



EPEA
The Cradle of
Cradle to Cradle



thinkstep

**Welcome to a joint webinar of
EPEA GmbH and thinkstep AG**



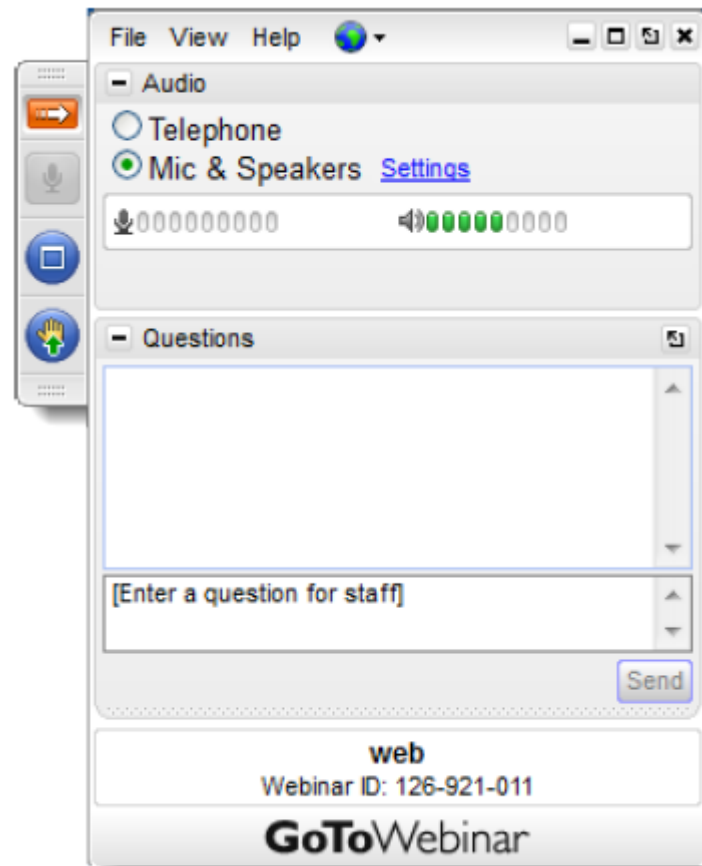
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We will start in 2 minutes!

**Welcome to a joint webinar of
EPEA GmbH and thinkstep AG**

Audio options

Questions



Send



Prof. Michael Braungart

Founder & CEO
EPEA GmbH



Carsten Haeling

Senior C2C consultant
EPEA GmbH



Dr. Martijn Gipmans

Team Lead Chemicals
thinkstep AG

From Cradle to Cradle Life Cycle Assessment





WHAT IS CRADLE TO CRADLE ?

Mindset



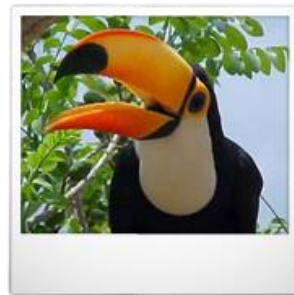
Cradle to Cradle® Paradigm – 3 Principles



Nutrients are nutrients



Use of renewable energy



Celebrating diversity

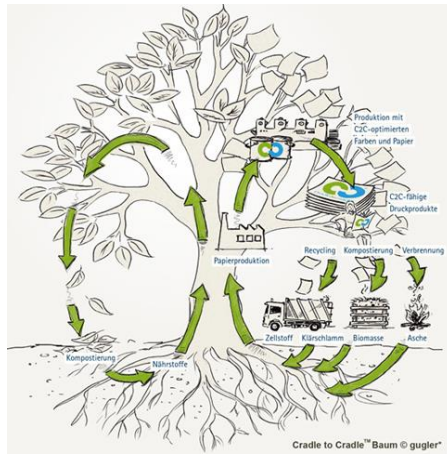
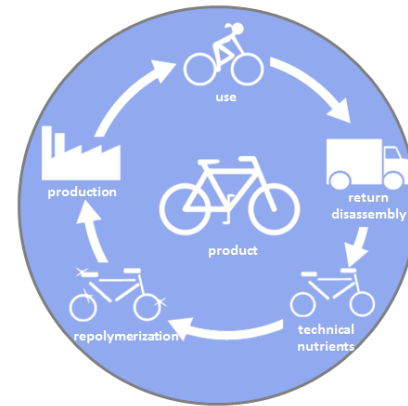
Developing beneficial elements



