

STRATEGIC MATERIALS FOR A LOW-CARBON FUTURE: FROM SCARCITY TO AVAILABILITY

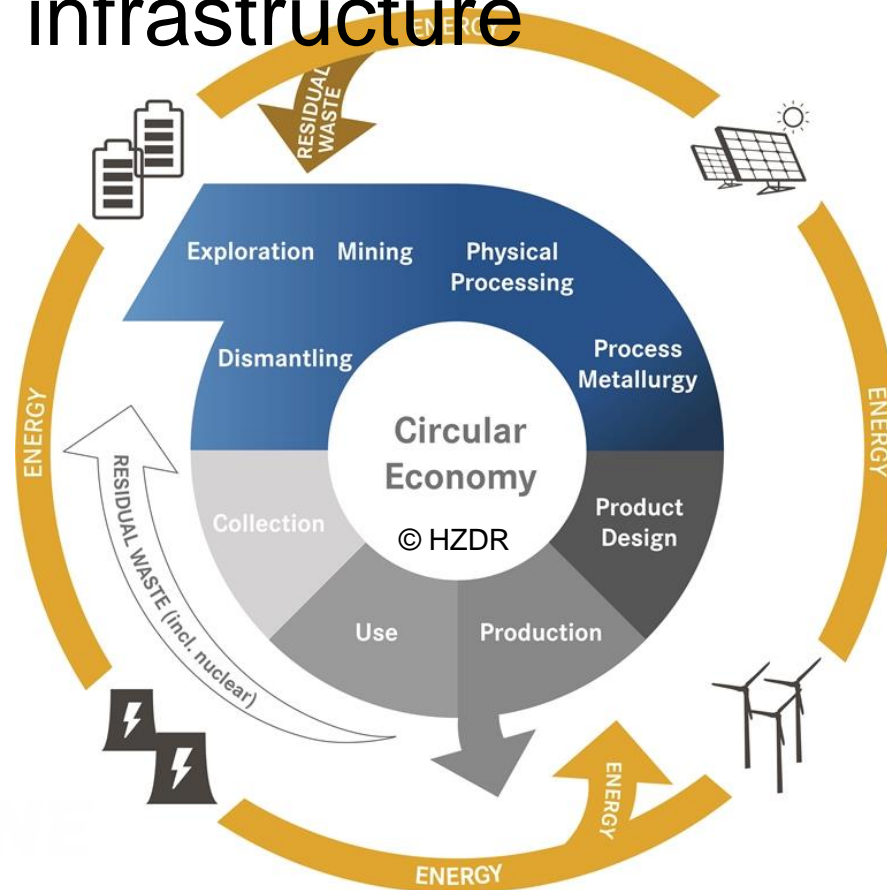
2-3 November 2017
Oxford, UK

Opportunities & limits of the circular economy

Simulation based calculation of the recycling index of complex products

Markus A. Reuter

Products, energy, resources, infrastructure



Complex modular “mineral”

#weareairphone



Key Papers and Software development

Ballester, Van Schaik, Reuter (2017) Fairphone recyclability report (see blogs)
Reuter et al. (2015) International Journal of Life Cycle Assessment, 20(5), 671-693
Rönnlund et al. (2016) International Journal of Life Cycle Assessment, 21(10), 1473-1500
HSC Sim: <http://www.outotec.com/products/digital-solutions/hsc-chemistry/>

