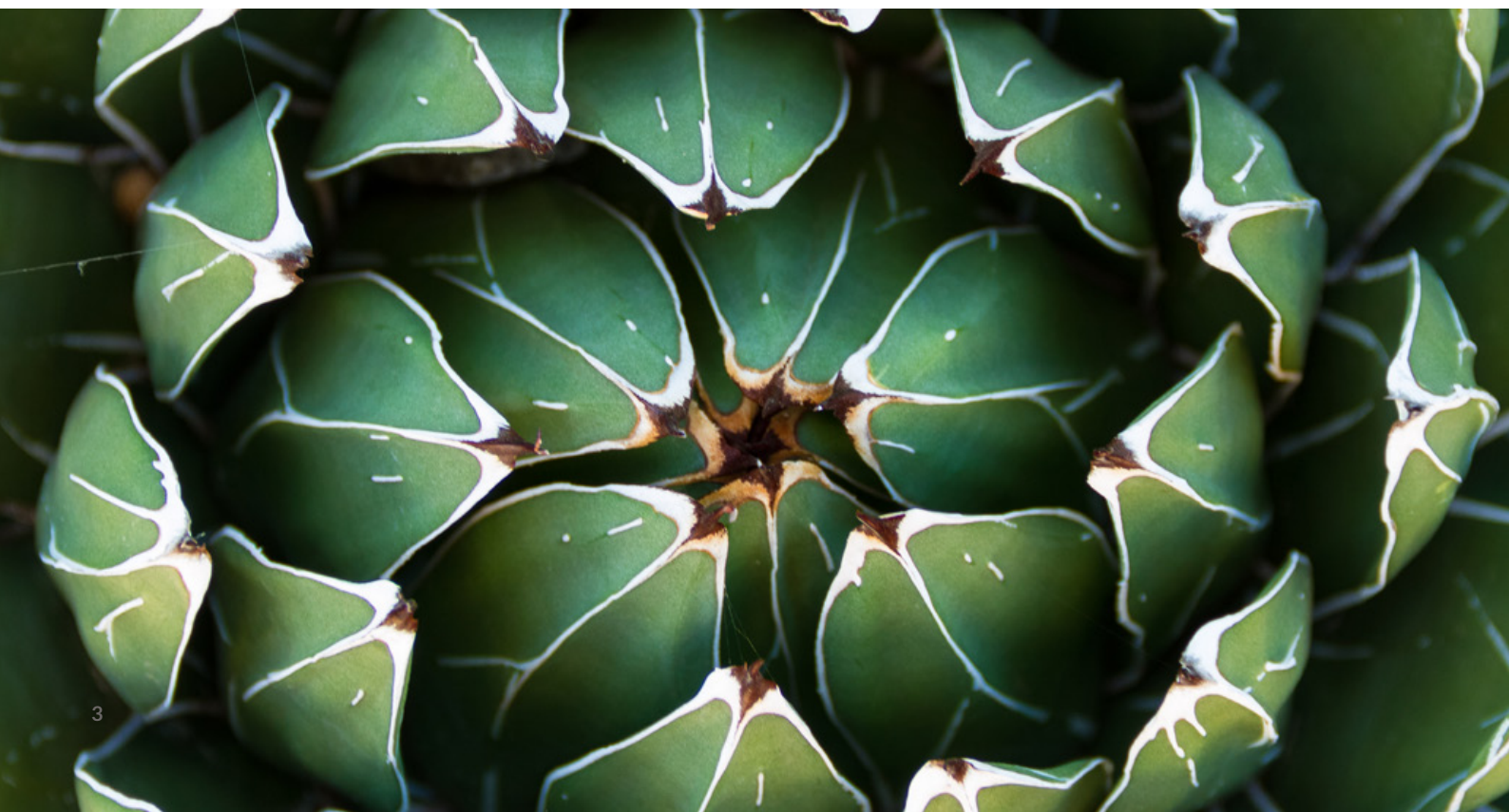
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Introduction

When the Covid-19 crisis started to unfold in early spring last year, little did we know about what we could expect. The coronavirus quickly spread around the world and pressured global leaders into taking preventive measures to contain the virus that had the potential to severely affect human health. Ever since, these measures have taken a massive toll on the global economy, with the International Monetary Fund (IMF) saying the world will very likely experience the worst recession since the 1930s¹.

Additionally, the crisis and interventions will likely lead to higher governmental budget deficits with rising debt levels of nations². Not only the economy, but also its people have been heavily affected by the economic downturn. Many have lost their jobs, leaving them to face an uncertain future. Steven J. Davis, an expert on hiring practices, job loss and the effects of economic uncertainty from the University of Chicago Booth School of Business says, “we estimate that 42% of recent pandemic-induced layoffs will result in permanent job loss”³. Many of these layoffs take place in the industries heavily affected by the crisis.

How has the pandemic changed industries?

One of the first industries that comes to mind is the travel industry in connection with aviation. Both have been hit hard by the governmental travel restrictions and the partially/temporarily closed borders that many countries have introduced as response to the fast-spreading pandemic. While the Canadian business jet maker Bombardier Inc. has announced to cut 2,500 jobs at its aviation unit⁴, some airlines like British Airways, easyJet and Ryanair have heavily opposed governmental restrictions and even launched legal action against the UK government’s 14-day quarantine policy⁵.

At the same time, we have seen other industries booming during and because of the crisis. Markets linked to food and beverage have remained stable, as have markets linked to healthcare (pharmaceutical and biotech, manufacturers of medical equipment and healthcare providers themselves).

Financial institutions (such as banks, insurance companies and asset managers) have provided us with universal positive commentary; one bank commenting that “sustainability is more important now than ever from a risk reputation perspective”. This affects them both at an organisational level but more so due to the complexity of the products and services they sell.

Also think of delivery services like Amazon, who have seen a surge in demand and responded with a hiring spree of increasing its total headcount by almost 20%⁶ compared to the previous quarter before the pandemic hit. The same goes for the Dutch online retailer Picnic and for global retailer Ahold Delhaize, who doubled profits in the second quarter of 2020 (compared to the same period last year). Other industries that have benefited due to the crisis include pharma, biotech, food producers, medical equipment providers, streaming services, conference apps, cloud computing, e-commerce and many more.

Covid-19 and environmental issues

Besides severely impacting economies, jobs and stock markets around the world, has the pandemic also had an impact on current environmental issues like climate change and pollution?

We have seen that with the governmental restrictions and even bans in many countries, work and vacation-related travel has dropped significantly. In mid-February 2020, China - as one of the first countries - experienced a sharp drop of 71% in flights compared to the numbers of the same date in 2019⁷. The carbon emissions in China declined by an estimated 18 % between early February and mid-March⁸ due to reduced coal consumption and industrial output.

