



IMPACT

REPORT
2021

A look back at Circle Economy's impact in 2021 and over the past 10 years



WHO WE ARE

Circle Economy is a global impact organisation with an international team of passionate experts based in Amsterdam.

We empower businesses, cities and nations with practical and scalable solutions to put the circular economy into action.

Our vision is an economic system that ensures the planet and all people can thrive.

To avoid climate breakdown, our goal is to double global circularity by 2032.

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INTRODUCTION

As 2021 draws to a close, we have much to reflect on.

This year saw the coming and going of Glasgow's COP26—branded a 'fragile win'—as well a rallying cry from people around the world to combat climate breakdown. As [our research](#) has reported, the global economy continues to consume over 100 billion tonnes of materials annually, of which over 90% becomes waste. With a global population set to reach 10 billion people by 2050, our current production and consumption patterns are highly unsustainable. A circular economy provides the answers to address these environmental and societal challenges.

As an organisation, we reached a ten-year milestone this year: a decade of advancing the circular economy transition with the ultimate aim of **doubling global circularity by 2032**. With this newly defined goal, we can limit global warming temperature to well below 2-degrees—tackling environmental pressures and enhancing economic resilience in the process and—if designed with just principles in mind—addressing deepening social inequalities. A **17% circular world** holds many benefits for businesses, cities and nations, and will allow us to create an economic system where the planet and all people can thrive.

In this Impact Report, we will highlight how we have supported and accelerated the global circular economy transition in the last ten years and spotlight our flagship product—the Circle Scan. We will reflect on both the highlights from the work we did in 2021, as well as projects we concluded in past years but that continue to bear their fruits.

OVER THE PAST 10 YEARS...

We have empowered:



To become more circular.

We have trained:



In circular principles.

We have developed:



IN 2021...

We have empowered:



To become more circular.

OVER THE PAST YEARS, WE HAVE

Been referenced in
610
PAPERS to date

Had our insights shared at
450+
EVENTS since 2018

Garnered a
SOCIAL
MEDIA
FOLLOWING
of over
170k
PEOPLE

Had **1m+**
VISITORS
to our website

Published
90+
REPORTS since 2016

LESSONS FROM COP26 IN GLASGOW

International coordination around mitigating climate breakdown overwhelmingly focuses on reducing greenhouse gas (GHG) emissions by transitioning away from fossil fuels. The latest COP, held in Glasgow in November, is a perfect example of this vital—yet narrow—focus. Only [one-third](#) of all national climate pledges currently mention the circular economy. Our [Circularity Gap Report 2021](#) found that 70% of all global GHGs are tied to the handling and use of materials. This means that to really slash emissions we must transform how we extract, use and dispose of materials and goods.

IN ADDITION TO REDUCING EMISSIONS...

Transforming our relationship with materials can lead to a host of co-benefits, from increased biodiversity, less pollution, cleaner air and—if managed well—more equitable societies. To get there we need to pivot to an economic and social system that allows us to thrive within the healthy boundaries of the planet. And while national climate pledges fall short, businesses, cities and nations can accelerate the transition themselves, having vital, interconnected roles. This is where the circular economy comes in. Circularity gives us the tools to transform our linear, take-make-waste economy into one where waste and pollution are eliminated, products and materials are reused and nature is regenerated.

WE USE A PRACTICAL AND SCALABLE APPROACH

We combine research, data and digital tools for the greater good to empower decision-makers from the public and private sectors to develop and implement circular economy strategies and business models. It's our vision to see circularity embedded in business, cities and nations across the globe. How are we doing this? Keep reading to learn more.

SHAPING THE CIRCULAR ECONOMY LANDSCAPE

Circle Economy is dedicated to answering the most timely questions and investigating the links the circular economy has with wider environmental, social and economic concepts. This is critical because the model only emerged in mainstream policy discourse about ten years ago. The global appetite for the circular economy is growing and knowledge needs to be cultivated and shared.

