



## Life Cycle Assessment

LCA

GERMAN INSTITUTE OF FOOD TECHNOLOGIES



## FOOD EXPERTS FOR YOUR SUCCESS

### PRACTICAL SOLUTIONS FOR THE FOOD INDUSTRY

- ⊕ more than 30 years experience in the food industry
- ⊕ practical product and process development
- ⊕ more than 170 food experts
- ⊕ more than 150 (international) member companies

## WHAT IS OUR APPROACH?

### RESEARCH AND REFERENCES

#### **FOOD PROCESSING**

Life Cycle Assessment of innovative technologies, TU Delft, Leiden University, 2014

#### **SMOKE PRODUCTS**

Life Cycle Assessment of meat products smoked by the use of purified primary smoke products in comparison to conventional smoking, Red Arrow Handels GmbH, 2014–2015

#### **MEAT ALTERNATIVES**

Life Cycle Assessment of most known meat substitutes, internal DIL study, published in International Journal of Life Cycle Assessment in 2015

#### **MILK CASE STUDY**

Environmental sustainability of ultra-high pressure homogenization application for liquid foods, Aalborg University, 2015

#### **SPATIO-TEMPORAL TOOLS FOR REGIONAL LOW-CARBON DEVELOPMENT**

Linking LCA and GIS to assess clusters of GHG emissions from cocoa farming in Peru, Ecosystem Services LLC, 2015

#### **LIFE CYCLE ASSESSMENT APP**

DIL Life Cycle Assessment App, 2015–2016

#### **ENTOMOFOOD**

Application of edible insects in Western food products, Life Cycle Assessment of insect based products, multiple partners from Germany and Belgium, 2016

#### **ALTERNATIVE RESEARCH**

Thermal and alternative pasteurization of tomato and watermelon juice: an energy comparison and life cycle assessment, KULeuven, submitted to Journal of Cleaner Production, 2016



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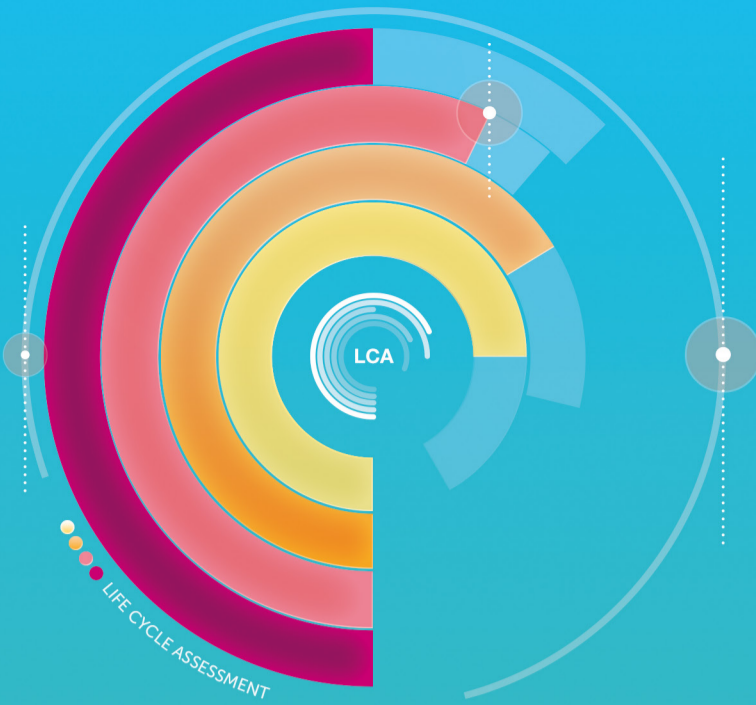


GOOD FOR YOUR COMPANY  
GOOD FOR THE ENVIRONMENT

# LIFE CYCLE ASSESSMENT

## WHAT IS LCA?

The Life Cycle Assessment is a new and certified (ISO EN 14040 & 14044) method for the assessment of ecological impacts due to industrial processes and production of goods. It's purpose is the identification of critical hotspots. This in turn enables the improvement of a company's economic and ecological performance.



## FROM ANALYSIS TO SOLUTION

### HOW DOES LCA WORK?

An initial analysis of the supply chain assesses the exact use of resources (input) and the environmental impact of a specific product or process (output). This enables the identification of potentials for improvement and savings.

These insights and the expertise of DIL in food technologies form the base for the development as well as the implementation of tailor-made solutions for process optimization.



## HOW CAN MY COMPANY BENEFIT?

### ADDED VALUE FOR THE ENVIRONMENT AND BUSINESSES

By reducing energy consumption and use of resources, LCA enables the reduction of production costs and the environmental impact. Moreover, the improvements contribute to a strong image of your company.



## WHICH LCA DOES MEET MY COMPANIES NEEDS?

Our team holds an extensive record in in the food sector. Our LCA services comprise the following offers

**LCA BASIC**  
This initial analysis is the base of LCA and uses standardized data for the identification of potential improvements. With 20 percent expenditure one can achieve 80 percent results.

**LCA PRO**  
Based on that an indepth LCA can be conducted. This analysis delivers more detailed information on saving potentials customized to a specific product, process or company.