But with significantly less planes in our skies, cars on our roads and limited public transport, do the restrictions inflicted due to the pandemic have a positive impact on the environment? For what it's worth, the air in many cities such as Seoul, Wuhan and Los Angeles cleared up to reveal blue skies according to a report written by Swiss-based IQAir, an air quality technology company that compared "air pollution data from 10 major cities during periods of government-enforced shutdowns in response to the Covid-19 outbreak"⁹. A study of different locations in Delhi showed significant reductions of air polluting trace gases and particulate matter such as PM₁₀, PM_{2.5}, NH₃, SO₂, NO, NO₂, NO_x and CO⁽¹⁰⁾ during India's lockdown period.



Indonesia, one of the world's most polluted countries, saw its skylines dramatically change thanks to the lockdown restrictions (Jakarta, Indonesia - April 2020)

The rebound effect

The pollution reductions might appear as a win in the fight against climate change, however, these reductions were only temporary due to what scientists call the “rebound effect”.

The effect predicts that emissions levels are inclined to return to pre-crisis levels once restrictions are lifted. They might even rise to higher levels as industries will try to make up for their losses during the crisis.

An example for this is the situation in China. By the end of March, coal consumption and nitrogen dioxide pollution had returned to normal levels¹¹, according to Lauri Myllyvirta, an analyst at the Centre for Research

on Energy and Clean Air covering air quality and energy trends in China. It showed how quickly emissions and the related air pollution can bounce back.

Another study¹² showed that the impact of the pandemic on 2020 annual CO₂ emissions depends on the duration of the restrictions imposed by governments, with estimates ranging between –4% if industries return to pre-pandemic levels by mid-June and –7% emission reduction if restrictions remain in place worldwide until the end of 2020. The study also notes that prior to the pandemic, CO₂ levels were rising by about 1% every year with no growth in 2019.

Paris agreement implications

Scientists have been warning that carbon dioxide emissions need to reach their peak soon to give countries even a remote chance of meeting the targets of the Paris Climate Agreement. The agreement specifies that an increase of temperature by more than 1.5°C should be avoided at all costs.

Even a temperature increase of 1.5°C cannot be considered as “safe” as it would still cause the loss of 70-90% of the world’s coral reefs¹³ and would disproportionately impact vulnerable and disadvantaged

populations through food insecurity, rising sea water levels and adverse health effects¹⁴.

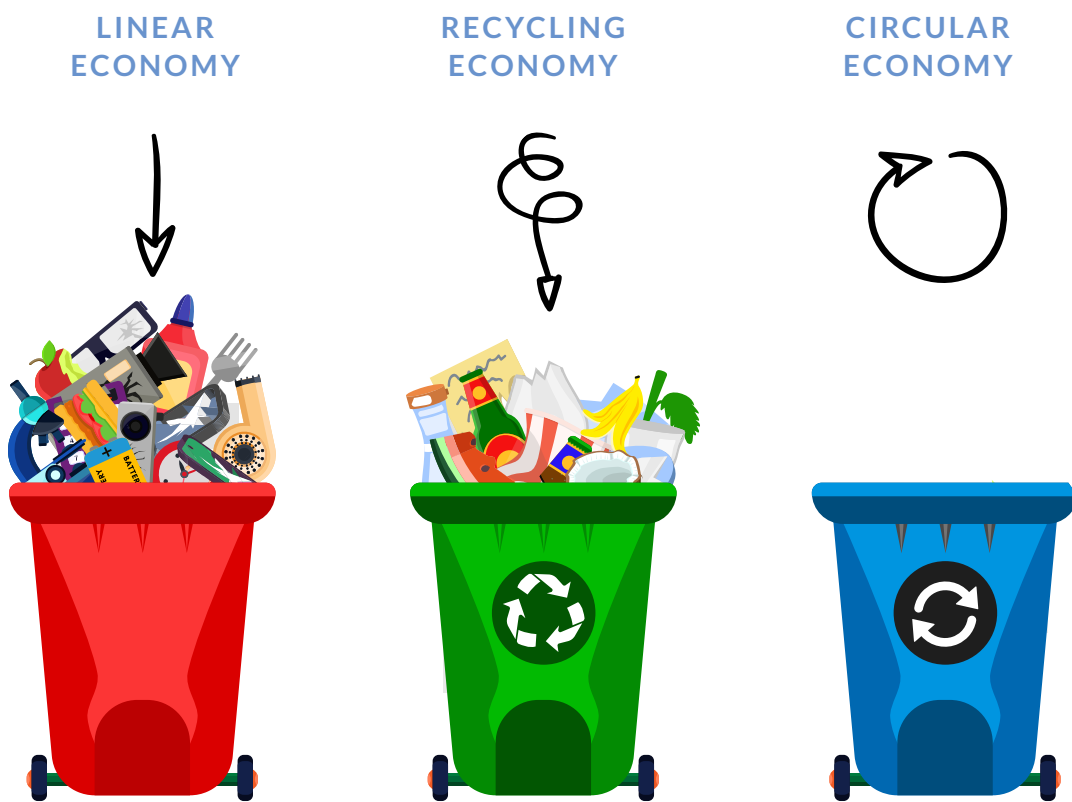
Much more effort is needed over the coming years to meet the Paris Agreement targets. In fact, we need to reduce greenhouse gas emissions by 7.6% every year from now for a decade¹⁵ to keep the temperature rise below 1.5°C. According to UNEP’s annual Emissions Gap Report¹⁶, temperatures are expected to rise by 3.2°C “even if all current unconditional commitments under the Paris Agreement are implemented”.



How the circular economy comes into play

The brittleness in our global supply chains revealed by the pandemic emphasized the need for businesses to transition towards a more circular supply chain. But what exactly does this entail? And what does “circular” mean?

The word comes from the notion of the circular economy (CE), a tricky concept to define. Often, it is better to start with an explanation of what the concept does not mean. The circular economy is a concept that contrasts with our current linear system in which goods are consumed in a “take-make-waste” style that is virgin material savvy and produces vast amounts of waste. This means, a circular system advocates the reduction and even elimination of waste and the reuse of materials to produce goods.



