

Financing the circular economy

Capturing the opportunity

Executive summary



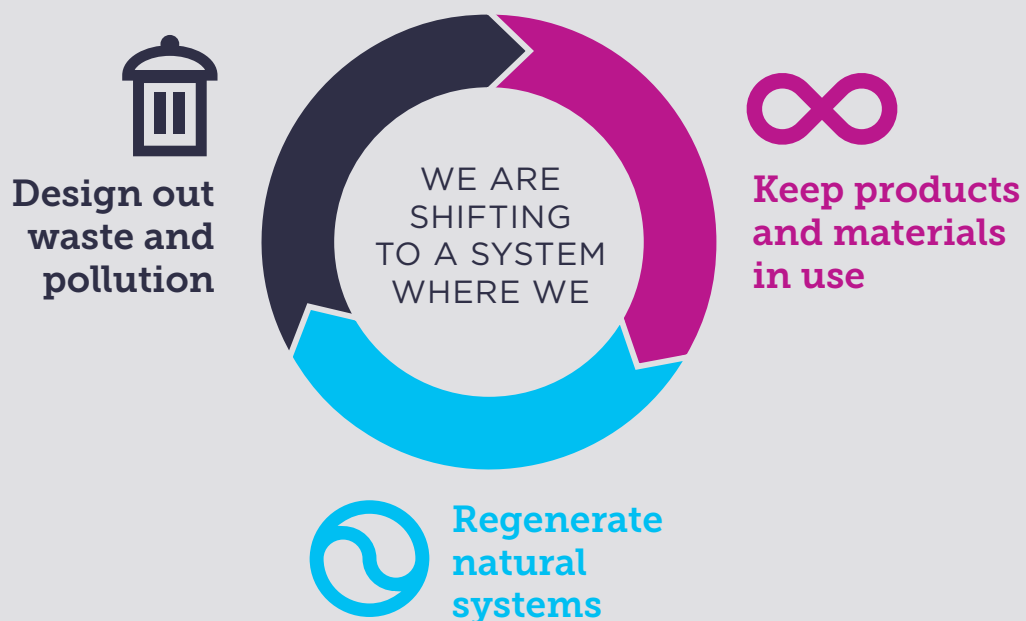
Executive Summary

The circular economy financing market is taking off, with a steep increase in activity over the last 18 months. Increasingly recognised as a crucial part of the solution to climate change and other ESG issues, the circular economy also offers significant opportunities for new and better growth. Now is the time for finance to capitalise on this industrial transformation, and help scale the circular economy.

Over the past two years, climate change and other environmental, social, and governance (ESG) issues have become key boardroom topics for asset managers, banks, and other financial services firms. Clients expect solutions and regulatory pressure is rising. The question is no longer *whether* climate change and other ESG issues matter to the financial services sector, but *how* it will address them. The circular economy is a crucial part of the answer to this question.

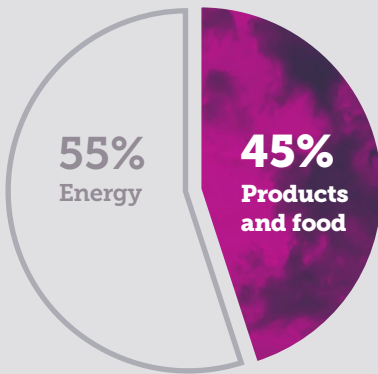
Moving past today's extractive 'take-make-waste' linear model, the circular economy offers a positive vision of an economy in which products are designed to be reused, repaired or repurposed, and natural systems are regenerated.

The circular economy can help meet global climate targets by transforming the way we produce and use goods. Relying solely on energy efficiency and switching to renewable energy will only address 55% of global greenhouse gas (GHG) emissions.¹ By adopting circular practices, we can reduce a significant proportion of the remaining 45%. For example, circulating products and materials – instead of producing new ones – can help cut energy demand, by maintaining the energy that went into making them. In agriculture, adopting circular principles is an effective way to sequester carbon in the soil.



Completing the picture: tackling the overlooked emissions

TOTAL CURRENT GLOBAL
GREENHOUSE GAS EMISSIONS



HOW THE CIRCULAR ECONOMY
HELPS TACKLE CLIMATE CHANGE



Design out waste and pollution
to reduce GHG emissions
across the value chain



Keep products and materials in use
to retain the energy embodied
within them



Regenerate natural systems
to sequester carbon
in soil and products

Source: Ellen MacArthur Foundation, Material Economics, *Completing the picture: How the circular economy tackles climate change* (2019)

Research suggests that if a circular approach were adopted in just five sectors (steel, aluminium, cement, plastic, and food), annual GHG emissions would fall by 9.3 billion tonnes of CO₂e in 2050, equivalent to the reduction that could be achieved by eliminating all transport emissions globally.² In this way, the circular economy can play an important role in managing climate-related risks.

