

Point of ADEME on Life Cycle Assessment



ADEME

LCA takes into account all possible environmental burdens

- Ressource depletion: abiotic/non abiotic, energetic/non energetic, land use, water use
- Air pollution: photochemical oxydation, ozone depletion, air acidification
- Water pollution: eutrophication, water acidification
- Soil pollution
- Global warming
- Human tox, Ecotox
- Ionizing radiations
- ...

What for?

- ▶ LCA studies
- ▶ Communication: footprints (eg carbon, water),
labelling, EPD systems
 - ISO 14020's
- ▶ Eco-design
- ▶ Hybrid approaches: LCA / EEIO

What ADEME are doing?

- **LCA studies**: to help on decision making to support new technologies
- **Communication**: footprints (eg carbon, water), labelling, EPD systems: participating to elaborate PCR on common goods as shoes, TV, ...
 - ISO 14020's
- **Eco-design**: new department on circular economy
- **Hybrid approaches**: LCA / EEIO : working on dynamic LCA (impact of policy support)
- **On CCS: ISO WG4 on Q&V: on LCA for all CSC Chain**

Focus on GHG footprint

« *Count to know, know to act, act to reduce* »
Michel Harvard (Harvard Report, 2009, p6)

▶ Main goal :

- to report GHG emissions (industries, compagnies,)
- to support policy (to help on decision making policy)

-> ADEME work on it for 15 years

Focus on GHG footprint

➤ International (2004-2006):

- GHG Protocol (direct emissions)

- ISO 14064

➤ France:

- GHG balance sheet (direct and indirect emissions) -> all organisation in France have to do a GHG bilan sheet since 2012

- ISO 14064

Focus on GHG footprint

▶ International (2013-2014):

- GHG Protocol SCOPE 3
- ISO 14069
- Review ISO 14064

▶ France (2011-2014):

- Reference guide (hospitals, cleanliness sector, water treatment,...)
- Guidelines (finance sector, trade and distributor,...)

Needs & Current developments

- LCIA: water use (WULCA), biodiversity, ressources
- Uncertainty propagation
- Database interoperability
- Impact hierarchisation: weighing, monetarization, endpoint, unique score

Links

- ▶ <http://www.lifecycleinitiative.org/>
- ▶ www.base-impacts.ademe.fr
- ▶ http://eplca.jrc.ec.europa.eu/?page_id=104
- ▶ http://ec.europa.eu/environment/eussd/smgp/product_footprint.htm
- ▶ <http://www.ecoinvent.org/>

Who uses LCA? Who makes it?

- Academics: CIRAIG, DTU, ETH Zürich, EPFL, ELSA, Sichuan Univ., ...
- Business: federations (eg Worldsteel, FEFCO, EAA/IAI, FEVE), companies (ScoreLCA), WBSCD, WRI...
- Public authorities: JRC, DG ENV, Switzerland, Italy, France, Japan, Thailand, China, Québec, USA...
- Consultancy: Quantis, Thinkstep, Pré, BIO IS...
- UNEP-SETAC Life Cycle Initiative