



Investing for a circular future

—— Summary

About

the authors



DAVID CZUPRYNA
SENIOR PORTFOLIO MANAGER

David has managed the Candriam Sustainable Equity Circular Economy strategy since December 2021, bringing his broad ESG experience to investors. Previously, he was Head of ESG Development at Candriam, where his role was to deliver Candriam's unique blend of sustainability credentials and market wisdom to investors and market participants. Before joining Candriam, David led the growth of sustainable investment strategies in several European countries at Sycomore Asset Management and in Northern Europe at Erste Asset Management. David started his career in finance with BNP Paribas in London on the equity derivative structuring desk in 2007.

David holds an MBA from the University of Cambridge specializing in finance and strategy as well as Masters degrees in political science from the Free University of Brussels and the Catholic University of Louvain.



BASTIEN DUBLANC
SENIOR PORTFOLIO MANAGER

Bastien joined Candriam as Senior Portfolio Manager in 2022. Prior to his involvement with the Candriam Sustainable Equity Circular Economy strategy, he managed a number of environment-oriented investment strategies at London based investment FinTech Clim8 Invest. Before that, he spent seven years at Lombard Odier in Geneva as an analyst, and has also been a sell-side analyst in the energy sector.

Bastien holds a masters in Offshore Technology from Cranfield University in the UK, and a masters in Business Management from HEC in Paris.

The need

is here

Resources are finite. We are consuming our natural resources at a pace equivalent to 1.7 earths, an unsustainable rate. The rate of resource depletion has exceeded the rate of GDP growth for decades. This equation must reverse, or we will run out of resources.

Meanwhile, non-biodegradable waste is fouling oceans and landscapes which were once thought to be infinite.

The growth potential for circular companies is clear. It is estimated that the global economy is only 9% circular.¹ That's a lot of market opportunity. And note well: We cannot slow global warming without the large-scale deployment of circular economy solutions in housing, mobility, and food.

Today's linear economy

Our "take/make/waste" global economy results from the way we pursue our economic activities. In just the first seven months of each year, our economy uses as much of our global natural resources as can be replenished in the full year. This break-even date arrives earlier every year. By 2050, we will be consuming three earths – that is, consuming at three times the replenishment rate.

Figure 1 – The Linear Economy

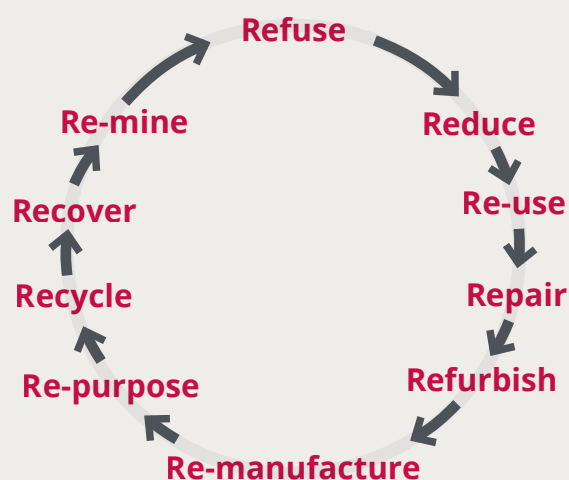


Towards a circular economy

Reduce, re-use, repair, recycle is clear enough in concept. Yet in practice the circular economy is quite complex. It consists of mostly local and often uncoordinated initiatives. By contrast, programs addressing greenhouse gas emissions reduction are globalizing. Yet a circular economy is a prerequisite to achieving these carbon reduction and climate mitigation goals.

A circular shape is beginning to crystallize. While the circular economy is a complex subject, its necessity is being recognized. Local and regional efforts and regulation are growing.

Figure 2 – The Circular Economy





The Candriam circular

investment framework

Comparable data for circularity across companies is probably years away. The circular economy still lacks both a universal definition, and even a set of widely accepted guidelines. Even the metrics remain ill-defined. Yet this circular transformation is creating a wide array of new businesses, investment opportunities, and investors. It is not enough to identify the potential for circularity – to create a robust investment process there must be a rigorous

framework for quantifying the extent of each company's circular contribution.

That is why Candriam has built our own circular investment framework, based on publicly available information. It is our conviction that investing in circular companies requires a multi-metric, but single-figure score.

We have designed our investment scoring to expand with the available thinking. Therefore we have drawn on the work of others, including the circularity principles of the Ellen MacArthur Foundation:

- Design pollution and waste out of the system.
- Keep material and products in use at an optimal level.
- Build and restore natural capital and regenerate natural systems.

A three-dimensional framework



Candriam
Circularity
Company
Score

After identifying the circularity candidates through the use of six verticals, the Candriam Circularity Framework assesses and scores their contribution across three pillars to create a score.