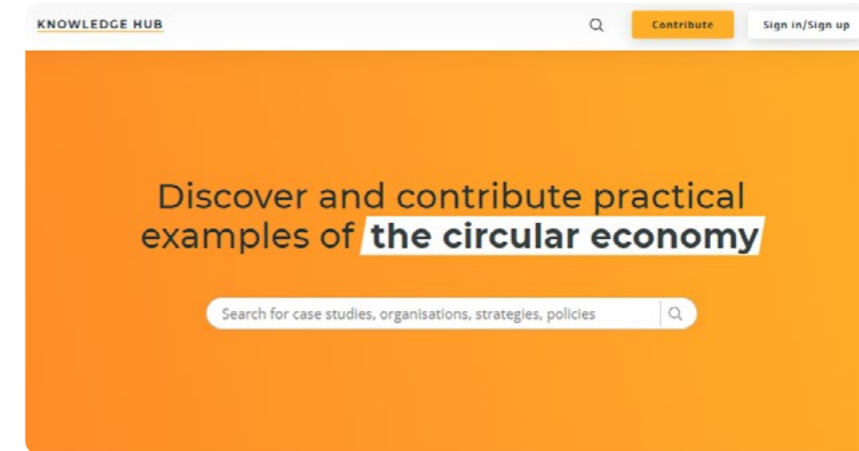
QUANTIFYING GLOBAL CIRCULARITY



Our flagship publication, the [Global Circularity Gap Report](#), measures the circularity of the globe, presenting one clear number. It is vital in forming the discourse around—and understanding of—the circular economy, as well as identifying solutions to accelerate the transition on a global scale.

The world is 8.6% circular. Closing the global Circularity Gap can close the Emissions Gap and keep global temperatures well below 2-degrees. Our Circularity Gap Reports have hit the headlines and have been featured in the National Geographic, the Guardian, The New Scientist, and more. They communicate a clear message: **we can tackle climate breakdown with the circular economy.**

THE LARGEST ONLINE REPOSITORY OF CIRCULAR KNOWLEDGE



One of the main barriers for circularity is the lack of an evidence base and knowledge. To overcome this, we created the [Knowledge Hub](#). Over the past 12 months has inspired 49,000 people—over 300 a day—via over 3,500 circular economy case studies from around the world.

DECISION-MAKERS EMPOWERED WITH UNESCO-UNEVOC



The Circular Jobs Initiative's position paper, [Closing the Skills Gap: Vocational education and training for the circular economy](#), funded by the Goldschmeding Foundation, was transformed into an online learning module for UNESCO-UNEVOC. It will raise awareness among education stakeholders for the skills and jobs we need to drive climate action, and present the solutions offered through technical and vocational education and training.

HARNESSING THE POWER OF COUNTRIES TO CLOSE THE CIRCULARITY GAP

The globe is currently only 8.6% circular, leaving a massive Circularity Gap of over 90%. Countries have a huge role to play in closing this Gap. We've already worked with **20 countries** and we plan to reach **125** in the next ten years. With a tailored [Circularity Gap Report](#) analysis, national-level decision-makers gain an understanding of how circular their local economy is, and the clarity needed to drive up local circularity—realising economic, environmental and social benefits in the process. We also work with countries using tailored project approaches.

DIGITAL SPOTLIGHT

PROVIDING ACCESS TO INSIGHTS ON CIRCULAR JOBS AROUND THE WORLD

Policymakers, economists and labour organisations can access insights into the opportunities the circular economy offers the workforce on the [Circular Jobs Monitor](#). Through our Circular Jobs Initiative, Circle Economy has been working with the United Nations Environment Programme on developing these insights using a [shared methodology](#). Learn more about our partnership [here](#).



AUSTRIA: THE CIRCULAR ECONOMY GETS ON THE GOVERNMENT'S RADAR

Conducted in 2018, the [Circularity Gap Report Austria](#) revealed that the country was 9.7% circular and presented four pathways the country could pursue to become 37.4% circular. These included shifting from fossil fuels to renewable energy sources and ensuring imported goods have a higher rate of secondary material content.