Implementing a circular economy can also help address other ESG issues. For example, a circular economy enhances biodiversity by reducing the need for resource extraction and by regenerating farmland. Moreover, it is estimated that a circular economy could create over half a million jobs by 2030 in Britain alone, in activities such as resale, remanufacturing, and recycling.³

The circular economy presents a multi-trillion-dollar economic opportunity

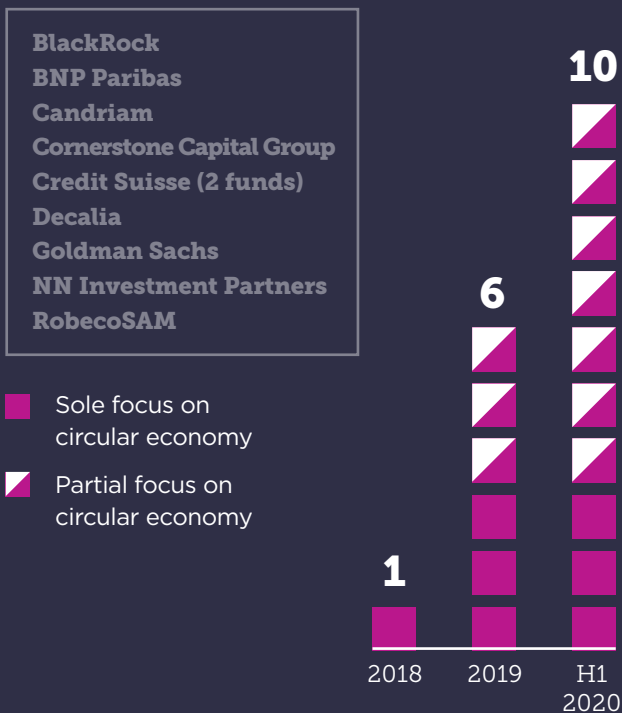
Shifting towards a circular economy model will not only deliver climate and other ESG benefits, but also provide significant new and better growth opportunities. For instance, adopting circular economy principles in Europe, in mobility, built environment, and food could offer annual benefits of EUR 1.8 trillion (USD 2.1 trillion) in 2030.⁴ In China, applying circular

economy practices at scale in five key sectors could save businesses and households CNY 70 trillion (USD 10 trillion or 16% of China's projected GDP) in 2040.⁵

More and more companies across industries are adopting circular principles to reduce costs, increase revenues, and manage risks. Circular solutions accounted for 13% of Philips' revenues in 2019,⁶ while Caterpillar offers more than 7,600 remanufactured products.⁷ The circular economy has started transforming entire industries: in fashion, clothing resale is expected to be bigger than fast fashion by 2029; and in plastics and consumer packaged goods, profit pools along the value chain are being transformed by increasing regulation, public pressure, and innovation.⁸ Governments are accelerating this shift, with the circular economy a key pillar of the European Green Deal and circular economy roadmaps and legislation in place in countries including China, Chile, and France.

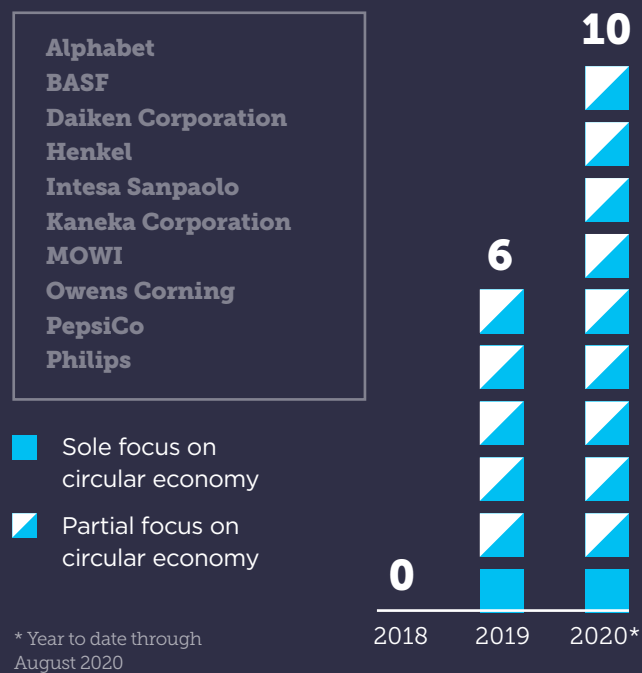
Megatrends such as shifting demographics, digitalisation, and resource scarcity are reinforcing the transition to a circular economy. The coronavirus pandemic has highlighted many of the risks inherent to the linear economy and, in June 2020, more than 50 chief executives and global leaders endorsed the circular economy as a solution to build back better in the wake of the pandemic.⁹