Biological & Technical Nutrients



Product examples

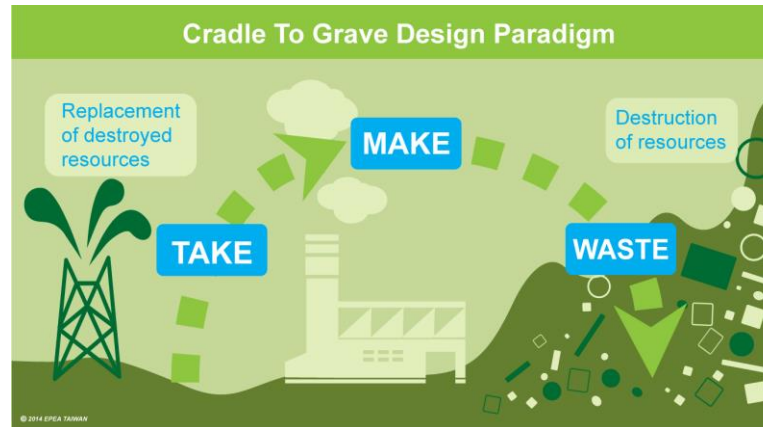


ECOVER

gugler*
brand · digital · print

Herman Miller

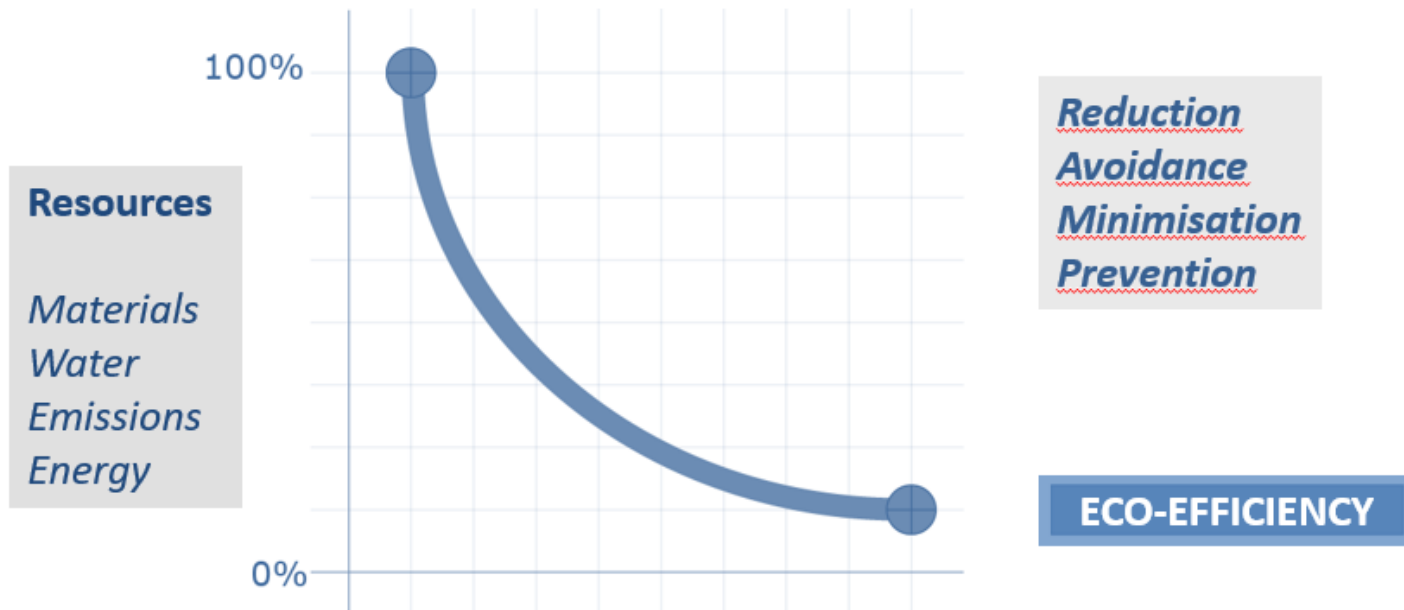
daas
baksteen



DIFFERENCE BETWEEN CRADLE TO CRADLE AND CRADLE TO GRAVE APPROACH

CRADLE TO GRAVE

TARGET IS ZERO HARMFULNESS



Efficiency Thinking



How do you get more
out of the same resources?

