

# LIFE CYCLE ANALYSIS

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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

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- Materials Flow Analysis
  - Financial Cost Analysis Tool
  - Industrial Ecology or Urban Metabolism

**WHY?**

THERE ARE NO  
GREEN  
PRODUCTS

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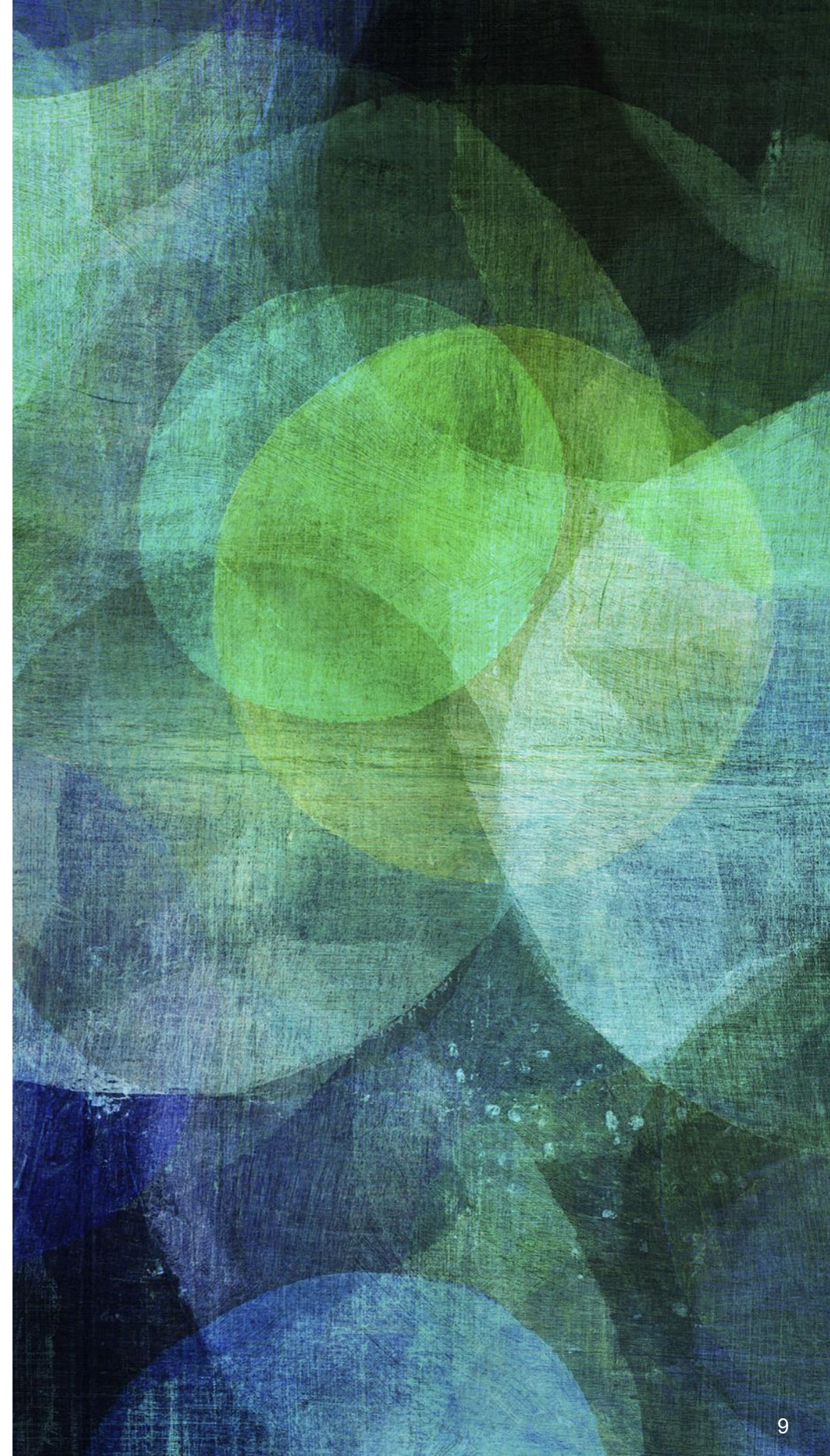
ONLY  
GREEN(ER)

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# THINGS YOU ARE LOOKING FOR

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- 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

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

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