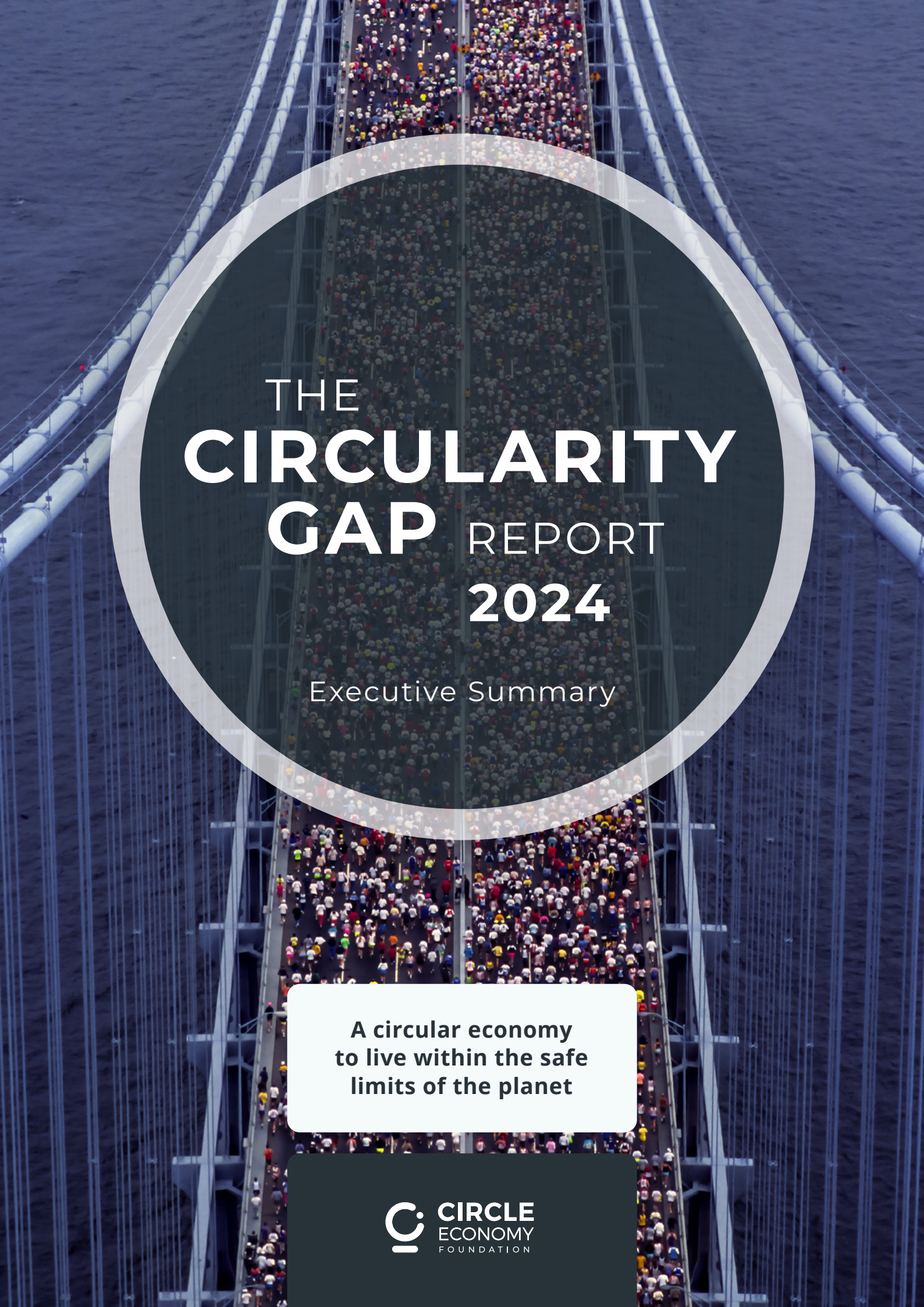


THE CIRCULARITY GAP REPORT 2024

Executive Summary

A circular economy to live within the safe limits of the planet

CIRCLE ECONOMY FOUNDATION

EXECUTIVE SUMMARY

Despite the circular economy entering the mainstream, global circularity is still in decline.