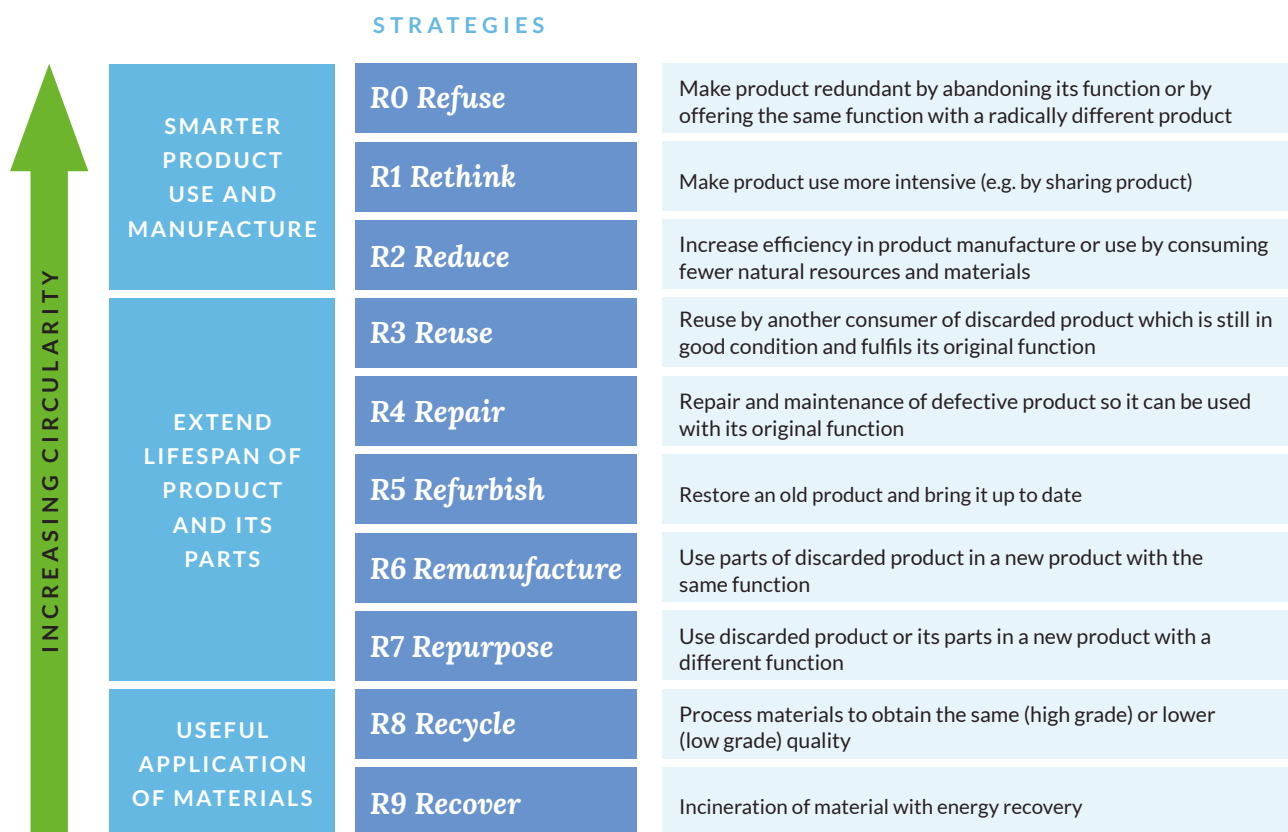
The Ellen MacArthur Foundation released one of the most prominent definitions¹⁷ of the circular economy, stating:

“[CE is] an industrial system that is restorative or regenerative by intention and design. It replaces the ‘end-of-life’ concept with restoration, shifts towards the use of renewable energy, eliminates the use of toxic chemicals, which impair reuse and aims for the elimination of waste through the superior design of materials, products, systems and, within this, business models.”

How the circular economy comes into play

When people think of ways to avoid producing waste, the first thing that comes to mind is often “recycling”. However, the principles of the circular economy contain much more than just that.

This framework by Kirchherr, Reike and Hekkert (2017)¹⁸ elaborates on a total of nine methods to keep materials and products away from waste and in the economy. Here we can see that recycling is one of the least efficient ways of making use of materials in comparison to methods like reducing, repairing and re-manufacturing. The closer we move to rethinking and redesigning strategies, the closer we get to the principles of the circular economy and the more efficiently we will make use of existing materials and goods.



(DIAGRAM: KIRCHHERR, REIKE AND HEKERT, 2017 REFERENCE¹⁸)



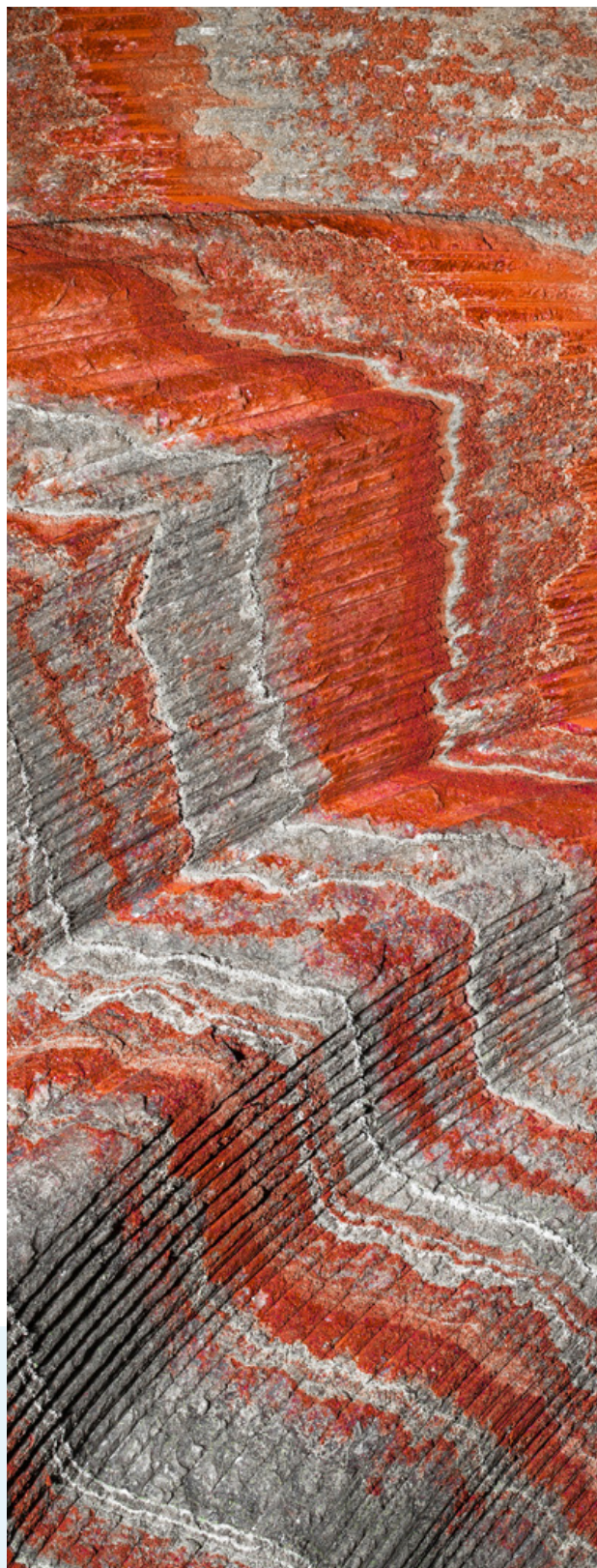
The Circular Economy as a problem solver

Without a doubt, humanity is using more resources than ever before in history. Despite the small slowdown in resource use due to the pandemic and the measures taking in connection with it, it is clear that the natural resources provided by Earth are extracted and used up in a destructive manner. To be precise, we currently use 1.75 times the resources¹⁹ that Earth can regenerate within a year.