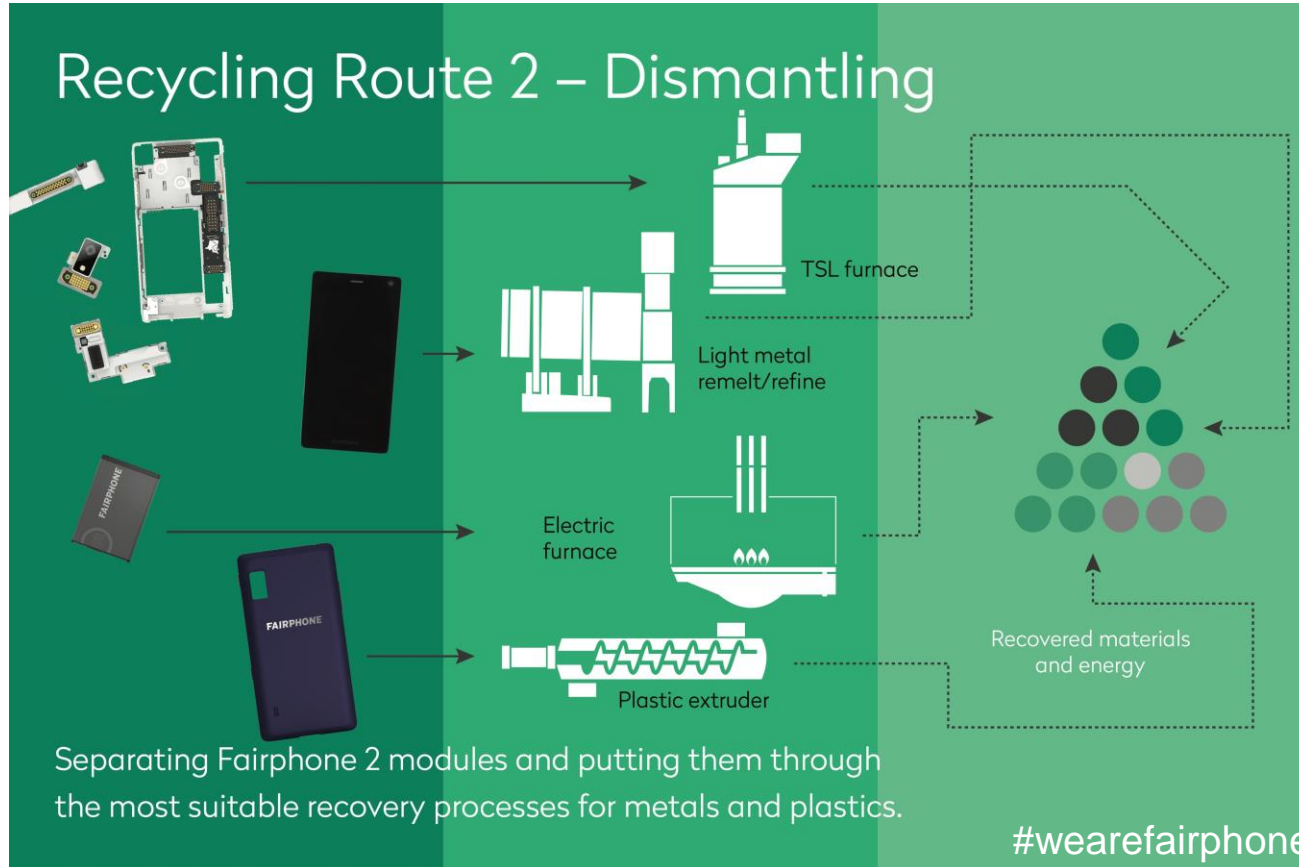


Fairphone Blogs

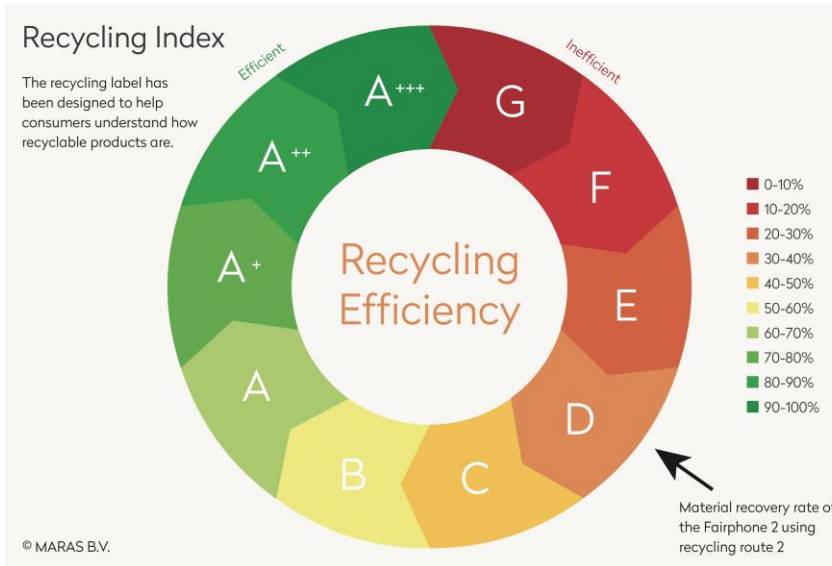
Blog 1: 27th Feb

Blog 2: 8th Aug

Various recycling routes

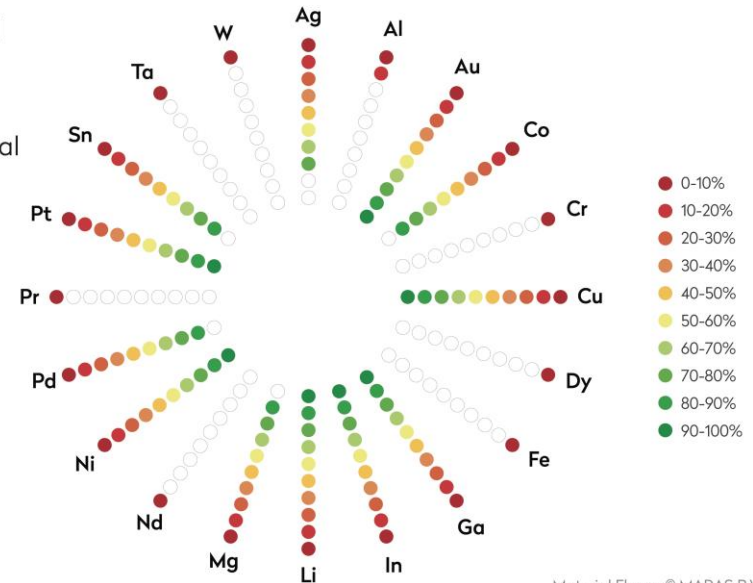


Highly non-linear interactions



Recycling Route 2:

Recovery rate by metal



Ballester, Van Schaik, Reuter (2017) Fairphone recyclability report (see blogs)