The Roots of the Circular Economy

Responsibility and long-term thinking is all the rage. Individuals, companies, governments – everyone is focused on leaving a lighter footprint on the planet and treating nature's resources with more respect to make sure we can use them to live a good life long into the future. But it wasn't always like this. From a historical perspective – say, a few hundred years – resource stewardship has only been in vogue for a short time. Four or five decades ago, manufacturers in developed economies were dumping waste into rivers and lakes, and in many cases this is still happening in emerging and developing economies. And the concept of household recycling was as foreign to consumers as the thought of putting a man on the moon.

Fortunately, we're now in an era where businesses and consumers are expected to share concern for the environment. That might mean consuming precious resources more wisely, minimizing the use of toxic or harmful substances, or reducing waste. Ultimately, we recognize that our planet can't continue to support the current population, let alone one that's expected to expand dramatically in the next few decades (latest estimates predict a global population of 9.5 billion by 2050 and 11 billion by 2100),¹ if economies continue to operate as if natural resource supplies are limitless.

This evolution in environmental awareness has borne what we've come to know as the circular economy. In the circular economy, companies are focused on growing without relying on extracting and consuming Earth's resources, without squandering energy, without generating a steady stream of products that end up in landfills or otherwise damage the environment. The circular economy represents the best alternative we have to

the "take-make-waste" industrial model that has dominated the industrial economy since its inception.

While the circular economy is still in its infancy from a global perspective, it's growing in prominence with each passing year. Industries, governments, and even consumers are increasingly recognizing the inherent and intuitive value in circular principles, and they're embracing practices that can help them achieve the "circular advantage."

Before exploring how companies are adopting circular principles today, it's worth briefly explaining what the circular economy actually is and how it developed to this point.

The circular economy's roots go back further than many people realize – to the late eighteenth century. In 1798, Thomas Malthus, concerned about the world's mushrooming population, published his famous work, "An Essay on the Principle of Population." The main tenets of his argument were radically opposed to then-current thinking. He argued that continued population increases would eventually diminish the world's ability to feed itself. Malthus based this conclusion on the thesis that populations expand to overtake the development of sufficient land for crops.² Other influential figures in these early years included John Stuart Mill and Hans Carl von Carlowitz, who advanced theories around responsible management of natural resources.

For environmental historians, the rise of the environmental movement as we know it today concludes a story that began before 1900. As Adam Rome wrote in *The Journal of American History*, "The first protests against pollution, the first efforts to conserve natural resources, and the first campaigns to save wilderness all occurred in the late nineteenth century." Soon, the implications of nonrenewable resource depletion aroused the interest of economists. One of them, Harold Hoteling, had this to say in 1931:

Contemplation of the world's disappearing supplies of minerals, forests, and other exhaustible assets had led to demands for regulation of their exploitation. The feeling that these products are now too cheap for the good of future generations, that they are being selfishly exploited at too rapid a rate, and that in consequence of their excessive cheapness they are being produced and consumed wastefully has given rise to the conservation movement.⁴

Many other influential thinkers followed Hoteling with their own takes on the issue, and their conclusions all echoed a similar message: that the exploitation of abundant and cheap natural resources, while profitable in the short term, is not viable indefinitely.