

## **RETHINKING VALUE CREATION: APPLYING CIRCULAR ECONOMY PRINCIPLES IN INDIA AS A FACTOR OF NATIONAL IDENTITY FORMATION**

In a context characterised by unprecedented economic dynamism and a rapidly growing population, India stands at the threshold of profound choices about the path to future development. If it continues, the country's economic growth trend, which averaged 7.4% a year in the last decade, will lead it to become the fourth largest economy in the world in about two decades.

This positive prospect does not, however, come without challenges as the nation still faces significant questions about rapid urbanisation, resource scarcity, and high levels of poverty.

In an interconnected world predicated largely on a linear economic model, the upcoming Indian powerhouse could embark on an industrialisation path comparable – albeit faster – to that of mature markets, with the associated negative externalities it entails. But this scenario is not inevitable. With its young population and emerging manufacturing sector, the country is at a crossroads and can today make systemic choices that would put it on a trajectory towards positive, regenerative, and value-creating development.

Business leaders and governments around the world are increasingly looking beyond the linear 'take, make, dispose' model of growth, with a view to operate a strategic move towards an approach fit for the long term. Past research by the Ellen MacArthur Foundation and others has demonstrated the potential of the circular economy – one that is restorative and regenerative by design and makes effective use of materials and energy in a digitally-enabled model of development. A circular economy path to development could bring India annual benefits of US\$ 624 billion in 2050 compared with the current development path – a benefit equivalent to 30% of India's current GDP. This conclusion rests on high-level economic analysis of three focus areas key to the Indian economy and society: cities and construction, food and agriculture, and mobility and vehicle manufacturing. The research shows that realising these benefits fully would require applying circular economy principles in

combination with harnessing the unfolding digital and technological transformation, all tailored to the Indian context. In addition to creating direct economic benefits for businesses and households, following a circular economy development path would reduce negative externalities. For example, greenhouse gas emissions would be 44% lower in 2050 compared to the current development path, and other externalities like congestion and pollution would fall significantly, providing health and economic benefits to Indian citizens. Achieving these benefits would require Indian businesses to lead the way in the transition phase, with policymakers simultaneously setting the direction and creating the right enabling conditions. Other organisations, such as universities, non-profits, and international organisations can play important supporting roles, including facilitating and participating in local collaborative initiatives. By embarking on a circular economy transformation – launching new circular economy initiatives and reinforcing existing efforts – India could leverage its expected high levels of growth and development to build a more resource effective system, creating value for businesses, the environment, and the Indian population.

Restorative and regenerative by design, a circular economy aims to keep products, components, and materials at their highest utility and value at all times. A circular economy is a continuous cycle that preserves and enhances natural capital, optimises resource yields, and minimises system risks by managing finite stocks and renewable flows. In a circular economy, value creation is decoupled from the consumption of finite resources. The model distinguishes between technical and biological cycles, which rely on distinct capital-building strategies. Consumption happens only in biological cycles, where nutrients are metabolised – e.g. through composting or anaerobic digestion – and life processes regenerate the living systems, such as soil, plants, or animals, that give rise to materials and other resources. Technical cycles recover and restore products, components, and materials through strategies like reuse, repair, remanufacture, refurbishment, or (in the last resort) recycling. In a circular system, innovation and restoration increase long-term resilience. A circular economy does not just amount to adjustments aimed at reducing the negative impacts of the linear economy; it reflects a systemic shift that creates a positive and self-reinforcing development cycle, generating business and economic opportunities and environmental and social benefits. The notion of circularity has deep historical and

philosophical origins. The idea of feedback, of cycles in real-world systems, is ancient and has echoes in various schools of philosophy. It enjoyed a revival in industrialised countries after World War II when the advent of computer-based studies of non-linear systems unambiguously revealed the complex, interrelated, and therefore unpredictable, nature of the world we live in – more akin to a metabolism than a machine. The circular economy model arose from several major schools of thought that emerged in the 1970s and gained prominence in the 1990s. They include the functional service economy (performance economy) of Walter Stahel; the Cradle to Cradle design philosophy of William McDonough and Michael Braungart; biomimicry as articulated by Janine Benyus; the industrial ecology of Reid Lifset and Thomas Graedel; natural capitalism by Amory and Hunter Lovins and Paul Hawken; and the blue economy systems approach described by Gunter Pauli.