Number of public equity funds with circular economy focus



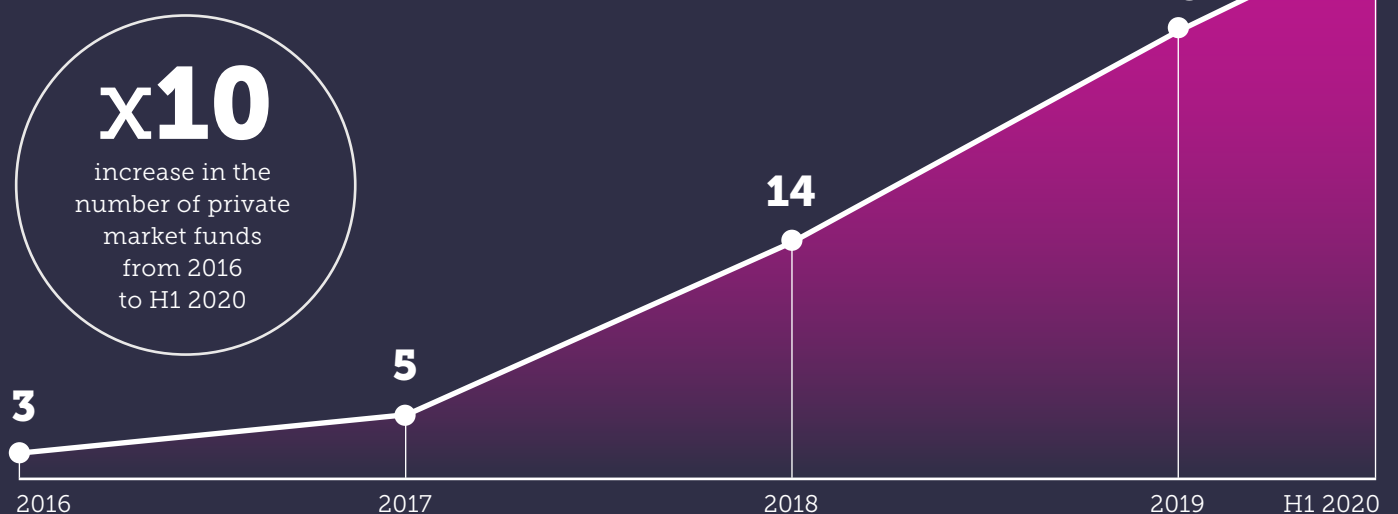
Number of outstanding corporate bonds with circular economy focus

Conservative estimate



Number of private market funds with circular economy focus

Conservative estimate. Includes venture capital, private equity and private debt funds



Source: Ellen MacArthur Foundation

“Since the beginning of 2020, assets managed through public equity funds with the circular economy as the sole or partial investment focus have increased 6-fold, from USD 0.3 billion to over USD 2 billion.”

The financial sector is starting to capture the circular economy opportunity

The last 18 months have seen a steep increase in the creation of debt and equity instruments related to the circular economy. While no such fund existed in 2017, by mid 2020 ten public equity funds focusing partially or entirely on the circular economy have been launched by leading providers including BlackRock, Credit Suisse, and Goldman Sachs.

In the last 18 months at least ten corporate bonds to finance circular economy activity have been issued with help from Barclays, BNP Paribas, HSBC, ING, Morgan Stanley, and others.

Since 2016, there has been a tenfold increase in the number of private market funds, including venture capital, private equity and private debt, investing in circular economy activities.

A similar trend is visible in bank lending, project finance, and insurance. Intesa Sanpaolo launched a EUR 5 billion (USD 6 billion) credit facility, Morgan Stanley launched a firm-wide Plastic Waste Resolution and the European Investment Bank partnered with five of Europe's largest national promotional banks and institutions to launch a EUR 10 billion (USD 11.8 billion) loan and investment

initiative dedicated to the circular economy. Insurance firms including AXA are developing new solutions for circular business models such as peer-to-peer sharing.

