MOBILE PHONE, A SUSTAINABLE PRODUCT?

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Mobile telephony, a player in economic development

<table>
<thead>
<tr>
<th>Developed countries</th>
<th>Developing countries</th>
<th>Sources</th>
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</thead>
<tbody>
<tr>
<td>Mobile-cellular penetration rates</td>
<td>Europe (EEA) = rising smartphone penetration</td>
<td>ITU, 2013</td>
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<td></td>
<td>Sub-Saharan Africa (SSA) = maximum growth in the number of users</td>
<td>GSMA, 2013</td>
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<td>4% of GDP</td>
<td>GSMA, 2013</td>
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<td>3.5 million FTEs jobs (SSA, 2011)</td>
<td>GSMA, 2014</td>
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<tr>
<td>Operators activity</td>
<td>1% of GDP</td>
<td>GSMA, 2012</td>
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<td>Price of an entry-level mobile -broadband</td>
<td>-1.2% of monthly GNI p.c.</td>
<td>ITU, 2013</td>
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<td>-11.25% of monthly GNI p.c. (but – 19% for fixed broadband services)</td>
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End of Life

Many different materials (new features) ⇒ more difficulties for recycling

LCA of a 3G smartphone

Functional unit: calling and browsing the web that requires a daily load over 2 years.

Materials weight (own LCA study)

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

Disposal

E-waste exported in certain countries can be treated in a precarious informal context

Packaging and distribution

57% of the life cycle energy (mobile phone in China) (Yu, 2013)

Manufacturing

Component manufacturing
Mobile phone assembly

Raw materials extraction and production

The life cycle of a smartphone

How long is the lifespan of your phone?

Enjoy your phone!

BUT

It’s not only a phone! => negative impacts

Excessive behaviors

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:

Contact

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