The increasing resource use can mostly be attributed due to the growing middle classes²⁰ around the world and rising income levels. Population growth also plays a role in natural resource use but not to the same extent²¹. This kind of destructive resource extraction has been and still is putting pressure on the environment, resulting in the loss of biodiversity, climate change, air pollution, land conversion and much more.

As resources become scarcer, specifically rare metals and minerals, the supply chains in sectors like metal, electric, machines and high-tech²² become dependent on a few exporters. As these sectors use relatively more rare and scarce metals and minerals, they are exposed to risks and uncertainty from their suppliers. The pandemic made this brittleness in the supply chain more visible than ever, especially regarding medical devices and goods. It highlighted the need for a more resilient economic model.

Instead of wasting crucial resources, the circular economy suggests to keep materials in “the loop”, by recycling and recovering them and making them available for reuse.



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The Circular Economy as a problem solver

To move even closer to circularity, we also have to rethink the design of products. On the one hand, products have to be designed in such a way that they last longer through a use of high-quality materials. This would help in reducing the use of virgin materials and reducing environmental externalities from production.

On the other hand, products need to be easy to repair and designed in such a way that parts can easily be exchanged if necessary. Especially for medical equipment, the lack of spare parts has been a crucial aspect during the pandemic. When parts of the product are only manufactured by a highly specialized firm halfway across the globe, supply can be slowed down significantly and repair hindered, resulting in a possible life and death situation.

By making repurposing and repair easy by design, the efficiency of the products can be greatly increased. Additionally, by designing production in such a way that there is not only a focus or specialization on one specific part for one specific customer, vulnerabilities can be decreased and agility created instead. This could enable firms to shift production quickly and adapt to the economic needs if necessary.

The concept of circularity has also achieved popularity, due to its ability to generate economic growth and provide new jobs. Specifically, a study commissioned by the European Commission²³ concluded that the circular economy could create 700,000 jobs through additional labour demand in recycling plants and repair services. The study's scenarios also showed that a circular economy could result in a GDP growth of almost 0.5% by 2030, in comparison to the baseline scenario.



The themes of circularity have always been historically linked to the city of Prato, since reuse has been the basis of the development of the textile district with the creation of carded wool, the first recycled spinning. (Prato, Italy - 2020)

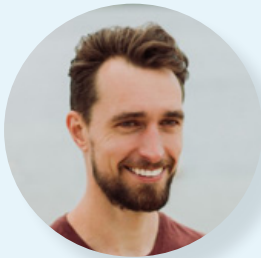
Expert Interviews

Having explored the potential that the circular economy offers, we may ask ourselves *“how we can make the concept more tangible and implementable?”*

To guide you through this, we asked three experts from the field to share some of their experiences. The expert interviews offer perspectives from a cities and a business approach to circularity. Each expert was carefully selected based on their knowledge.

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FEATURING COMMENTARY FROM:



ROBERT SLOOTEN

Program Manager, Sustainability
Signify



DR. CHRISTINA RAAB

VP, Strategy & Development
**Cradle to Cradle Products
Innovation Institute**



MAX RUSSELL

Project Manager & Analyst
Circle Economy



How can businesses embrace circularity during a crisis?

Businesses have reacted to the crisis in many ways. Some have put major projects on hold, others have restructured their company and let go of staff. Acre has also noticed a significant drop in the number of companies currently hiring, with some major companies even placing a company-wide hiring freeze. At the same time, especially NGOs and non-profits have clearly stood out during the crisis with continuous growth and new hiring.

Politicians and businesses also seem to have shifted their focus away from working towards a more sustainable way of doing business towards a “survival mode” to get through the recession.

We interviewed Robbert Slooten from Signify about how Signify, and other businesses, are embracing circularity.



“I have no doubt that a circular economy is much better equipped to handle global pandemics like Covid-19.”

ROBBERT SLOOTEN

Program Manager, Sustainability

Signify

HOW CAN THE PRINCIPLES OF CIRCULAR ECONOMY CONTRIBUTE TO SUSTAINABLE DEVELOPMENT IN TIMES OF CRISIS?

Robbert: *“Acute scarcity due to interrupted supply chains has forced companies and individuals to rethink their normal way of working.*

Many have succeeded in continuing to operate with materials they already had available, by re-purposing devices or objects that had normally been discarded. Or they’ve come up with completely new ways of manufacturing based on what was locally available.

This resilient and adaptive mindset is a core asset of a circular economy; I have no doubt that a circular economy is much better equipped to handle global pandemics like Covid-19.”



HOW HAS SIGNIFY EMBRACED THE CONCEPT OF CIRCULARITY?

Robbert explains that the concept of circularity has been explored by Signify for some time and has led to numerous changes in the business model, decision-making and the design of products;

Robbert: *“Our new business model of circular lighting is a combination of a product and a service. Customers get the lighting they need and Signify takes responsibility over the hardware at the end of the contract and reuses the parts.”*

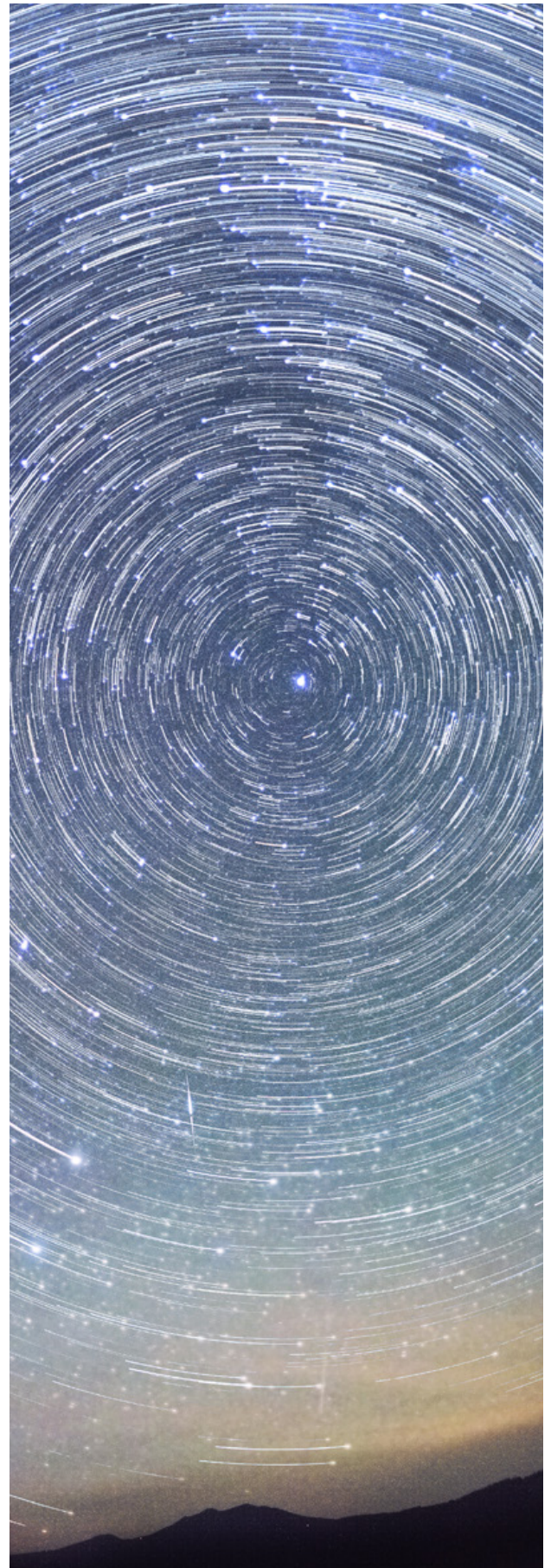
We’ve also embedded design for a circular economy in the product innovation process. The decision to eliminate plastic packaging came from the fact that less than 10% of plastic globally is recycled or reused.

