LIFE CYCLE ANALYSIS
a.k.a LCA
WHAT IS IT?
WHAT ISN’T?

- Quantitative tool for measuring products’ environmental analysis
- Products’ tracking system from raw materials to final disposal/transformation
- (Eco)design tool

- Materials Flow Analysis
- Financial Cost Analysis Tool
- Industrial Ecology or Urban Metabolism
WHY?
THERE ARE NO GREEN PRODUCTS
ONLY GREEN(ER)
THINGS YOU ARE LOOKING FOR

- Raw material acquisition: includes material harvesting and transportation to manufacturing sites
- Processing: involves materials processing and transportation to production sites
- Manufacturing: includes product manufacture and assembly, packaging, and transportation to final distribution
- Product life: includes energy and emissions during normal product life, required maintenance, and product reuse (refurbishing, material reuse)
- Waste management/end of life: includes recycling, landfills, liquid waste, gas emissions, etc.
HOW DOES IT LOOK?
CHALLENGES

- Costly
- Complicated
- Long
- Standardization
- Estimations!
- Post-design
- Data
- Localized