

The Positive Academy #3 The Holistic View – Key Definitions





The urgent need for climate action has brought with it a whole new vocabulary to describe and support sustainable actions, targets and goals. 'Carbon neutral', 'Net Zero', 'offsetting' and 'sustainability' have become buzzwords for whenever we talk about climate action, but what do these terms really mean and how do they relate to climate impact?



Today...

#1 We will have a look at Life Cycle Assessments (LCA), Carbon Zero/Net zero, Offsetting

#2 What are our customers doing?

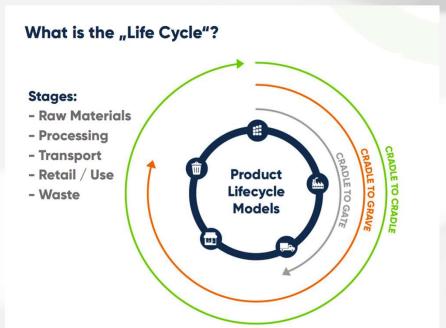
#3 What is CCL doing? – intro Corporate Social Responsibility Tea, (CSR) with Alexandra Joesten

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CCL 🔽

Life Cycle Assessment...WHAT?

1. Life Cycle Stages



2. Life Cycle Inventory

→ EMISSIONS

← RESOURCES

3. Life Cycle Impact Assessment

Global Warming

Water Consumption

Eutrophication

Acidification

...







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 6 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



Interpretation

WHAT DOES ALL OF THIS MEAN?

How high are our emissions?

How do our products compare? Can we improve them?



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.



A Life Cycle Assessment (LCA) is defined as the systematic analysis of the potential environmental impacts of products or services during their entire life cycle



Carbon Neutral vs Net Zero – what's the difference?

In a carbon neutral organization there is a commitment to evaluate the CO2 emissions produced. This is coupled with finding ways to reduce those emissions and with compensating for these by reducing emissions elsewhere, or by removing an equal amount of CO2 from the atmosphere.

This balancing practice is known as carbon offsetting and could involve planting new trees or investing in renewable energy, or with for example bioenergy carbon capture and storage (BECCS).

Net zero is all about 'balancing' or cancelling out any carbon we produce. We reach net zero when the amount of greenhouse gas we produce is no more than the amount taken away. Zero carbon concerns the emissions produced from a product or service – it means no carbon is given off at all.

"Net Zero is considered the gold standard for corporate climate action."

Net Zero on the other hand means that a company reduces its absolute emissions across its whole supply chain, in order to support the target to limit global temperature increases to 1.5 degrees Celsius, as agreed in the <u>2015 Paris climate</u> summit.

The Science Based Targets initiative (SBTi), a partnership between CDP, the United Nations Global Compact, World Resources Institute and the World Wide Fund for Nature, has set out the world's first Net Zero standard, providing companies with a framework and tools to effectively implement the Net Zero target.



Race to Net Zero: What are our customers doing?

HEINEKEN AIMS TO BE CARBON NEUTRAL IN PRODUCTION BY 2030 AND FULL VALUE CHAIN BY 2040

15 April 2021



HEINEKEN has launched the "Packaging the Future" programme aimed at accelerating the carbon transition of its top 50 suppliers.

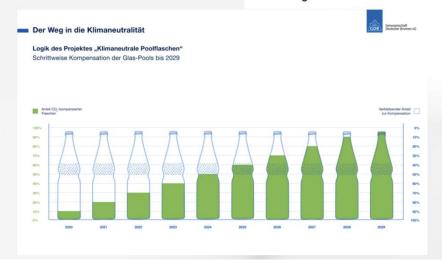


Pepsico doubles down on climate goal and pledges net-zero emissions by 2040

14-01-2021



COCA-COLA HBC COMMITS TO NET ZERO EMISSIONS BY 2040





The Sustainable Product Family can Contribute...





Impact of Beverage Packaging

A Comparison

	PET Water Bottle	Aluminium Can	Beverage Carton	Glass Bottle	PET Soda Bottle
Average container	8.3	19.7	21.8	300.6	22.2
weight	grams	grams	grams	grams	grams
Greenhouse gas	50	155	75	383	141
emissions	tons CO₂ eq.	tons CO₂ eq.	tons CO₂ eq.	tons CO₂ eq.	tons CO₂ eq.
Fossil fuel use	958	1,342	1,056	4,320	2,639
	GJ consumed*	GJ consumed*	GJ consumed*	GJ consumed*	GJ consumed*
Wateruse	4.6	7.5	13.7	28.9	12.5
	million gallons	million gallons	million gallons	million gallons	million gallons

Source: Life Cycle Assessment for the International Bottled Water Association by Trayak (2021) Weights are for individual 16.9 oz containers. Other values represent 1 million 16.9 oz containers each.

* Gigajoule consumed = total quantity of fossil fuel consumed throughout the life cycle



Offsetting – as a solution to reduce the footprint

A carbon offset broadly refers to a reduction in GHG emissions – or an increase in carbon storage (e.g., through land restoration or the planting of trees) – that is used to compensate for emissions that occur elsewhere.

Carbon Offsetting is important because it allows people to make a positive contribution to the environment when their emissions can't be avoided. In addition, the increased funding these causes receive can change lives, bringing economic, social and health improvements to whole communities.



Coming Up Next:

Sustainability

#1 Explained: Our Sustainable Product Family

May 5, 2pm CET

#2 Update: Recycling Technologies and

Legislation May 19, 2pm CET

#3 The Holistic View: Material LCA's, Carbon Net

Zero and Emission Targets June 10, 2pm CET

#4 Sustainability Trends July 14, 2pm CET

Marketing

#1 Marketing Toolbox Explained June 24, 2pm CET

Basics

#1 Basics: Inks and Adhesives tbd

#2 Basics: Printing Technologies tbd

#3 Basics: Materials - Plastics

Explained the





Thank you very much!