Existing examples provide early indications as to how the circular economy can create value for asset managers, banks, and other financial services firms. They demonstrate its potential to attract inflows: since the beginning of 2020, assets managed through public equity funds with the circular economy as the sole or partial investment focus have increased 6-fold, from USD 0.3 billion to over USD 2 billion.¹⁰ In the first half of 2020, on average these funds performed 5.0 percentage points better than their Morningstar category benchmarks, indicating how the circular economy can deliver excess returns. Future research will be required to see whether outperformance persists over time.

The circular economy can help meet demands from regulators and other stakeholders, such as to those expressed by Bank of England Deputy Governor Sam Woods in his July 2020 letter on climate change to finance CEOs.¹¹ In addition, building circular economy expertise and know-how can help financial institutions to engage with corporate clients, for who the circular economy has increasingly become a boardroom topic.

The way forward

Now is the time for finance to capitalise on this momentum and help accelerate the circular economy transition. While the recent growth in financing is promising, far more capital and activity will be needed to scale the circular economy and fully seize its opportunity.

All aspects of finance will play an important role in bringing forward the transition to a circular economy. Investors, banks, and other financial services firms have the scale, reach, and expertise to stimulate and support businesses to make the shift. This is not just about investing in perfectly circular companies or divesting from extractive ones, but about engaging with and encouraging companies in every industry to make the transition.

Governments, central banks, and financial regulators can complement and enable the shift in the private sector. Governments can directly invest in circular economy activities and innovation, set direction and level the playing field through, for example, pricing externalities. They can enhance transparency by mandating disclosure and standardising definitions and metrics for circular activities, such as in the EU Taxonomy.¹² Central banks and financial regulators can integrate circular concepts in risk assessments and modelling, and could explore its integration in less conventional methods such as green quantitative easing. Blended finance solutions, combining public, private and philanthropic capital, can fund harder-to-finance circular economy infrastructure and long-term innovation.

Better data will be required to underpin the shift. If capital is to be reoriented at scale, more transparent and consistent data on circularity performance (both historical and forward-looking) will be crucial. In addition to scaling dedicated circularity measurement tools such as the Ellen MacArthur Foundation's Circulytics¹³, integration of circularity metrics in leading existing frameworks, such as the Task Force on Climate-related Financial Disclosures (TCFD)¹⁴ and the Sustainable Accounting Standards Board (SASB)¹⁵ will be needed. Finally, the adaptation of accounting rules would enable a more representative valuation of circular business models and linear risks.

Public equity funds with circular economy as a sole or partial investment focus on average performed

5.0

percentage points

better than their benchmarks in H1 2020

Source: Ellen MacArthur Foundation



Endnote

- 1 Ellen MacArthur Foundation, Material Economics, Completing the Picture: how the circular economy tackles climate change (2019)
- 2 Ellen MacArthur Foundation, Material Economics, Completing the Picture: how the circular economy tackles climate change (2019)
- 3 WRAP and Green Alliance, Employment and the Circular Economy: job creation in a more resource efficient Britain (2015)
- 4 Ellen MacArthur Foundation, SUN, McKinsey & Co., Growth Within: a circular economy vision for a competitive Europe (2015)
- 5 Ellen MacArthur Foundation, The Circular Economy Opportunity for Urban and Industrial Innovation in China (2018)
- 6 Philips, *Annual Report 2019* (2019)
- 7 Caterpillar, 'Cat Reman': <https://www.caterpillar.com/en/brands/cat-reman.html>
- 8 thredUP (GlobalData Market Sizing), *ThredUP 2020 Resale Report* (2020)
- 9 Ellen MacArthur Foundation, "It's time to step up, not step back" — more than 50 global leaders pledge to build back better with the circular economy': <https://www.ellenmacarthurfoundation.org/news/more-than-50-global-leaders-pledge-to-build-back-better-with-the-circular-economy>
- 10 Analysis conducted by the Ellen MacArthur Foundation
- 11 Bank of England, 'Letter from Sam Woods "Managing climate-related financial risk – thematic feedback from the PRA's review of firms' SS3/19 plans and clarifications of expectations"' (July 2020): <https://www.bankofengland.co.uk/prudential-regulation/letter/2020/managing-the-financial-risks-from-climate-change>
- 12 European Commission, EU taxonomy for sustainable activities https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities_en
- 13 Ellen MacArthur Foundation, Circulytics: <https://www.ellenmacarthurfoundation.org/resources/apply/circulytics-measuring-circularity>
- 14 Task Force on Climate-related Financial Disclosures (TCFD): <https://www.fsb-tcfd.org/>
- 15 Sustainability Accounting Standards Board (SASB) Foundation: <https://www.sasb.org/>