MSCI

Rethinking material use

The circular economy 101

How can we minimize waste and shift current consumption trends?

Waste
Global waste is projected to rise **70%** by 2050

Raw Materials
Global extraction is projected to **double** by 2060

Water
80% of global wastewater is untreated or reused before returning back to the ecosystem.

Annual municipal solid waste

In order to change consumption patterns and reduce waste, our behaviors, business models, and policies will need to change.

But the question is how?

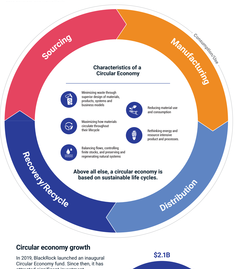
To answer this problem, the concept of a circular economy is gaining traction.

Source: World Bank, Global Water Intelligence, Statista

What is a circular economy?

A circular economy is centered on the idea of resources being kept in use for as long as possible, extracting the maximum value from them, and then recovering and regenerating products and materials at the end of their service life. Unlike a linear economy, which follows a "take, make, dispose" model, a circular economy aims to keep resources circulating through production and consumption processes, minimizing waste and pollution, and regenerating natural systems. This approach offers a sustainable alternative to the traditional linear economy, promoting resource efficiency, reduced environmental impact, and the creation of new economic opportunities.

Let's consider this framework:



Circular economy growth

In 2019, BlackRock launched an inaugural Circular Economy fund. Since then, it has attracted significant investment.

Circular Economy ETF assets under management

Source: BlackRock, Bloomberg

A number of the world's largest asset managers have followed suit.

Policy-driven agendas are also focused on the circular economy shift.

Circular economy principles aligned with sustainability offer the following advantages:

Reducing GHG emissions/ improved air quality
9.38 tonnes of CO_2e could be avoided by 2050 if circular economy principles are applied across steel, aluminum, cement, food, and plastic sectors

Preserving long-term biodiversity
~50% decrease in harmful effects in farm-level biodiversity

Improving ocean health & water quality
80% reduction in plastics entering the ocean globally by using reclamation, recycling, and reduction strategies, among others.

Economic growth & job creation
$4.5T global economic opportunity by 2030 through circular innovation or waste reduction.

Source: Ellen MacArthur Foundation, Circular Economy in Brief, Circular Economy Strategies for Consumer Goods, Circular Economy: Fashion Report, Circular Economy: Food Report, Circular Economy: Plastics Report

What can we measure today?

To sincerely address these strategies, the following individual factors of a circular economy are key to measure against.

It is also important to measure the sustainability impacts of circular strategies.

Circular strategies, technologies, and transition companies are looking beyond traditional economic models.

5 business models in a circular economy

From alternative energy to bio-based and recyclable materials, the most effective circular business models are ones that create obvious value.

Let's consider five circular economy business models and where they can be applied in the supply chain:

Some of the models can be adapted to **any part of the supply chain**

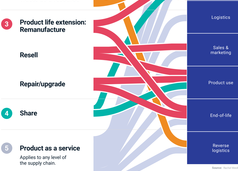
Source: Ellen MacArthur Foundation

Today, circular models present opportunities in fashion, food systems, and mining & metals, among others.

How are circular economy indexes created?

A circular economy theme is built on **two** key dimensions:

It then identifies areas of innovation that support a circular model



As a result, MSCI has created a suite of Circular Economy related indexes.

It's worth noting that what is measurable today will likely only expand, considering the evolving regulatory frameworks and thinking around a circular economy.

The value of a circular economy

Through looking at Circular Economy innovation, we yield **three** important insights:

For a growing number of investors, companies, and researchers, a circular economy provides a wide scope of opportunities.

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