Over the past five years, the volume of discussions, debates, and articles addressing this topic has almost tripled, reflecting a heightened awareness and interest in circularity. However, the vast majority of extracted materials entering the economy are virgin, with the share of secondary materials declining steadily since the *Circularity Gap Report* began measuring it: from 9.1% in 2018 to 7.2% just five years later in 2023.[1] Meanwhile, the total amount of materials consumed by the global economy continues to rise: in just the past six years alone we have consumed over half a trillion tonnes of materials—nearly as much as the entirety of the 20th century. These statistics display the cold, hard truth: despite the circular economy reaching 'megatrend' status, lofty speeches and targets are not yet translating into on-the-ground actions and measurable impacts. Without bold, urgent action to shift to a circular economy, we'll miss out on achieving broader social and environmental goals—ranging from emissions reductions to boosting the use of secondary materials—putting industries and governments at risk of sleepwalking into circular washing and missing out on much-needed impact.

The *Circularity Gap Reports* have provided crucial analysis and theory on the global state of circularity since 2019. Now, it's time to put this theory into action.

Today, six of the nine key 'planetary boundaries' that measure environmental health across land, water and air have been broken—largely due to the impacts of the linear 'take-make-waste' economy. Our *Circularity Gap Report 2023* found that adopting 16 circular economy solutions could not only reverse the overshoot of planetary boundaries but also slash the global need for material extraction by one-third. This reduction is rooted in the circular economy principles of using less for longer, using regenerative materials and cycling materials at their end-of-life. At this moment in time, we've never needed a circular economy more. While material consumption has been instrumental in raising living standards over the past century, we've reached a unique point in history where its continued acceleration—in high-income countries—no longer *guarantees* increases in human wellbeing. Meanwhile, the unequal distribution of wealth and materials hugely destabilise society and strains Earth's life support systems. The world's wealthier nations can no longer use progress as an excuse for unrestricted material consumption. The global economy needs to adopt circular principles to boost development and resilience and to safeguard people's wellbeing in this time of uncertainty and transition.

To walk the talk, governments and industry must break free of flawed development patterns that continue to fuel industries and practices known to be socially and environmentally exploitative.

They can do this by unlocking capital, rolling out bold, contextually-appropriate policies and closing the sustainable and circular skills gap. In this year's Report, we shift from exploring the *what* to the *how*: exploring the different ways that we need to 'change the rules of the game' and create a set of conditions that discourage the overshoot of planetary boundaries and 'undershoot' of human development. This process has resulted in us spotlighting 12 of the original 16 solutions, highlighting the country profile that they are most relevant to, as well as placing people at the centre of this story for the first time. Based on extensive interviews and desk research, this Report aims to show governments and industry leaders that if they want to turn theory into action and scale an economy that delivers on needs within the safe limits of the planet, they need to dismantle harmful entrenched processes and align enabling elements:

- **Create a level policy playing field:** Set the 'rules of the game' through policies and legal frameworks that incentivise sustainable and circular practices while penalising harmful ones, thereby shaping the nature and scale of economic activities across industries and nations.
- **Get the economics right:** Adjust fiscal policies and leverage public investment to create true prices and ensure that circular solutions become more valuable instruments and begin to replace linear norms.
- **Build circular expertise and skills:** Ensure people are skilled and trained to ensure a just transition where opportunities and decent livelihoods are fairly distributed across and within societies.

For a just transition, we must take a systems-thinking approach in real-life applications of the circular economy—both because systems change must meet people's needs and because people and their skills are necessary to implement the solutions themselves.

Although human wellbeing is a broad concept that encompasses a range of social, emotional and physical factors, this Report specifically focuses on how the circular transition can support wellbeing through the provision of decent work. Jobs act as a robust proxy for human wellbeing as it speaks to many dimensions of the human experience: jobs fulfil concrete needs like financial security while also providing a sense of meaning and fulfilment, community and social mobility. Decent and meaningful livelihoods are the bedrock of thriving societies. This is why circular solutions must be designed with the world's most vulnerable in mind. Done right, the circular economy can do more than create jobs and deliver on people's basic needs—it can elevate job quality and safety and reduce inequalities across entire workforces and, with this, populations.

A future-proof system must galvanise wellbeing by funnelling materials into industries and practices that lift people up and repair the damage done to the ecosystems upon which we depend, while degrowing harmful ones—especially in higher-income countries.

Key global systems put the most pressure on key Earth systems, driving us past the safe limits of six planetary boundaries. However, these systems are vital for fulfilling people's needs. In this report, we focus on transformative circular solutions across three key systems:

THE FOOD SYSTEM nourishes populations and employs 50% of the global workforce, but:

- it currently drives a quarter of the overshoot on the climate change planetary boundary due to its greenhouse gas (GHG) production,
- animal farming alone uses over one-quarter of all land, equivalent to the size of the Americas,[2]
- nearly a quarter of freshwater resources are lost due to rampant food waste, and
- it is the single largest driver of biodiversity loss.[3]

THE BUILT ENVIRONMENT, including housing, commercial buildings and the necessary infrastructure for mobility, is essential for our livelihoods, but:

- the extraction of minerals used to produce construction materials is responsible for a quarter of global land use change,
- approximately 40% of global GHG emissions can be attributed to buildings' construction, use and demolition, and
- construction and demolition processes drive nearly one-third of all material consumption.

MANUFACTURED GOODS, such as vehicles, textiles, appliances and equipment and their associated production processes are big employers but:

- production processes often rely on fossil fuels and currently drive one-third of the overshoot on the climate change planetary boundary due to its GHG production,
- material- and energy-intensive industrial activities are linked to deforestation and drive 15% on both the land use and freshwater planetary boundaries,
- manufacturing goods results in substantial amounts of hazardous industrial waste and leaks chemicals into the environment.

To achieve global wellbeing within planetary boundaries, we must prioritise circularity-based development in lower-income *Build* countries, promote circular industrial processes in *Grow* countries and shift consumption patterns in higher-income *Shift* nations.

Ultimately, different countries will have different priorities in scaling a global circular economy and ensuring that materials funnel into systems and practices that boost wellbeing within the safe limits of the planet.

Higher-income *Shift* countries should radically reduce their material consumption while upholding wellbeing.

On average, residents of *Shift* countries—including the US, Japan, the UK and Canada—enjoy affluent, comfortable lifestyles, and perform well on social indicators, but they consume far more than their share of materials. Despite housing around 17% of the global population, they consume one-fourth (25%) of raw materials, and consume the most non-metallic minerals and fossil fuels per capita of all country profiles. On average, *Shift* countries' per capita material footprint of 22.6 tonnes is 4.6 times that of *Build* countries (largely due to the overconsumption of consumer goods imported from *Grow* countries) and 1.6 times that of *Grow* countries. They also generate 43% of global emissions. This country profile's mission will be to reduce its material consumption and ultimately, lessen its impact on planetary boundaries, which currently comes at the expense of the global majority.

Although much of their infrastructure is already built up, *Shift* countries still contribute heavily to planetary boundary overshoot:

42% of the overshoot of the climate change boundary

27% of nitrogen

18% of phosphorus

16% of freshwater use

38% of land use change

Middle-income *Grow* countries should stabilise their material consumption.

Grow countries—including, for example, China, Indonesia, Brazil, Mexico, Vietnam, Myanmar and Egypt—need to continue improving their people's quality of life, but in a way that is much more sensitive to planetary boundaries. Globally, they account for 51% of the material footprint, while housing around 37% of the global population. Their average per capita material footprint is 17 tonnes per year. While these countries contribute 41% of global emissions—almost as much as *Shift* countries—their share of the global population is double that of *Shift* countries.

Increased growth and incomes have led to a nutrition transformation: diets are increasingly shifting in favour of more animal-based proteins—such as meat and dairy—and processed foods. While many countries are and will likely remain key manufacturing and industrial hubs for the rest of the world's—and their own—consumption, this necessitates a shift to make this sustainable environmentally and supportive and safe for workers.

Grow countries make a large contribution to the overshoot of planetary boundaries—largely by producing materials to feed the demand of higher-income (Shift) countries:

50% of the overshoot of the climate change boundary

62% of nitrogen

60% of phosphorus

53% of freshwater use

42% of land use change

Lower-income *Build* countries should increase their material consumption to fulfil their populations' needs.

