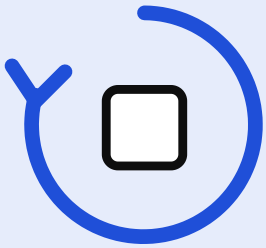
Specialty

Circular design

Designs products, services and business models so that they create no waste and keep products and materials in use at their highest value.



In Spanish

Diseño circular

Origin

Ellen MacArthur Foundation (2013); McDonough and Braungart (2002)

What problem it addresses

The linear economy extracts, makes and throws away. Waste is a design flaw.

Principles

Eliminate waste and pollution

From the design stage, not at the end.

Circulate products and materials

Repair, reuse, remanufacture and recycle.

Regenerate nature

Give back more than is taken.

Applications in design

✓ Use it like this

Design for disassembly: parts that can be separated and repaired.

✗ Avoid

Calling something circular when it is only recycled once.

👁 Don't fall for it

Recycling is the last option: repair and reuse come first.

Connections

Builds on

- Design for recycling
- Design for manufacture and assembly
- Planned obsolescence

Uses these methods

- Life cycle assessment (LCA)

Related to

- Fashion design
- Industrial design
- Regenerative design
- Textile design
- Ecodesign
- Product-service systems

Authors and works

	Ellen MacArthur Foundation (n.d.)	Sums up the circular economy in three principles and argues for applying them from the design stage.
2013	**Ellen MacArthur Foundation**	Popularized a model of the circular economy with two cycles, technical and biological, to keep materials and products in use.
2002	**William McDonough and Michael Braungart**	Proposed designing products as technical or biological nutrients so that waste ceases to exist.

Sources

Original sources

- Ellen MacArthur Foundation (2013). Towards the circular economy, Vol. 1: An economic and business rationale for an accelerated transition. Ellen MacArthur Foundation. View source (https://www.ellenmacarthurfoundation.org/towards-the-circular-economy-vol-1-an-economic-and-business-rationale-for-an)
- McDonough, W., & Braungart, M. (2002). Cradle to cradle: Remaking the way we make things. North Point Press.

Secondary sources

- Ellen MacArthur Foundation (n.d.). Circular economy introduction. Retrieved 2026. View source (https://www.ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview)

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