

MOBILE PHONE, A SUSTAINABLE PRODUCT?

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- Booming economy
- Growth in developing markets
- Very useful services



Contribute to sustainable development ????

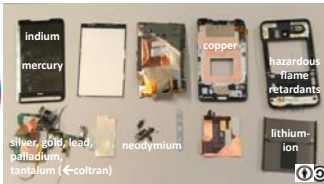
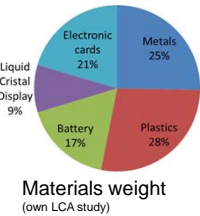
Mobile telephony, a player in economic development

	Developed countries	Developing countries	Sources
Mobile-cellular penetration rates	128 % (126% in Europe)	89 % (only 63% in Africa but mobile > fixed line household penetration)	ITU, 2013 GSMA, 2013
Growth	Europe (EEA) = rising smartphone penetration	Sub-Saharan Africa (SSA) = maximum growth in the number of users 4% of GDP	GSMA, 2011 GSMA, 2014 Deloitte, 2012
Operators activity	1% of GDP 1.7 million FTEs jobs (EEA, 2010)	3.5 million FTEs jobs (SSA, 2011)	
Price of an entry-level mobile-broadband	~1-2% of monthly GNI p.c.	~11-25% of monthly GNI p.c. (but ~19% for fixed broadband services)	ITU, 2013

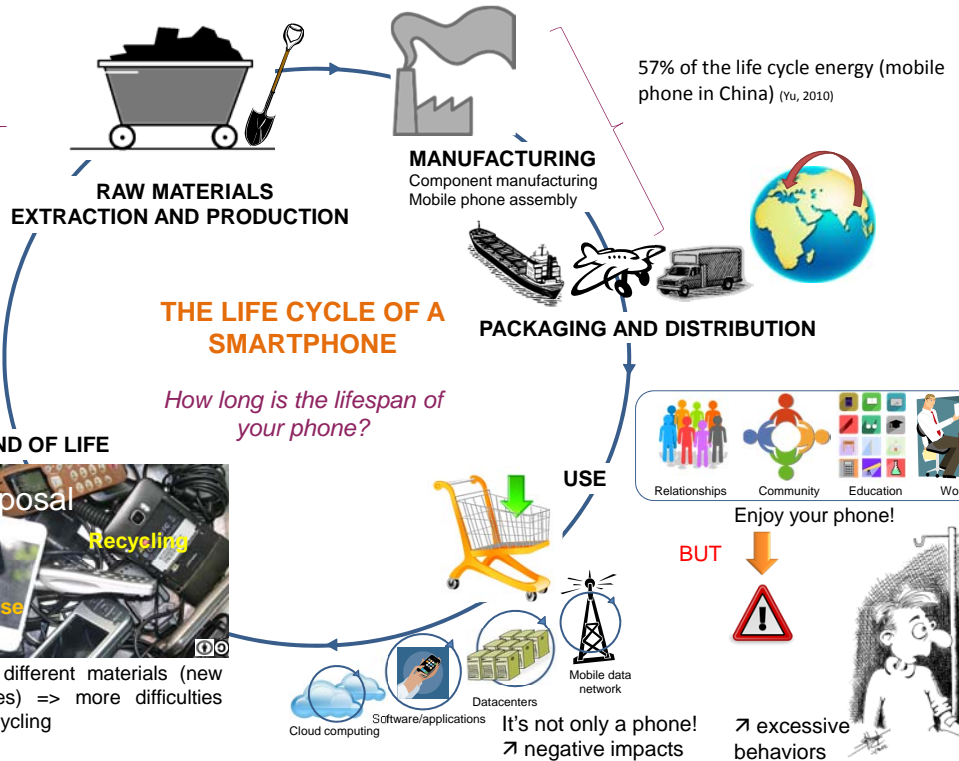
Luwero Coltan mine near Rubaya, North Kivu, Manuscro Photo - 2014



Conditions at artisanal mining sites are poor and extremely dangerous (Amnesty International, 2013 ; Etelge, 2013)



- Critical resources (availability, geopolitics)
- Over sixty metals
- Hazardous substances



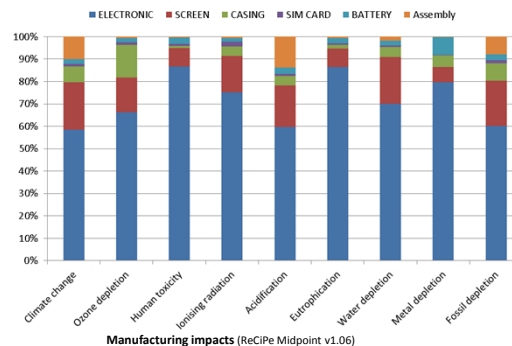
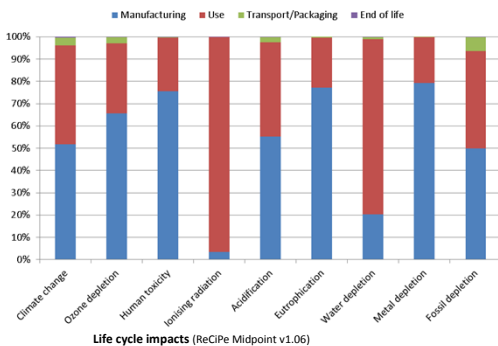
La Abuela China que cambia arroz por chicharrón. ANOVA - 2009



E-waste exported in certain countries can be treated in a precarious informal context (Bisschop, 2012; Panambunan-Ferse, 2013)

Eric DREZET (EcoInfo), 2012

LCA of a 3G smartphone Functional unit: calling and browsing the web that requires a daily load over 2 years.



Manufacturing	China (Yu, 2010) / includes material extraction
Transport	China -> France by boat and truck
Use	<ul style="list-style-type: none"> • France, 2 years (ADEME, 2012) • load every day : 2.745kWh / year (own measures, Malmmodin 2014) • network : 23kWh / user / year (Malmmodin 2014) • French electricity mix
End of Life	81% storage, 19% WEEE FRANCE (TNS Sofres, 2010)



French electricity = nuclear
If European electricity, use > manufacturing (~65% vs 35%)

So, could you change your social behavior to increase sustainability ?

- Increase the lifespan of your phone (> than 5 years).
- A new life for your old phone : give, donate, resell, recycle properly (take-back program, drop off at an electronic recycling location).
- Choose an eco-designed phone.

Write here your suggestions:

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