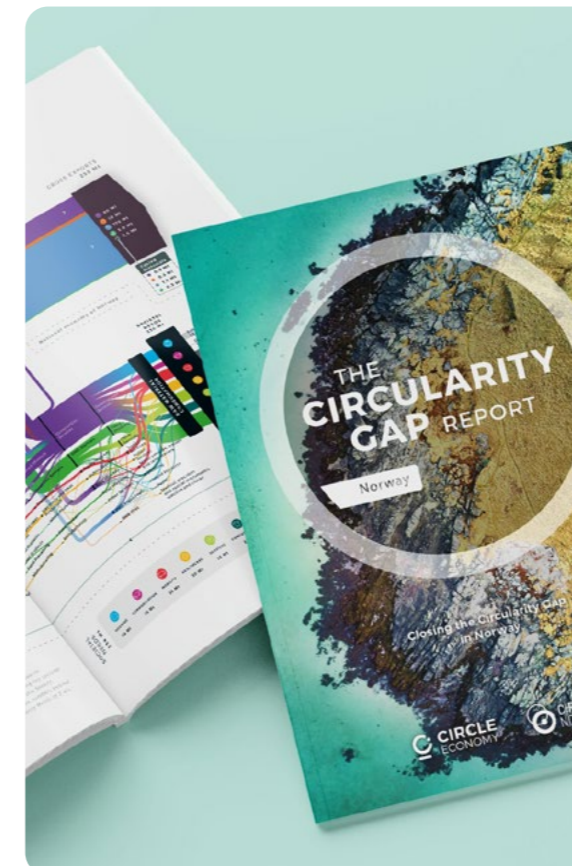
IMPACT: The report has now landed on the desks of policymakers, elevating the circular economy debate from the industry to national government level. It has driven formal discussion between the government and the waste management industry to develop a broader set of indicators to monitor the transition.



LAO PDR: COLLABORATIONS SPUR CIRCULAR BUSINESSES THAT SUPPORT ECOTOURISM

[Our 2021 analysis](#) found that the GDP from the circular economy in Lao PDR could reach US\$16 billion by 2050, while the number of jobs in the circular economy could reach 1.6 million by 2050. The UNDP-led initiative consisted of stakeholder training, policy and metabolic analysis, and a Community of Practice (CoP) to connect the public and private sectors. We teamed up with Shifting Paradigms, Rebel Group, and Earth Systems.

IMPACT: The CoP reached a diverse audience consisting of 21 circular business, policymakers and financial sector stakeholders. This forged the collaboration needed to implement circular strategies from the analysis in reality. As a result of these activities, tourism provider Green Discovery now collaborates with PLM Eastbeam on substituting steel for wood to build an eco-friendly bridge, and with Lao Biogas to champion more sustainable energy sources.



NORWAY: ANALYSIS SHAPES DEBATE ACROSS BOARDROOMS, UNIVERSITIES AND MORE

Norway has one of the highest global per capita consumption rates at 44.3 tonnes per person. The [Circularity Gap Report Norway](#) presented routes the country could take to cut consumption by half, slash greenhouse gas emissions by 63% and increase its circularity from 2.4% to 45.8%.

IMPACT: In 2021, the analysis has established itself as a reference report for the Norwegian economy, being used by the authorities and the business sector. It is referenced in newspapers and research articles, is used by consulting companies, NGOs and in university curricula. Circular Norway is now also working on a digital version where scenarios for the Norwegian economy and key industries can be simulated. Since the report launch, the Norwegian government also unveiled its national circular economy strategy.

THE MAJORITY OF THE GLOBAL POPULATION LIVES IN CITIES: WE HELP THEM GO CIRCULAR

Over the last ten years, we have worked with **40 cities** to develop tailored, data-based circular economy strategies. Using our [Circle City Scan](#) approach, city stakeholders are taken on a journey from understanding local resource use and waste generation to identifying promising opportunities and developing action plans to pursue them. We also work with regions based on their needs and wants in the circular transition.

NEW SOUTH WALES: POLICY RECOMMENDATIONS SET BASED ON OUR DATA INSIGHTS

To inform their decision-making and kick-start the circular transition in their region, the state government in New South Wales, Australia, leveraged Circle Economy's digital platform. We worked with the municipality, a PhD researcher and a consulting company to help them collect and draw meaningful insights from the necessary data. However, it soon became clear that the necessary data was not readily available.

IMPACT: To build a database that could house data to drive informed circular decision-making, the state council submitted a policy recommendation to gather and track up-to-date local circular data. Our team compiled the specific challenges for the data in the area, as well as recommendations for how to gather and improve it for the policy recommendation.

