

BREAKING DOWN THE CIRCULAR ECONOMY

What is 'circular economy'?

1 Circular economy aims at **circulating and recirculating resources**, minimizing waste and enhancing resource efficiency.



In a **circular system** resource input and waste, emission, and energy leakage are minimized by closing energy and material loops.

2

This can be achieved through: long lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, recycling and converting outputs into inputs.**[1]** This regenerative approach is in contrast to the traditional **linear economy**, which has a 'take, make, dispose' model of production.**[2]**



3 One early mention was by **Kenneth Boulding** in 1966 when he raised awareness of what he called a "spaceship economy" or a "**closed economy**", in which resources remain as long as possible a part of the economy, as compared with the conventional "**open economy**" with assumed unlimited resources.**[3]**



[1] Geissdoerfer, Martin; Savaget, Paulo; Bocken, Nancy M. P.; Hultink, Erik Jan. "The Circular Economy – A new sustainability paradigm?". *Journal of Cleaner Production*, 2017, 143, 757–768. doi:10.1016/j.jclepro.2016.12.048.

[2] *Towards the Circular Economy: an economic and business rationale for an accelerated transition*. Ellen MacArthur Foundation, 2012.

[3] Boulding, Kenneth E. "The Economics of the Coming Spaceship Earth". In H. Jarrett (ed.) *Environmental Quality in a Growing Economy*, Resources for the Future, Johns Hopkins University Press, Baltimore, 1966.