We have to accept that the current plastics industry is far from circular. Paper has a much higher recycling rate – much more in line with our circular ambitions.”

When it comes to barriers for businesses to become more circular, many struggle not only with legal/regulatory and financial barriers but also market barriers such as low virgin material prices as well as cultural factors such as a hesitant company culture²⁶. One additional significant hurdle is the planned obsolescence or design of products to fail prematurely.

“Many business models are based on the principle that products will break and have to be replaced. That’s how companies make money, by selling you new stuff. So if you start preaching that this has to change, it’s often seen as a threat.”

Robbert: *“As a single company in the value chain, it’s hard to break with this, the change needs to be systemic. How can we make incremental improvements to achieve a fundamental reordering of our deepest economic principles?”*



IN YOUR VIEW, WITHIN THE CIRCULAR ECONOMY SOLUTIONS FRAMEWORK, WHAT ARE THE MOST RELEVANT AND PROMISING SOLUTIONS AT HAND?

Robbert: *“Keeping with my current professional focus – packaging – I see a lot happening to reduce packaging waste. One major solution is the ‘ship in own container’ principle. E-commerce will keep growing, and with it the number of parcels. How can we avoid the huge amount of additional outer boxes and buffering materials used to ship stuff to our homes? Well, if products are packaged in such a way that an online retailer only has to slap a label on it and be done, we’d avoid all that.”*



DO YOU HAVE A BEST-PRACTICE EXAMPLE OF A COMPANY THAT HAS SUCCESSFULLY BECOME CIRCULAR AND WHAT KEY LEARNING CAN YOU SHOW?

Robbert: *“Again sticking to packaging, TerraCycle’s venture **Loop** deserves some praise. They’re taking something that is taken for granted to throw away - packaging - and have set up a complete reuse system for it. **Loop’s vision is an inverted ownership model: brands retain ownership of the packaging, which opens the door to invest in high-end materials that enhance consumer experience and, more importantly, are worth reclaiming to use again.***

It shows that if we rethink key assumptions in our financial systems and business models, we find opportunities that improve both the economics and environmental impact of things we do.”

ABOUT ROBBERT SLOOTEN

Robbert has been working in the sustainability field for 7 years, primarily focusing on climate change, carbon emissions and renewable energy.

He is the program manager for the plastic-free packaging initiative in Signify’s central sustainability team. Robbert coordinates all activities related to the elimination of plastic from the consumer packaging that Signify aims to achieve by the end of 2021.

Signify is the world leader in lighting for professionals and consumers and lighting for the Internet of Things. Sustainability is core to the company and their vision – “to unlock the extraordinary potential of light for brighter lives and a better world”.

This year Signify will achieve carbon neutrality and 100% renewable electricity use.

A circular economy framework for business: *Where to start?*

Through the Cradle to Cradle Certified™ Products Program, the non-profit Cradle to Cradle Products Innovation Institute (C2C) sets the global standard for products that are safe, circular and made responsibly. The C2C Certification framework is used by future-focused designers, brands, retailers and manufacturers across the value chain within the built environment, fashion, cosmetics & personal care, household goods and packaging to innovate and optimize materials and products according to science-based measures.

The Institute also powers the global shift to a circular economy through partnerships and collaborative initiatives that equip businesses, governments and other stakeholders with the technical solutions and knowledge they need to innovate the way products are designed and made.

We interviewed Dr. Christina Raab about the benefits of embracing a holistic Circular Economy Framework



“A safe and inclusive circular economy is now more than ever being recognised as an enabler to fulfil the SDGs.”

DR. CHRISTINA RAAB

Vice President, Strategy & Development

Cradle to Cradle Products Innovation Institute



COVID-19 HAS EXPOSED WEAK POINTS IN THE DOMINANT LINEAR MODEL. IN WHAT AREAS CAN THE CIRCULAR ECONOMY CONTRIBUTE TO SUSTAINABLE DEVELOPMENT DURING AND AFTER THE COVID-19 CRISIS?