DIGITAL SPOTLIGHT

DATA-DRIVEN INSIGHTS ON AN UNPRECEDENTED SCALE

Using over **500 global case studies** and **4,000 baseline datasets** from global cities, a newly - developed tool, *Ganbatte* cities, provides urban decision-makers with the information needed to kickstart their circular journeys. Currently being piloted with ten cities in the USA and Sub-Saharan Africa, the mass of information allows these cities to identify suitable circular strategies based on their unique contexts—empowering cities or regions that don't have access to their own data to make progress towards circularity. Next year, we will expand our digital platforms tremendously—watch this space!

The tool is funded by the MAVA Foundation and supported by the cocreators ICLEI (Local Governments for Sustainability), Metabolic and the Ellen MacArthur Foundation.



PRAGUE: IMPLEMENTS ACTION PLAN AND BECOMES A CIRCULAR FRONTRUNNER

Between 2018 and 2019, Circle Economy and INCIEN carried out a Circle City Scan which resulted in *Circular Prague*, a visual roadmap for the strategies best positioned to kick-start the Czech capital's transition to a circular economy.

IMPACT: Now, in 2021, it is clear how Prague has brought our action plan to life. Firstly, the city touts a growing network of re-use points throughout the city. In only half a year of the pilot being active, nearly 2,000 pre-loved items have been processed: the equivalent of 14 tonnes. To use its tonnes of food waste as a resource, Prague set the ambitious goal of separating 70% of municipal waste at the source by 2035—a leap from the current separation rate, standing at 31%. To start, it became the first Czech city to implement household food waste collection—this is currently in the pilot phase in three districts, with aims to be city-wide by 2026. The Circle Scan also helped form a dedicated committee and steering group for the circular economy. The circular economy has truly been embedded into the daily decision-making processes of the city.



KONGSVINGER: PILOTS SPRING UP ACROSS REUSE, REPAIR AND RESALE

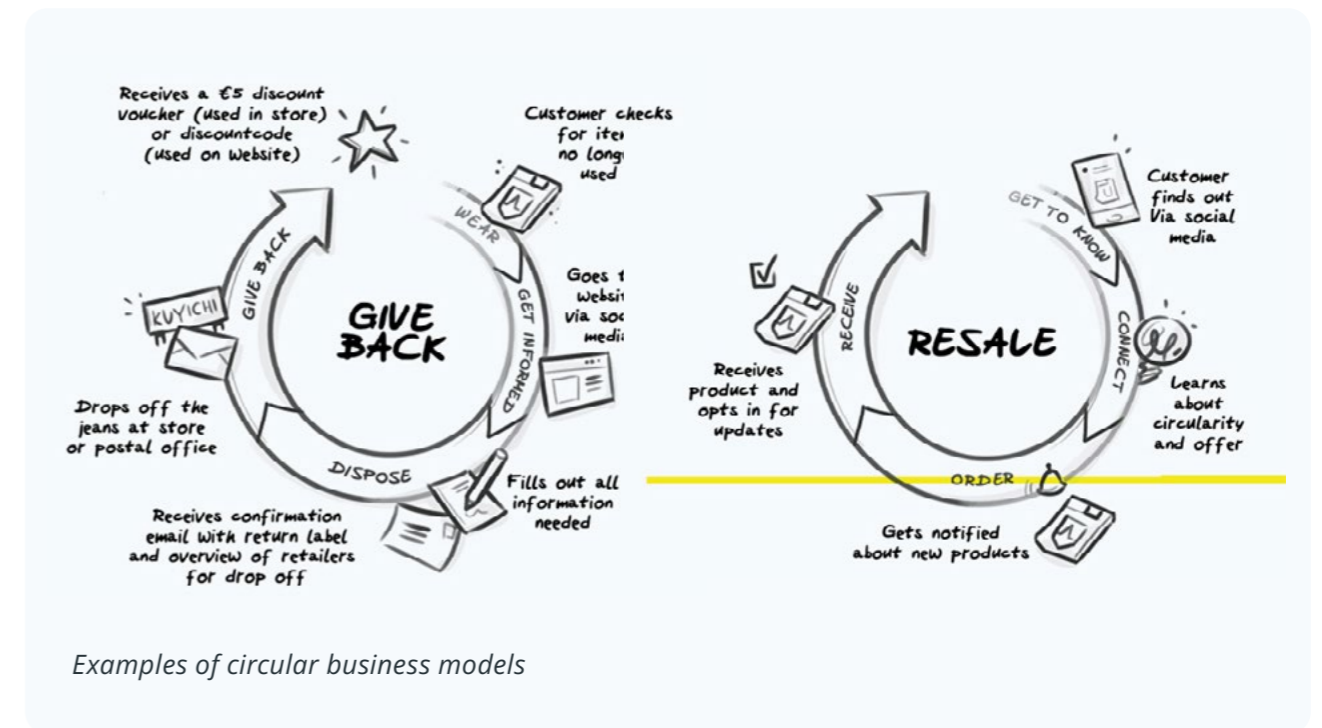
In 2020, our [Circle Region Scan](#) and building stock analysis in the Norwegian region of Kongsvinger revealed key areas where the region could develop pilot projects to scale a more circular built environment.

IMPACT: Since our analysis, four key pilot projects have been rolled out. The first facilitates a regional network for reusing and redesigning office furniture to increase the overall use of secondary materials. The second supports the use of demolition waste as a resource by providing quality assurance for materials before they enter a reuse and resale database. The third pilot supports circular procurement training and capacity building to encourage circular education. The fourth is O-house: a prototype for circular housing. The pilot, a collaboration between four stakeholders, will ensure that at least 50% of all building materials used will be based on recycled materials.

A RESILIENT BUSINESS REVOLUTION: MAKING VALUE CHAINS CIRCULAR

Circularity is not just common sense from a sustainability perspective—it also makes good business sense. The circular economy brings businesses many competitive advantages, including leading the innovation curve, opening up new markets, improving customer relations and increasing brand value. Our [Circle Business Scan](#) uses a data-driven

approach to analyse and measure circularity in the material and energy flows of a business's value chain. It identifies opportunities to rethink and improve upon product and service design and business and service models. To date, we have supported over **100 businesses**—including both startups and major corporations.



Examples of circular business models

DIGITAL SPOTLIGHT

HOW TO LAUNCH A CIRCULAR BUSINESS IN TEN MONTHS

Our Switching Gear knowledge was transformed into openly accessible industry-facing tools, resources and podcasts: [the Circular Toolbox](#) and the [Switching Gear podcast](#). The podcast follows the journey of the four brands that participated in the Switching Gear project from 2019 to 2021 and provides rich insights and perspectives from those that

have put these tools into practice. Through this and the toolbox, we have inspired and motivated a huge number of apparel brands to follow in the footsteps of the four Switching Gear brands—while providing the concrete tools needed to make it happen. Since our global launch, we have reached over 1,800 stakeholders and have achieved nearly 1,000 listens to the podcast.

SWITCHING GEAR: DRIVING MASS ADOPTION OF CIRCULAR BUSINESS MODELS IN THE APPAREL INDUSTRY

Over two years, our [Switching Gear](#) initiative has fast-tracked the use of rental and resale models in the apparel industry. Working closely on the design and launch of rental or resale business models for four brands: LINDEX, Asket, ETP, and Kuyichi.

IMPACT: Each brand that participated in the initiative has launched circular business model pilot plans. The [Switching Gear Enabling Network](#) (SGEN), created with Fashion for Good, has grown to become a global collective of over 56 industry members. SGEN includes 32 innovators whose business proposition supports the implementation of rental and resale business models, ten frontrunning or explorative brands who already have circular models in the market or are curious to start, and 14 experts and partners that contribute relevant knowledge or resources in business analysis, circular design and more.

LOOKING AHEAD: DOUBLING GLOBAL CIRCULARITY BY 2032

To achieve our goal of doubling global circularity by 2032 we must accelerate the adoption of circular strategies across businesses, cities and nations, using a practical and data-driven approach. High-level change must also be enacted to create the enabling conditions for a more circular world. At Circle Economy, we aim to do this by forming partnerships that unite key stakeholders across geographies and industries, forming data-driven tools and platforms to stimulate the adoption of circular practices at scale and speed, and applying a social lens to ensure the circular transition is just.

