

WHAT'S THE ENVIRONMENTAL IMPACT OF MY PRODUCT / COMPANY / SERVICE?



Why ask?

Management

Make sustainable decisions

Product Development

Develop sustainable products

Sales & Marketing

Prove sustainable claims

Supply Chain

Find better suppliers



LCA is a framework standardized by ISO 14044 to measure this impact!
It's conducted in 4 stages:

1

Goal & Scope

WHAT DO WE WANT TO MEASURE?



Define the product / company / service you want to measure



What system do we measure in?

Which parts of the life cycle?
Which impact category (CO2, water,...)?



What do we exclude?

You can't just compare one LCA to another. It's important to compare the goal & scope of each analysis! For better comparison, there are Product Category Rules (PCR) that define how to analyze a certain product or industry.



2

Life Cycle Inventory

COLLECT AND STRUCTURE OUR DATA

What data do we need? In this stage, we collect all the inputs and processes that we want to measure. For example...

The raw materials and bill of materials
The energy we use and buy
Supplier data
... everything that goes into and flows out of the system we want to measure!

The easiest way to structure your data is in a flow- or tree-chart - from input, over processes, to outputs, and waste.



3

Impact Assessment

TRANSLATE OUR DATA TO IMPACTS



We look at Life Cycle Databases (for example Ecoinvent) and scientific papers to define what the impact of our Life Cycle Inventory is.



We sum up the impacts in category totals - for example, Global Warming Potential (CO2).

We translate everything to our total. Example: Our category is CO2. 1 kg of nitrogen equals 25 kg of CO2 according to norm EN15804



4

Interpretation

WHAT DOES ALL OF THIS MEAN?

How high are our emissions?
How do our products compare? Can we improve them?
Can we improve our processes?
What are the biggest levers for us?



Based on the interpretation, it is common to go back to the analysis and re-assess certain aspects of it.

What is the „Life Cycle“?

Stages:

- Raw Materials
- Processing
- Transport
- Retail / Use
- Waste