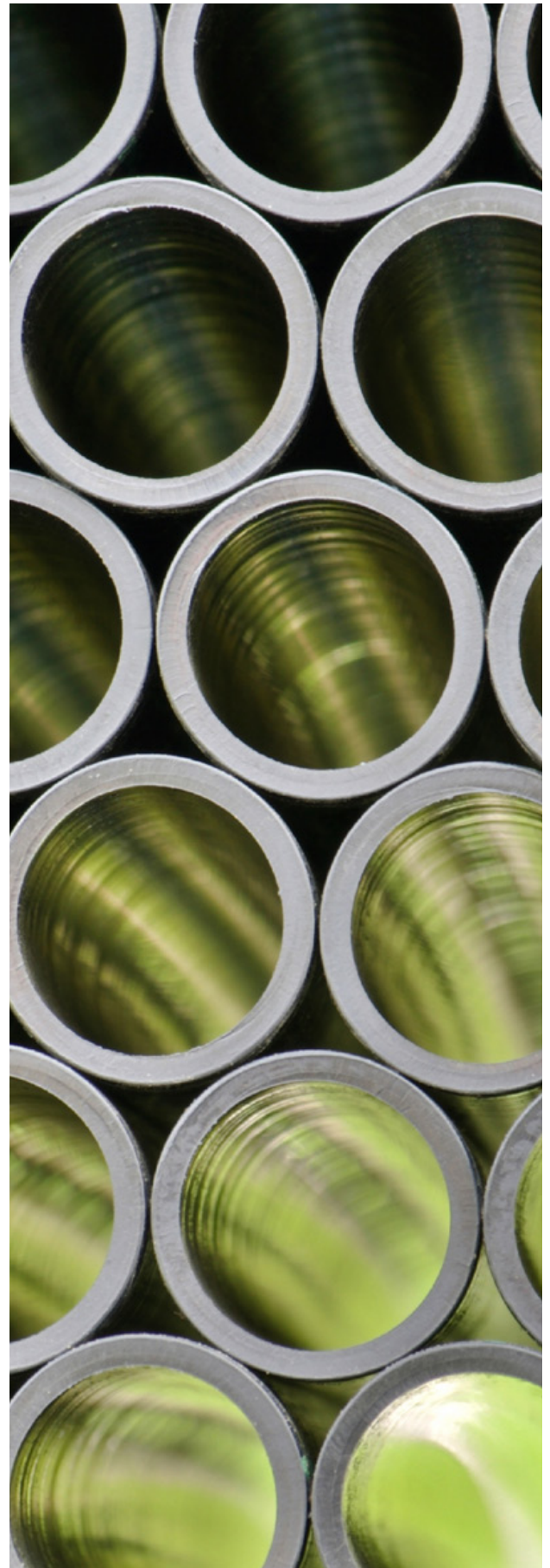
Christina: *“A safe and inclusive circular economy is now more than ever being recognised as an enabler to fulfil the Sustainable Development Goals, not only SDG12 (Responsible Consumption and Production) but also other cross-cutting goals such as Goal 3 (Good Health and Well-Being), Goal 8 (Decent Work and Economic Growth) and Goal 17 (Partnerships).”*

“For the great reset into a post Covid-19 world, we observe an increasing tendency that circular models will be used as a driving concept for sustainable business strategies and supply chain operations”.

IN YOUR VIEW, WITHIN THE CIRCULAR ECONOMY SOLUTIONS FRAMEWORK, WHAT ARE THE MOST RELEVANT AND PROMISING SOLUTIONS AT HAND?

Christina: *“Our (C2C Certified) global standard is recognised worldwide as the most advanced and comprehensive solution for a circular economy and innovative products that are also safe, circular and responsibly made.*

The framework is routed in continuous improvement across bronze-silver-gold-platinum performance levels and a verified assessment with a product mark. It spans the bridge from products to supply chain to company practices and allows to measure circularity and communicate progress directly to consumers. The most promising circularity solutions are those that not only consider circularity in isolation but its linkages to sustainability, resilience and innovation.”



HOW DOES CRADLE TO CRADLE HELP ORGANISATIONS DESIGNING OUT WASTE AND POLLUTION, AND KEEPING PRODUCTS AND MATERIALS IN USE?

Christina: “The Cradle to Cradle framework is rooted in design principles, namely that everything is a resource for something else and that waste can be designed out right at the product development stage. The five categories within the Cradle to Cradle Certified Products Standard are interlinked but any zero waste efforts start with;

#1 THE MATERIAL HEALTH CATEGORY.

This category ensures that chemical ingredients in a material or product have been inventoried, screened, assessed and optimized for human and environmental health and safety. This is a precondition for products to be able to safely cycle through the highest and best channels of use and reuse.

#2 PRODUCT CIRCULARITY

Combines safe materials with circular business models and their supporting systems and infrastructure. Circular sourcing requirements drive increased use of cycled or renewable content, while circular design ensures that products are made to be compatible with their intended biological or technical cycling pathway and that they retain their highest value as they cycle. Finally, circular systems guide active cycling and end-of-use handling by promoting publicly available circularity data.

The other three categories, essential for a holistic approach to circular economy, are:

#3 CLEAN AIR AND CLIMATE PROTECTION

Product manufacturing results in a positive impact on air quality, the renewable energy supply, and the balance of climate changing greenhouse gases.

#4 WATER AND SOIL STEWARDSHIP

Watersheds and soil ecosystems are protected, and clean water and healthy soils are available to people and all other organisms.

#5 SOCIAL FAIRNESS

Companies are committed to upholding human rights and applying fair and equitable business practices.

WHY DO BUSINESSES EMBRACE SPECIFICALLY THE CRADLE TO CRADLE METHODOLOGY FOR THEIR PRODUCTS?

Christina: “One of the most common motivations for companies to embrace specifically the Cradle to Cradle framework is being enabled to demonstrate industry leadership on sustainability/circularity, and thereby achieve enhanced brand value.

The standard is also utilised to support innovation frameworks for design and product development, and as a pathway to continuous improvement of sustainability/circularity performance on product, supply chain and company level. Companies increasingly use Cradle to Cradle Certified as cross-cutting metrics to achieve commitments such as to Sustainable Development Goals, science-based targets, and climate pledges, and to have their progress validated by a rigorous, holistic third-party standard.”

ABOUT DR. CHRISTINA RAAB

Before joining the C2C Products Innovation Institute, Christina held management positions in global firms at the forefront of holistic sustainability services. She worked with private companies, multilateral organisations and public institutions to advance the integration of sustainability and circularity into core business and supply chain practices.

Christina started her professional journey at the environmental branch of the United Nations Industrial Development Organisation and holds a PhD in materials chemistry. As Vice President Strategy & Development at the Cradle to Cradle Products Innovation Institute, Christina is responsible for the growth, innovation and impact initiatives of the Institute worldwide across sectors. In this role, Christina is also leading strategic alliances and partnerships with stakeholders from business, policy and finance.

How can cities become more circular as they emerge from the crisis?

There are cities that have pledged to keep the air clean after the pandemic has passed. As such, Copenhagen is among the most ambitious, pledging to become carbon neutral by 2025 while also California and Mexico City have recently increased their efforts²⁴ to improve air quality and environmental pollution issues. But the question remains, will other cities use this moment to make their development efforts sustainable and keep their air clean?

We interviewed expert Max Russell from Circle Economy who is currently working on the “Thriving Cities Initiative”.



“A future within this 1.5 degree warming has to be a circular future, there is no disputing it.”

