


# Chapter 3

## Circular Economy: Ecosystem, Strategy, and Practice

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### ABSTRACT

*Sustainability is the way forward. Circular economy is an apparatus to achieve sustainable development. It is both appropriate and desirable to take stock of circular economy. The chapter dwells on the ecosystem of circular economy which comprises companies, government, general public, and society at large. A strong ecosystem of multiple actors who collaborate and complement each other's role is the key for the realization of circular economy. The destructive and ravaging linear economy must be eliminated. The sustainable alternate is circular economy. Resource management strategy is the core of circular economy. Reduce, reuse, and recycle are the tenets of circular economy. The portfolio of restorative and regenerative resource management strategies are discussed. Flawless execution of the strategy is the key. The best and inclusive practices authenticate and endorse the execution and implementation of circular economy. The global and Indian practices of circular economy are deliberated.*

### 1. INTRODUCTION

Economic growth at the cost of resource exploitation is undesirable and should be circumvented. There is a need for decoupling economic growth and resource consumption. Take, make, use and dispose is a detrimental concept. Linear economic model has impelled an array of planetary boundaries to dangerous and unpredictable bounds (CGR 2023, 2023). The planet's resources are being exploited and the situation is frightening and alarming. The way out is circular economy. The converse of the conventional linear economy is the circular economy (Ness, 2008).

Reuse, recycle, repair, reduce and rethink are the strategies that the corporate entities should embrace. Restoring the environment and resourcefulness must be the order. There is a nexus between circular economy and sustainability. In fact, circular economy is the lever for achieving the Environmental,

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Social and Governance (ESG) score. Circular economy establishes a right balance among economy, environment, and society (Ghisellini et al., 2016).

Circular economy aids in achieving net-zero strategy. Circular economy is the mainstay for achieving sustainable development goals (SDGs) as it ensures closed loop economic system. Circular economy unlocks a huge opportunity as far as India is concerned. Circular economy ensures resource efficient business models. It has many direct and derived benefits to the economy, business units and society at large. Circular economy's closed loop system encourages the use of waste as inputs for manufacturing companies and thereby it promotes inter industrial cooperation (D'Amato et al., 2017).

As per the analysts, the transition to circular economy has the potential to unlock the value of the tune of USD 4.5 trillion (Accenture, 2015). Circular economy ensures long term shareholder value maximisation by plugging waste, reducing spills and extending life span of the products.

## **2. CONCEPT AND ECOSYSTEM OF CIRCULAR ECONOMY**

As per United States Environmental Protection Agency (US EPA), circular economy is “*an economy that uses a systems-focused approach and involves industrial processes and economic activities that are restorative or regenerative by design, enables resources used in such processes and activities to maintain their highest value for as long as possible, and aims for the elimination of waste through the superior design of materials, products, and systems (including business models)*” (US EPA, 2021).

The key elements of US EPA definition of circular economy are regenerative, extending the life value of the products and waste elimination.

As per United Nations Conference on Trade and Development (UNCTAD), “*A circular economy entails markets that give incentives to reusing products, rather than scrapping them and then extracting new resources*” (UNCTAD, 2021).

The chief feature of circular economy as per UNCTAD's definition is ‘Reuse’.

As per Ellen MacArthur Foundation, “*the circular economy is a system where materials never become waste and nature is regenerated*” (Ellen MacArthur Foundation, 2023). This definition captures the regenerative element.

The best way to appreciate the circular economy is to understand what is not circular economy. The linear value chain economy is glaringly and starkly contrary to the circular economy. Linear economy is better explained as ‘take-make-waste’. The linear value chain and circular economy's closed value chain, as per Deloitte's publication on ‘circular economy from theory to practice’ are presented in Figure 1A and Figure 1B.

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