

Natural eco-systems operate in cycles – plants grow in soil, animals eat plants, dung replenishes soil and so it goes on. Since the Industrial Revolution, humankind’s use of natural resources has generally been linear: raw materials are extracted and used, and often not recycled. It is worth reflecting that around two-thirds of the material so used slips through our fingers: plastics find their way into rivers and oceans, fertilisers leach into rivers, a third of all food produced is allowed to rot away, some £350bn-worth of clothes a year ends up in landfill, and burning fossil fuels pours carbon dioxide into the atmosphere. Recycling and composting account for less than 10% of the ‘stuff’ humans are using. [A pdf of the report is available here](#). Over the past half century the global population has doubled, yet the amount of material being used in the economy has tripled. The challenge of interrupting this mostly linear process and making it a more circular one is enormous. There are, however, things that everyone can do to maintain prosperity whilst recognising that the world’s resources are finite.

A **circular economy** approach to economic development can benefit businesses, society and the environment. In contrast to the traditional 'take-make-waste' linear model, a circular economy focuses on delivering services efficiently and aims gradually to decouple growth from the unchecked consumption of finite resources.

The City of London is due to introduce its own circular economy strategy in 2021. Further information and recommended actions by individuals and businesses can be found [here](#).

There are basically seven ‘R’s’ to the circular economy, which broadly follow the [waste hierarchy](#)

- **Rethink** – by re-thinking business models and solutions at every level so that they are more service-oriented, rather than production-oriented, we can tackle overuse of resources and the production of waste. The growth of the sharing economy is a signal that ownership of goods can be constrained, with fewer materials used. IKEA is an example of those businesses that are already looking into renting and recycling as alternative models.
- **Reduce** - reduce consumption of energy and materials by applying the principles of lean design and by producing products that are made to last.
- **Repair** - repair components and parts to extend the life of products while in use. This helps rein in throw-away consumption.
- **Refurbish** - businesses can look into recovering and refurbishing end-of-life products to be sold again or transformed into new products.
- **Re-use** - reuse products that are no longer required by making them available to other users. Online marketplaces such as eBay have already done this for the consumer; a similar approach is starting to be used by some industries too.

- **Recycle** - recycle materials or resources by disassembling components and separating out the recyclable parts.
- **Recover** - recover embedded energy from non-recyclable waste material where feasible. Non-recyclable waste may at least be converted into energy through waste-to-energy processes such as combustion and gasification.

Further Reading

[ReLondon](#) is a partnership of the Mayor of London and London' boroughs to improve waste and resource management.

[Heart of the City](#) supports SMEs to be a force for good, providing mentoring, how to support local communities and reduce environmental impact.

City of London Corporation advice on the Circular Economy. [See here.](#)

City of London Corporation advice on Waste & Recycling. [See here.](#)

[Clean City Awards Scheme](#), now in its 26th Year.

[The Ellen MacArthur Foundation](#) takes as its mission to accelerate the transition to a circular economy.

[The International Society for Industrial Ecology](#) is an academic community that provides scientifically rigorous methodologies, tools, and approaches for understanding and applying circular economy practices.

Fact checked by:

