

Editorial

The global economy has an estimated total gross domestic product (GDP) of US \$80 trillion – a figure that has doubled since the beginning of the 21st century. The current world population of 7.6 billion is expected to reach 8.6 billion in 2030, 9.8 billion in 2050 and 11.2 billion in 2100.

Against this background, in order to continue feeding humanity, provide it with the necessary goods and to guarantee people a decent existence, a fundamental change in how we use raw materials is necessary. The concept of “circular economy” – an economic model focused on eliminating waste and inefficiency and promoting greater resource productivity – promises an alternative model based on entirely different principles.

This concept has his roots in several school of thoughts and theories that challenge the prevailing economic system based on overconsumption of natural resources. It has been taken up by several governments and businesses around the world that consider the circular economy as a solution for reconciling what at first sight seem to be the conflicting objectives of economic growth and environmental sustainability. The Finnish Government has expressed the ambition for Finland to be a pioneer in the circular economy by 2025, aiming to create sustainable well-being and a successful carbon-neutral circular economy over the next five to ten years. Thus, Finland developed the world’s first national roadmap toward a circular economy, “Leading the Cycle – Finnish Road Map to a Circular Economy 2010-2025.” The Road Map indicated five focus areas – a sustainable food system, forest-based loops, technical loops, transport and logistics, and joint actions – and aims to create a shared mindset for promoting the circular economy among all stakeholders and determine the most effective means to bring about a systemic change in the economy.

In parallel with Finland’s actions, the European Commission has been working on policy and guidance in the area of circular economy. In 2015, it adopted a Circular Economy Package, which includes revised legislative proposals on waste to stimulate Europe’s transition towards a circular economy. The Circular Economy Package consists of an EU Action Plan, which establishes “a concrete and ambitious program of action”. In 2016, the EC published a review of the implementation of the Action Plan, and

established a Circular Economy Finance Support Platform together with the European Investment Bank, bringing together investors and innovators; issued guidance to member states on converting waste to energy; and proposed a targeted improvement of legislation on certain hazardous substances in electrical and electronic equipment.

Thus, experts and scholars agree that a circular economy offers significant advantages, including economic, environmental and social benefits, such as larger profits, reduced carbon emissions, cleaner production methods, and the creation of new jobs. However, the transition to a circular economy requires an entirely new way of thinking, as well as a new approach to process and product design. This requires developing a good knowledge of the concept, the different circular economy processes and their expected effects on sectors and value chains.

In this context, this issue of the *Review of Studies on Sustainability* aims to contribute to the ongoing discussion. The issue taps into various disciplines with the aim of creating not only a contribution to a holistic view but more accurately reflects the kaleidoscopic nature of circular economy and combines insights from different disciplines.

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