MAX RUSSELL

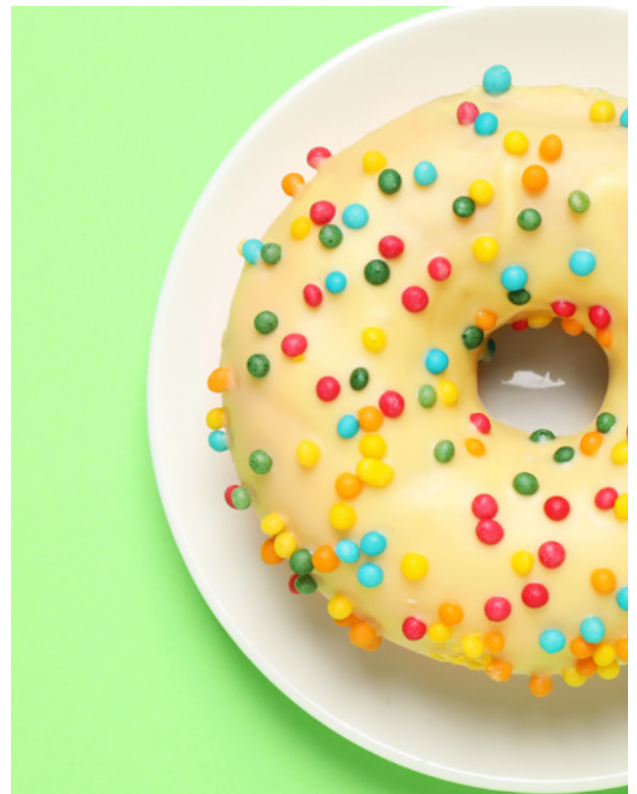
Project Manager & Analyst

Circle Economy

COULD YOU TELL US ABOUT THE THRIVING CITIES INITIATIVE?

Max: *“The project is designed to bring the concept of Doughnut Economics to cities to co-create transformative circular strategies. As such, we have worked with cities like Amsterdam, Philadelphia and Portland.”*

Doughnut Economics refers to a concept introduced by economist and author Kate Raworth. The “Doughnut” in Raworth’s model refers to “the sweet spot for humanity” in which we are able to meet the needs of all of society within the means of our planet. Raworth criticises that much of humanity’s basic needs such as water, food, housing, energy and education are still not met. At the same time, she argues that society has already overshoot our pressure on some of the Earth’s “life-support systems” such as climate change, biodiversity loss and land conversion.



WHICH ASPECTS DO CITIES HAVE TO KEEP IN MIND TO BECOME CIRCULAR?

Max: *"I think there are, at least, five key points when it comes to how cities can integrate circularity:*

Re-framing the urban commons, co-creating a just and inclusive future, embedding resilience at the core of the city, reinforcing a local and global identity and redefining the goal."



In a recently published article²⁵, Max and his colleague Ilektra explain these five key points in more detail;

#1 RE-FRAMING THE URBAN COMMONS

means providing people with the least, who have also been hit the hardest by the pandemic, with the basics to fulfil needs such as safe housing and nutritious food. This must happen without putting too much pressure on the already stressed environment. Solutions for this are innovations within the sharing economy by supporting the use of shared resources (e.g. ride-sharing, co-living spaces etc.) and encouraging 'access over ownership'.

#2 TO CO-CREATE A JUST AND INCLUSIVE FUTURE

, cities need to ensure that the prosperity generated through the transition towards a circular economy does not feed into the gap between the rich and poor. A just transition needs to "pro-actively engage and give a voice to marginalised communities to co-create a future that is as inclusive as it is sustainable".

#3 EMBEDDING RESILIENCE AT THE CORE OF THE CITY has become more important than ever.

With the pandemic exposing the brittleness of the supply chains of businesses and entire cities, circular strategies used to redesign the core of cities can help reduce climate change impacts like the increasing heat island effect and flooding risks in cities.

#4 REINFORCING A LOCAL AND GLOBAL IDENTITY

includes realising that cities can have large impacts on other places through the interconnected and overlapping systems. At the same time, this interconnectedness is key to solving global issues and needs to be utilized in the sharing of knowledge, data and resources.

#5 REDEFINING THE GOAL

means shifting the goal away from GDP growth towards the goal of "thriving cities" that embrace doughnut economics and actively measure the wellbeing of their citizens by other means than GDP growth.

WHAT WOULD A CIRCULAR CITY REALISTICALLY LOOK LIKE?

Max: “Ideally, a circular city would be glocal, regenerative and embrace a sharing-economy.

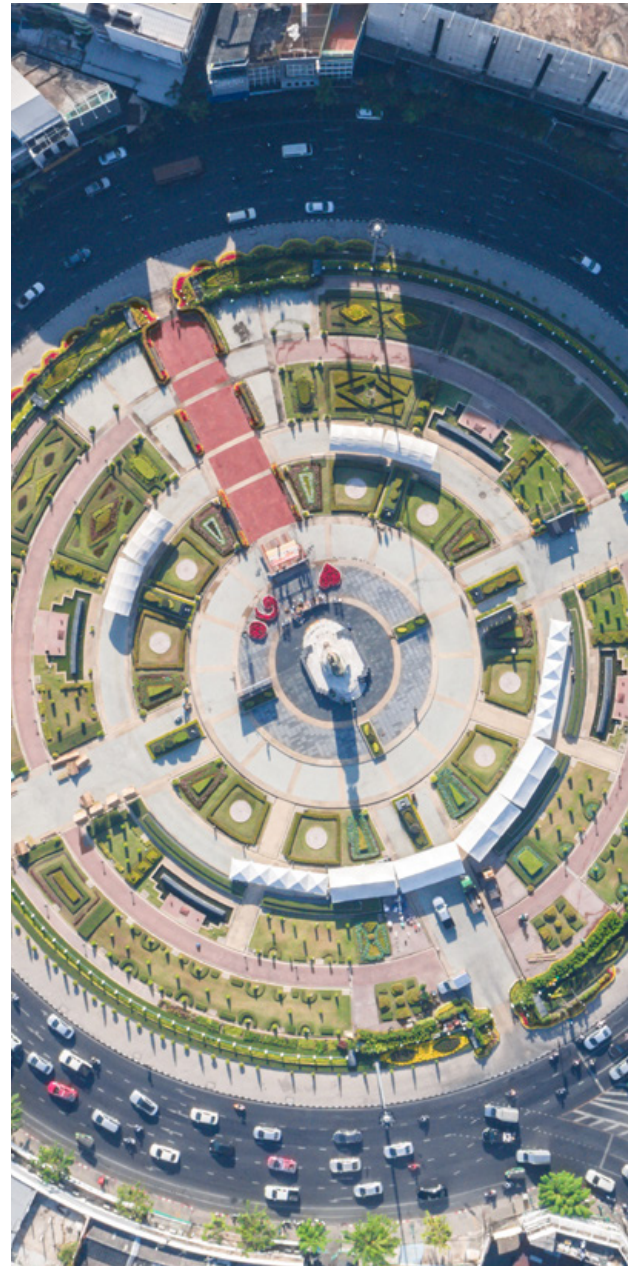
Glocal means that a city that has, as much as possible, re-localised its supply chains and resource loops, while sharing knowledge, ideas and collaborating globally. It should be reinforcing local links with the surrounding region.

In being regenerative, a city is using green infrastructures to actively regenerate the urban and local environment.

To embrace a sharing-economy, a city would be sharing and distributive, to lower its consumption. This includes using alternative models to reduce overall consumption of resources through sharing models, while ensuring equitable access to needs and services.

After all, different cities will have different approaches surrounding the circular economy based on their current conditions and future requirements.