1. PARTNERSHIPS FOR SCALING A JUST TRANSITION TO A GLOBAL CIRCULAR ECONOMY

The circular economy is an intrinsically multi-stakeholder model that necessitates cross-sector and boundary-blurring engagement. No one entity can address the challenges of climate breakdown, resource scarcity and social inequities alone. Instead, radical collaboration is needed. Circle Economy is committed to partnering with stakeholders across the board to strengthen the evidence base for the circular transition, and build knowledge of the link between the circular economy and the labour market and on tracking circular performance.

SWITCH

A five-year project led by the United Nations Industry and Development Organisation (UNIDO), delivered in partnership with Chatham House, Circle Economy and the European Investment Bank and funded by the European Union. The project will use Multinational Corporation (MNC)-led circular economy pilots

in the textiles and garments, plastic packaging and electronics and ICT value chains to support lower-income country suppliers in adopting circular economy practices, through capacity development, technical expertise, circular ecosystem development and access to finance.

Learn more about [SWITCH](#).

Indicators Coalition

A coalition of leading circular economy experts that aims to improve knowledge, alignment, and implementation of CE indicators advancing transparency and accountability while measuring the progress and impacts of a circular economy transition. Stakeholders include PACE, World Resources Institute, Circle Economy, the Ministry of Infrastructure and Water Management of the Netherlands, Goldschmeding Foundation, EMF, OECD, WBCSD, European Commission and the European Environment Agency.

Learn more about the [indicators coalition](#).

Capital Equipment Coalition (CEC)

A group of fifteen businesses—including Philips, Cisco, and Dell—which have pledged to apply circular economy principles to preserve and recover value throughout the lifecycle of their products. The coalition, with a European and a North-American cohort, meets four times a year on hot topics to enable change such as metrics, digital, value chain collaboration and policies, and to address common challenges and share best practices. CEC has published four reports and hosted 16 workshops to date, engaging key external stakeholders in dialogue such as World Business Council for Sustainable Development, the Ellen MacArthur Foundation and EU government officials.

Learn more about [CEC](#).

2. DATA- DRIVEN DIGITAL TOOLS FOR EVERYONE, EVERYWHERE

Digital tools can scale circularity. They enable users to understand current circular economy developments, scan for relevant opportunities and act accordingly. Data is equally crucial and underpins evidence-based decision- and policy-making. Our digital products focus on bringing this evidence and guidance to businesses, cities and nations around the world and will continue to do so in 2022 and beyond. Exciting digital products to keep an eye on:

The Knowledge Hub

Our open-access, collaborative library of over 3,500 case studies.

Visit the [Knowledge Hub](#).

Ganbatte

By the end of 2023, we aim to have 300 businesses, 1,000 cities and 70 nations actively using our upcoming digital platform to gain insights, promote action and connect with each other and track their progress towards a circular economy. Ganbatte will serve as a single platform to unite many of our digital tools.

3. A SOCIAL LENS TO ENSURE THE TRANSITION IS SAFE AND JUST

A holistic circular economy that applies a social lens to all of its activities can support many Sustainable Development Goals, from ending hunger and improving health and well-being to affordable low-carbon energy and the opportunity for decent work. Potential consequences from one circular solution must be measured to ensure that the transition is safe

and just for all and that potential blindspots of the circular economy are managed. Circle Economy will continue to embed [a social lens to all of our work](#)—from keeping workers front and centre in evaluating the impact of circular economy interventions to exploring linkages with the social and solidarity economies.

Circular Jobs Initiative

The circular economy is a labour-rich model, and therefore will provide work to the population. We know the workforce is an essential lever for transforming our economy from linear to circular and we must monitor these jobs to ensure the work is decent and the transition fair and just for all.

Learn more about the [Circular Jobs Initiative](#).

Thrive

We are exploring a more holistic approach to the circular economy using the holistic thinking of the Doughnut Economic Model, developed by Oxford Economist Kate Raworth. Launching soon.

New Research

Our Circular Jobs Initiative's upcoming position paper will investigate how Europe and other higher-income regions can implement a circular economy that will have a positive impact on lower-income regions and indigenous communities.

Interested to learn more about our vision and the projects for which we seek support?



THE TEAM BEHIND THE IMPACT



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HERMAN WIJFFELS



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