Build countries, such as Bangladesh, Ethiopia, Nigeria, Pakistan, the Philippines, and some small island states, for example, account for 18.5% of the global material footprint, despite being home to almost half (46%) of the population. Their material footprint per capita is just 5 tonnes per year—less than the estimated sustainable level of 8 tonnes per person per year. Similarly, they contribute a relatively small share of global emissions: just 17%.

As these countries generally struggle to meet basic needs for healthcare and education, their primary objective is to improve living standards. This necessitates increased material use to provide the infrastructure, goods and services needed to improve wellbeing. It will also require uplifting workers in nations with prevalent informal economies, which are especially common in the agricultural, forestry and waste management sectors.

Build countries make a minimal contribution to the overshoot of planetary boundaries, contributing:

8% of the overshoot of the climate change boundary

11% of nitrogen

23% of phosphorus

30% of freshwater use

20% of land use change boundary

The transition calls for radical collaboration and concerted efforts to avoid burden-shifting among industries, regions and resources—striving for a structural transformation of production and consumption. No one actor can spur change alone:

1. Ministries of Economy, Finance and the Environment, Business leaders, Multilateral organisations and International Financial Institutions (for example, the IMF and Development Banks) can **SHIFT THE GOALPOSTS** by placing materials at the centre of the story of achieving wellbeing within boundaries.

How?

Develop and apply holistic indicators. We must move beyond GDP and other traditional economic metrics to incorporate indicators that measure the things that matter to people

Set mission-oriented targets. New targets are needed to shift the goal from maximising economic output to maximising human wellbeing within planetary boundaries.

2. Ministries of Economics, Finance and Trade, Multilateral organisations and International Financial Institutions can **WORK TOGETHER** to reform international financial and trade architecture to ensure all nations have the means to invest in sustainable development.

How?

Reform financial and trade patterns to promote circular solutions. This can unlock the potential of the circular economy to improve social outcomes and the environment.

Increase fair access to affordable circular technological innovations. Technological transfer can improve access to existing technologies, and rethinking trade policy can foster innovation in Build Countries.

Roll out measures for debt cancellation and relief. Debt cancellation and relief for Build and Grow countries is essential because it enables them to invest in the circular economy transition.

3. Ministries of Economics, Finance, Educational Institutions, Multilateral organisations and International Financial Institutions must **GET THE ECONOMICS RIGHT SO FINANCING CAN FOLLOW** by rolling out fiscal measures and new redistribution mechanisms and redesigning the system.

How?

Redesign taxation to ensure that prices reflect and include all costs. This should include those linked to environmental and health impacts, and can be done through carbon pricing and resource taxes.

Dismantle incentives for excessive material consumption. We can not only curb excessive consumption but also channel the generated revenue into public goods.

Complement pricing signals with fee-and-dividend schemes. Other mechanisms can also complement and reinforce better pricing, with the ultimate aim of limiting inflation and fostering social support.

4. Ministries of Economics, Labour, Educational Institutions, Multilateral organisations, Labour agencies and unions and Business leaders can **FORGE GLOBAL COLLABORATION FOR A JUST TRANSITION** by aligning environmental goals with social and economic ones across the world.

How?

Ensure the circular economy transition is people-centric. Working towards a just transition means leaving no one behind.

Build substantial support and leadership among governments around the world for this social transition to take place. Transitioning towards a circular economy requires state planning, strong social policy and the implementation of specialised public labour agencies that manage the transition of workers.

Harness policymakers' creativity to achieve results within a tight timeframe. In *Shift* countries, job guarantees and Just Transition Funds can be used to support workers in resource-intensive industries that will undergo changes, both in their own countries and in partner *Grow* and *Build* countries.

Ensure education addresses the inevitable shift in jobs and skills. It is vital that the right basic education, Vocational Education and Training (VET) and lifelong learning opportunities are made available now.

Ensure that circular, green employment means better employment. This includes better representation, decent pay and improved working conditions. No matter what corner of the world or the value chain we find ourselves in, it is crucial that people everywhere have the opportunity to lead dignified lives.

Let us set the stage for a global economy that operates by new rules—ones that promote a level playing field and propel us toward a more sustainable and equitable future.



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