Some will look more towards maintaining the assets that they already have, such as buildings. While others, who still need to increase their baseline standard of living, will look more towards circular design to ensure that such needs can be provided without locking into a linear system e.g. modularity, renewable materials, etc.”



ABOUT MAX RUSSELL

Max is a project manager and analyst for the Cities programme at Circle Economy. Within his role, he manages the execution of projects, as well as conducting analysis and delivering insights related to projects. Max holds a BSc degree in Geography and an MSc degree in Urban Management and Development.

Circle Economy is a social enterprise based in Amsterdam that works with policy-makers, businesses, academics and NGOs to accelerate the transition towards a circular economy. Circle Economy is known for its Circularity Gap Reporting Initiative, which publishes the annual “Circularity Gap Report”. The report measures current states of circularity and highlights the urgent need to transition to a circular economy.



HARCO J. LEERTOUWER

Managing Director, Europe

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2020 has been a year that has changed the world's societies - without exception. While countries across Europe continue to struggle in dealing with repeated waves of the coronavirus pandemic and the lockdowns as an immediate response, society is still evolving and adapting at an exponential pace.

Not only the economy, but also its people have been heavily affected by the economic downturn. At the same time, we have seen industries booming during and because of the crisis. Moreover, the pandemic also exposed shortcomings in our global supply chains and ways of doing business. The economic downturn during the pandemic has highlighted how our business as usual approach is impacting our environment. However, many of the positive effects of the economic downturn, such as clearer skies, waters and air, only lasted for a short period of time, before emissions bounced back to pre-pandemic levels.

The interviews with our three experts are all pointing towards the same direction: to reach the target of the Paris Agreement to keep global warming below 1.5 degrees Celsius, however, much more drastic action is needed to reduce emissions permanently. Also, there is clear alignment that a circular economy is much better equipped to handle global pandemics like Covid-19.

The concept of the circular economy can be used to reduce virgin material use and avoid emissions. It ultimately initiates the process of redesigning business models and products to facilitate re-usability and ease to repair damaged or defect products. This in turn decreases vulnerabilities in the supply chain and increases efficiency.

At the same time, the circular economy has the potential to create 700,000 jobs through additional labour demand in recycling plants and repair services as well as a GDP growth of almost 0.5% by 2030, in comparison to the baseline scenario.

During the past year, governments around the world have taken short-term measures to minimise the impact that the crisis has. Our response to Covid-19 should be different though: all our effort and capital should be channelled to building a circular economy. At present, most "solutions" and short-term backing are financial injections to support the status quo and the institutional and economic arrangements. However, we should demand our politicians and captains of industry to actively channel these funds into the drivers of the circular economy, push the sustainability agenda, boost innovation and accelerate building the future we want to live in.

This deep and ongoing crisis may hopefully destroy some of the 'old normal' characteristics of this moment in human history (the way we eat, travel, work and consume energy will have a direct impact on (animal) agriculture and forestry, (air) travel and fossil energy consumption to name a few) and could bring about the transformations in sustainability that will enable us to build a better future for all life here on Earth. The risk is that exactly the opposite will happen — and that is a risk that humanity cannot afford to take. It is in our hands to make the right decision.



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Tabea graduated in 2019 from her BBA in International Business and supports Acre's Benelux team with candidate search, market research, business development and marketing activities. While working part-time for Acre, she also follows a Master's programme at Wageningen University in Environmental Sciences. She is passionate about the circular economy, environmental research and sustainable business practices. Before joining Acre, Tabea worked in Marketing and Communications at Circle Economy (Amsterdam) and as a researcher at TerraCycle (Toronto).

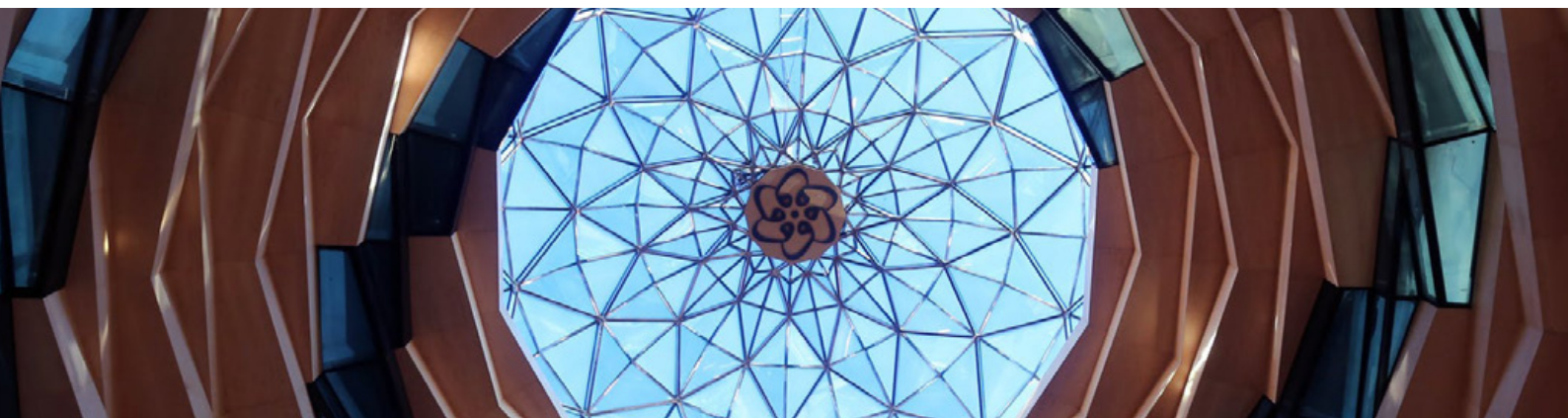
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Harco joined Acre in January '20 to lead Acre's international expansion into continental Europe. He brings in a wealth of executive search and international business growth experience, having been a Director of Michael Page in Germany and Managing Director for Badenoch & Clark Germany and the Netherlands. In 2018, Harco set up his own executive search boutique, focusing on sustainability, renewable energy and clean technology. Harco holds an MBA, having graduated in Corporate Social Responsibility at the prestigious Henley Management College (Henley-on-Thames, UK). Moreover, Harco is an active member of the Climate Reality Project, a diverse group of passionate individuals who have come together to solve the greatest challenge of our time. Harco was trained by the Institute's founder, Nobel Peace Prize laureate and former US Vice President Mr. Al Gore.

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ABOUT ACRE

Acre connects forward thinking organisations with purpose driven professionals. We work with functions which focus on resolving systemic challenges that impact society and the environment at a global level. These functions include; Sustainability and CSR, Corporate Affairs, ESG and Sustainable Finance, EHS and Energy and Clean Technology.

Our pioneering work across our disciplines has created the largest global recruitment network of its kind. With offices in London, Amsterdam and New York, Acre is the global market-leading sustainability search firm.

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