

BLOG POST

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CIRCULAR ECONOMY TO ACHIEVE NET ZERO: THE ROLE OF FINANCIAL INSTITUTIONS



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November 27th, 2024

CIRCULAR ECONOMY TO ACHIEVE NET ZERO: THE ROLE OF FINANCIAL INSTITUTIONS

The world we live in is characterized by finite and limited resources. Current estimates indicate that humanity consumes natural resources 1.7 times faster than the Earth's ecosystems can regenerate [1]. The current economic model fails to sustainably address the excessive generation of waste produced by human activities. Continuing with the traditional “take-make-dispose” linear model is unsustainable in a world with limited resources [2]. In contrast, the circular economy offers a viable solution, emphasizing sustainable production and consumption processes. This approach represents a major step towards achieving the urgent climate transition.

WHAT IS CIRCULAR ECONOMY?

From a systemic level, circular economy is a model that seeks to prioritize the reduction, reuse, repair, and recycling of products, extending their life cycle as long as possible [3]. In practice, this implies reducing waste generation and greenhouse gas (GHG) emissions while addressing current problems such as pollution, biodiversity loss, resource scarcity, and price volatility [4]. The following figure illustrates the circularity of the model.

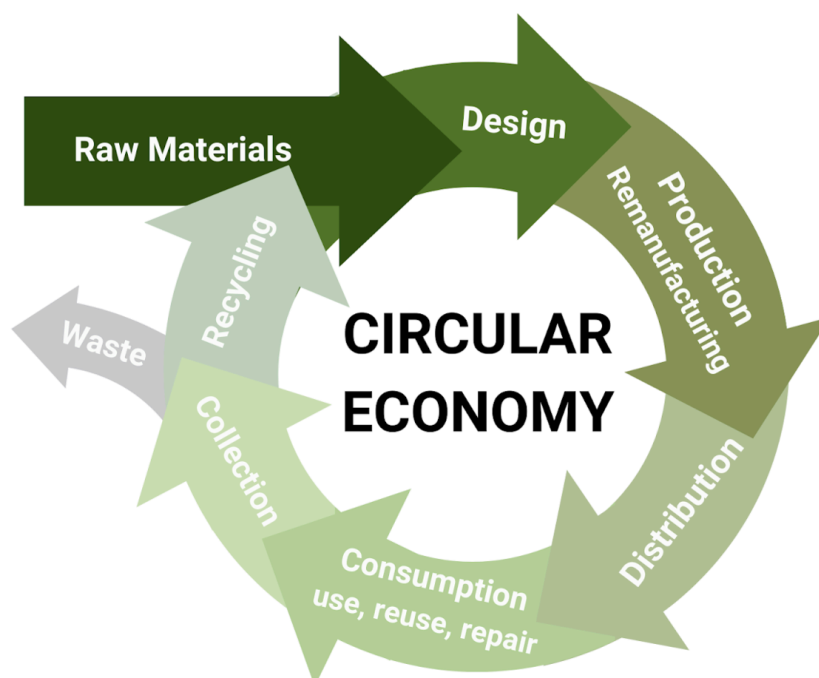


Figure 1. Circular Economy Model*

*Own elaboration based IIEA Circular Economy definition [5].

Beyond environmental benefits, circular economy offers solutions with benefits that transcend into society. Job creation, corporate resilience, just transition, and increased productivity in value chains are generated from reduced costs and diminished dependence on natural resources. Moreover, according to the World Economic Forum, it is estimated that a transition to this model could add \$1 trillion to the global economy, prevent 100 million tons of waste and generate 100,000 jobs by 2025 [6].

HOW DOES CIRCULAR ECONOMY RELATE TO ACHIEVING NET ZERO?

To ensure a sustainable future for society and the operation of markets, achieving net-zero goals is essential. This requires transitioning to an economic model that minimizes GHG emissions to be reduced as much as possible and eventually achieve full decarbonization.

Today, several countries, companies, and financial institutions (FIs) have developed decarbonization plans focused on the energy transition, seeking to achieve net-zero emissions through energy efficiency and renewable energies. However, in addition to targeting such key transition objectives, they must also consider enabling the material transition. In other words, engaging low-impact ways to produce materials [7], which are responsible for almost 45% of the world's CO₂ production [8].

In this sense, the circular economy represents a key opportunity to achieve net zero because it offers a systemic and cost effective approach to tackle decarbonization from the production side [9]. On the other hand, by seeking to extend the life of materials as much as possible, the circular model minimizes the production of waste, which is a significant source of methane emissions [10].

To drive these initiatives, and companies must integrate this model into their decarbonization plans, invest in strategies to achieve their transition objectives in ensuring a comprehensive approach to a net-zero future.

FINANCING CIRCULAR ECONOMY – THE ROLE OF FINANCIAL INSTITUTIONS

FIs play a very important role in driving the circular economy. Not only do they have the necessary capital to enable transition, but they also have the capacity to develop instruments that promote an economic model with financial incentives and environmental considerations.

According to the United Nations Environment Programme Finance Initiative (UNEPFI), financial institutions in Latin America have begun to expand financial instruments to include circular foundations related to climate risk management and redirecting resources to climate resilience and adaptation. Thematic sustainable debt instruments, such as green bonds and loans, have been key mechanisms on which these institutions have relied to implement circularity initiatives in their operations and strategies [11].

Bancolombia is a key example. In 2023, the Colombian bank committed to the transition to a circular economy and partnered with the Ellen MacArthur Foundation seeking to exchange knowledge and strategies to accelerate Colombia's economic transition. To achieve these objectives, a green bond was issued and a line of credit, which has already disbursed more than \$405 billion, was dedicated to finance sustainability projects with an exclusive taxonomy for circular economy [12].

CONCLUSIONS

The financial sector is increasingly aware of the importance of incorporating circularity in its operations and of promoting initiatives that boost its implementation in other companies. While circularity offers opportunities to reduce carbon emissions, large investments are needed to successfully transition to a model that requires a way of rethinking and reconditioning the production and consumption of limited and finite resources.

By integrating the circular agenda into economic activities, it is possible to reduce waste and carbon emissions while providing benefits for society and the environment. Circular economy has the potential to increase resilience and climate adaptation, but a lot of work is still needed to continue incentivizing the transition to a sustainable economic model that enables net-zero emissions.

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If you're looking to elevate your organization to the next level in sustainable finance, or if you're interested in issuing a green, social, or sustainability-linked bond, our expert team is here to provide you with guidance and assistance every step of the way. You can reach out to us through LinkedIn, email, or our website to explore the comprehensive services we offer. Together, we can embark on a path towards making a meaningful contribution to the global sustainability agenda.

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