

Reading Guide

This reading guide contains the source material for most of the courseware in the MOOC **Circular Economy: an introduction**. Some of the books, reports and journal papers in this reading guide are freely available.

Episode 1: What is the Circular Economy?

Webster, Ken. *The Circular Economy; A Wealth of Flows*. Ellen MacArthur Foundation Publishing, 2015.

More information; <https://www.ellenmacarthurfoundation.org/publications#!/The-Circular-Economy-A-Wealth-of-Flows/p/49525598/category=0>

Towards The Circular Economy Vol. 1: An Economic And Business Rationale For An Accelerated Transition. Ellen MacArthur Foundation. 2013.

Free download from: <https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Ellen-MacArthur-Foundation-Towards-the-Circular-Economy-vol.1.pdf>

Episode 2: Business Value in a Circular Economy

Koppius, Otto, Öznur Özdemir-Akyildirim, and Erwin van der Laan, *Business Value from Closed-Loop Supply Chains*, 2014, Int. J Sup. Chain. Mgt, vol. 3, nr. 4, p 107-120.

Available through: ojs.excelingtech.co.uk/index.php/IJSCM/article/view/1006

Tukker, Arnold. *Eight Types of Product–Service System: Eight Ways to Sustainability? Experiences from Suspronet*. Business Strategy and the Environment, 13, 2004. p. 246–260

Available through: <http://onlinelibrary.wiley.com/doi/10.1002/bse.414/abstract>

Episode 3: Longer Lasting Products

Bakker, Conny, Marcel den Hollander, Ed van Hinte and Yvo Zijlstra. *Products that Last; Product Design for Circular Business Models*. TU Delft Library, 2014.

More information: <http://productsthatlast.nl/site/app/index2.html?#/home>

Growth Within: A Circular Economy Vision for a Competitive Europe. Ellen MacArthur Foundation and McKinsey Center for Business and Environment. 2015.

Free download from:

https://www.ellenmacarthurfoundation.org/assets/downloads/publications/EllenMacArthurFoundation-Growth-Within_July15.pdf

Episode 4: Remanufacturing

Nasr, Nabil and Michael Thurston. *Remanufacturing: A Key Enabler to Sustainable Product Systems*. Proceedings of the 13th CIRP International Conference on Life Cycle Engineering, p 15-18, 2006.

Available from <http://www.mech.kuleuven.be/lce2006/key4.pdf>

Graedel, T.E., E.M.Harper, N.T. Nassar, and Barbara Reck, 2013. *On the materials basis of modern society*. *PNAS*, pp.1–6.

Available from <http://www.pnas.org/content/112/20/6295.full.pdf>

Peck, David, Prabhu Kandachar and Erik Tempelman. *Critical materials from a product design perspective*. *Journal of materials and design*, Vol. 65, p 147 – 159. 2015.

Available through <http://www.sciencedirect.com/science/article/pii/S026130691400658X>

Episode 5: Waste = Food

Benyus, Janine, *Biomimicry; Innovation Inspired by Nature*. Perennial, 2002.

Braungart, Michael and William McDonough, *Cradle to Cradle, Remaking the Way we Make Things*. North Point Press, 2002.

Episode 6: Thinking in Systems

United Nations Environment Programme UNEP, *International Resource Panel Work on Global Metal Flows*. This is a set of four reports:

- Metal Stocks in Society (2010)
- Recycling Rates of Metals (2011)
- Metal Recycling: Opportunities, Limits, Infrastructure (2013)
- Environmental Risks and Challenges of Anthropogenic Metals Flows and Cycles (2013)

Free download from:

<http://www.unep.org/resourcepanel/Publications/AreasofAssessment/Metals/InternationalResourcePanelWorkonGlobalMetal/tabid/132990/Default.aspx>