- **Circular results – 60%**
- **Circular commitment – 20%**
- **Circular momentum – 20%**

A three-dimensional framework







Our Candriam Circularity Framework was created with the aim of identifying, and scoring, the contribution of companies to a circular economy. No single metric can capture a company's circularity. We have designed a model which combines a number of metrics to generate a single-score result which is both useful to investors, and as accurate as possible given the current fragmentation of taxonomy and data.

We organize companies according to six **verticals**, or **circular value chains**. Our verticals approach offers insight into the areas where increased circularity can have the greatest contribution to decarbonization. Large scale deployment of circular economy solutions in housing, mobility, and food verticals would contribute substantially to climate change mitigation (figure 3).

Figure 3 – Interconnection between circularity and climate mitigation

CO2-equivalent emissions are roughly 50 Gt annually, per the IEA

Reduction potential shown in the verticals below represents estimated cumulative emissions 2022 through 2030E.

						
Six Circular Value Chain	Housing / Infrastructure	Mobility / Transport	Food / Nutrition	Products	Healthcare	Communications
CO2 reduction potential, gross(Gt)	18.5	8.1	7.5	1.8	0.2	0.2
Materiality	Very high	High	High	Moderate	Low	Low
	Ex: Resource-efficient construction, Natural housing solutions, Reduce floor space, Increase durability, circular materials	Ex: Reduce travel, Improve vehicle utilization, Durable vehicles	Ex: Healthy diet, Reduce excess, sustainable agriculture	Ex: Chemical-free, Circular consumables, Durable products	Ex: Circular healthcare	Ex: Efficient design of ICTs

Source: Candriam, Circle Economy, Goldman Sachs investment research

The scoring

After identifying the circularity candidates through the use of the six verticals, the Candriam Circularity Framework assesses and scores their contribution across three pillars to create a score.

Circular commitments – 20%

Ideally, **Commitments** enable future outcomes. The role of the analyst when assessing is to carefully attempt to differentiate what is likely to materialize, from commitments not backed by real ambition or resources.

Circular results – 60%

The circular **Results** are the core of the Candriam Circularity Framework. Commitments and Momentum provide valuable insights, but actual contributions are what ultimately matter in the transformation to a circular economy.


We translate the academic approaches into four Circular Results that we call **Use Less**, **Recover**, **Use Longer**, and **Share**. For us to consider a company circular, every company, no matter the nature of its contribution the circular economy, will need to contribute to at least one of these four actual circular results.

Figure 4 – The Candriam Circular Company Scoring Model
The Candriam Circularity Framework across Four Circularity Results



Circular Commitments

The Circular Commitments score assesses the company's **resources**, level of **strategic integration** and credibility to make the economy more circular.



Circular Results

The Circular Results are based on a detailed assessment of how the company contributes to circularity through its **products**, **service**, as well as the way it **operates**.

Use Less

Integrate renewable, biodegradable, recyclable inputs in value chain and reduce need of raw materials.

Recover

Provide or enable waste collection, waste sorting, treatment, recycling, upcycling, downcycling.

Use Longer

Extend product life through eco-conception, repair services, refurbishment, second-hand markets.

Share

Allows consumers and businesses to share use an/or ownership of products or for companies to optimize use phase through products as a service.



Circular Momentum

The Circular Momentum adopts a **forward-looking** perspective to evaluate the company's **circularity trend**: how much and how fast is the company transforming itself or helping others to transform themselves towards greater circularity.

Circular momentum – 20%

The **Momentum** dimension creates a dynamic link the company's historical results, strategy, and future circular progress. To understand whether results will continue to improve, we assess how credible and ambitious the company's circular commitments are and whether recent circularity achievements bode well for the future.

Investing in the circle

— of life

We know we are depleting our natural resources and raw materials. What we do *not* know is where the tipping point is. We also do not know when there will be a global recognition of the problem and an organized circular approach. But we *do* know that the momentum is building.

Climate goals cannot be achieved without the large scale deployment of circular economy solutions in housing, transportation, and agriculture. Existing and expanding climate change goals and regulation are already pushing circular solutions, whatever we call them. Climate change mitigation should provide a strong economic **catalyst** for circular solutions even before clear circular frameworks or goals are in place.

Another potential **catalyst** for a more circular economy is security of supply. Even before we deplete our resources, might geopolitical tensions cut us off from certain natural resources such as cobalt, lithium, or . . . oil?

A factor of ten?

It is estimated that the global economy is only 9% circular.¹ The circular economy is projected to reach \$4.5 trillion by 2030.²

Circular investing today and tomorrow

Investing need not wait for a global framework and numerical targets. Candriam launched our first Responsible fund in 1996 and established our in-house ESG analysis team in 2005, both before the creation of the UN PRI. Investing ahead of the crowd is difficult, but we have been here before – and succeeded.

It is our Conviction that we can invest for a circular future.

Figure 5 – Global Circular Markets

Circularity is a prerequisite for many of the UN SDGs



Circular Opportunity
Water & Wastewater
Management



Circular Opportunity
Upgrading Infrastructure
& Industries for Resource
Efficiency



Circular Opportunity
Minimizing Product Life
Cycle Waste from Design
through End of Life



Circular Opportunity
Placing a Value on, and
Minimizing, GHGs

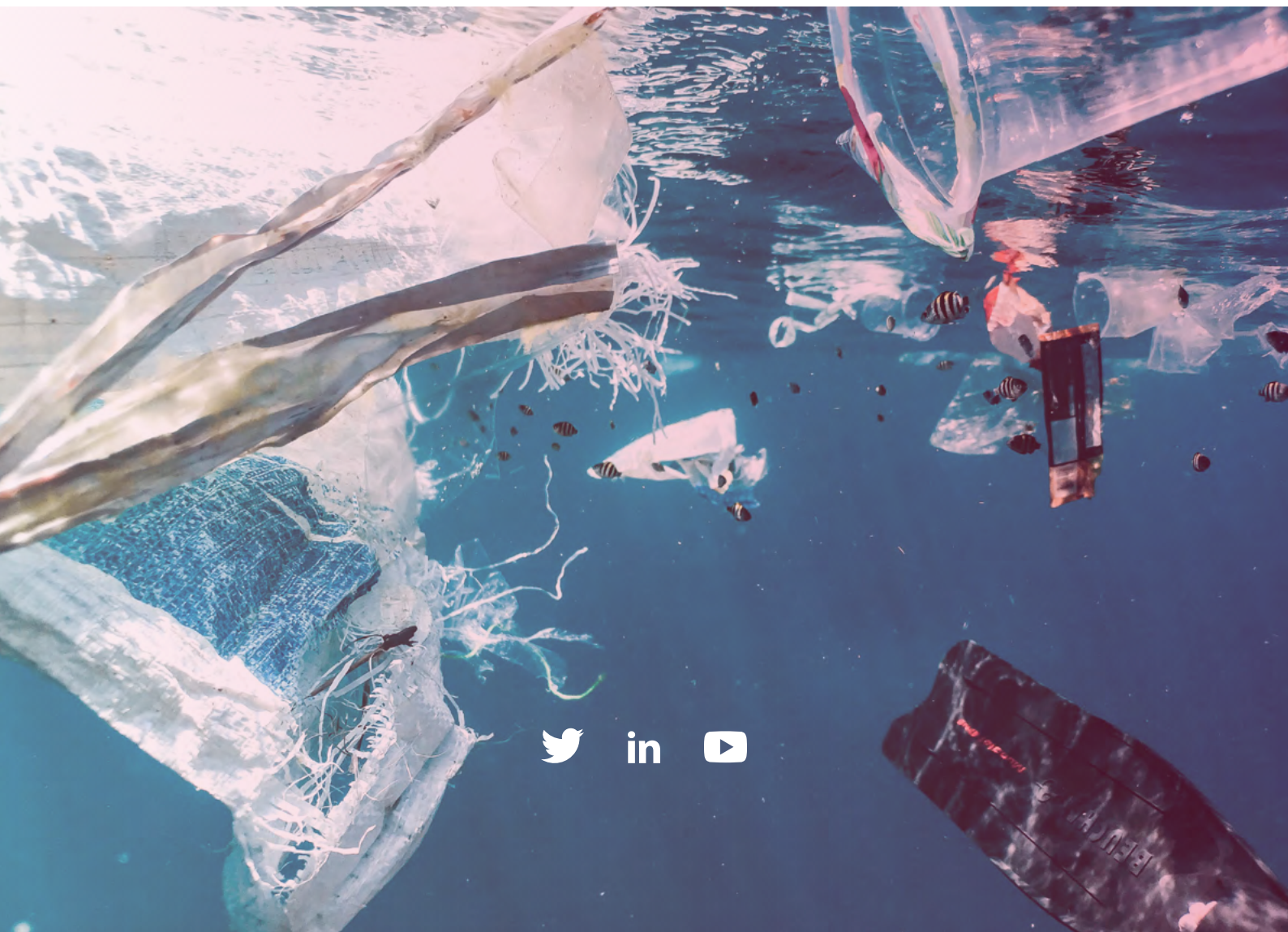
For more see our white papers:

[Investing for a circular future, September 2022](#)

[Circular economy: Paradise restored?, September, 2020](#)

1. Circular Gap Reporting Initiative. <https://www.circularity-gap.world/about>, accessed 24 August, 2022.

2. Accenture. The Circular Economy Could Unlock \$4.5 trillion of Economic Growth, Finds New Book by Accenture, <https://newsroom.accenture.com/news/the-circular-economy-could-unlock-4-5-trillion-of-economic-growth-finds-new-book-by-accenture.htm#:~:text=NEW%20YORK%3B%20Sept%2028%2C%202015,consumption%20while%20driving%20greater%20competitiveness>. Accessed 24 August, 2022.



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