Accenture helps leading companies increase performance without increasing costs. By optimising supply chains to enhance productivity. By using predictive analytics that drive growth through insights. By applying outsourcing not only as a way to save money but also as a way to make it. Talk to us and find out all the ways our capabilities can help you make the most of yours.

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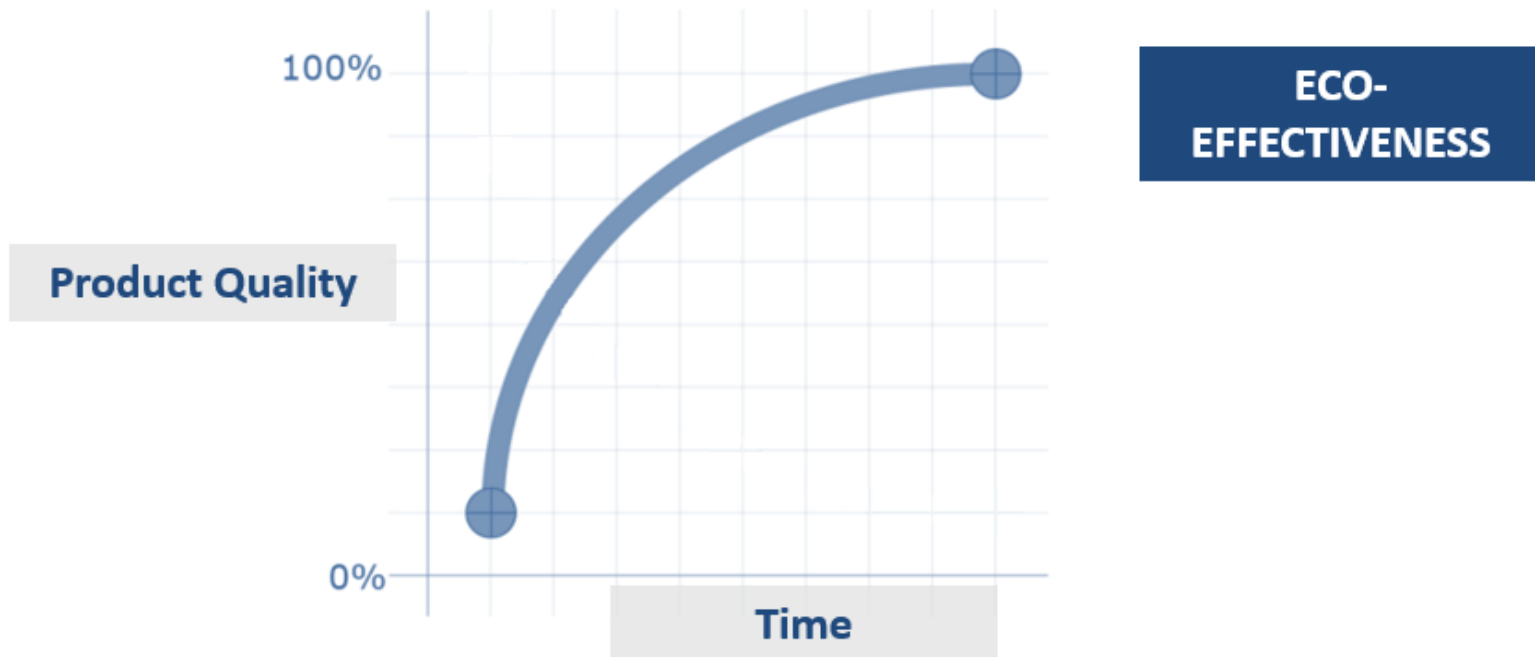
Efficiency Thinking

CO₂ NEUTRAL?

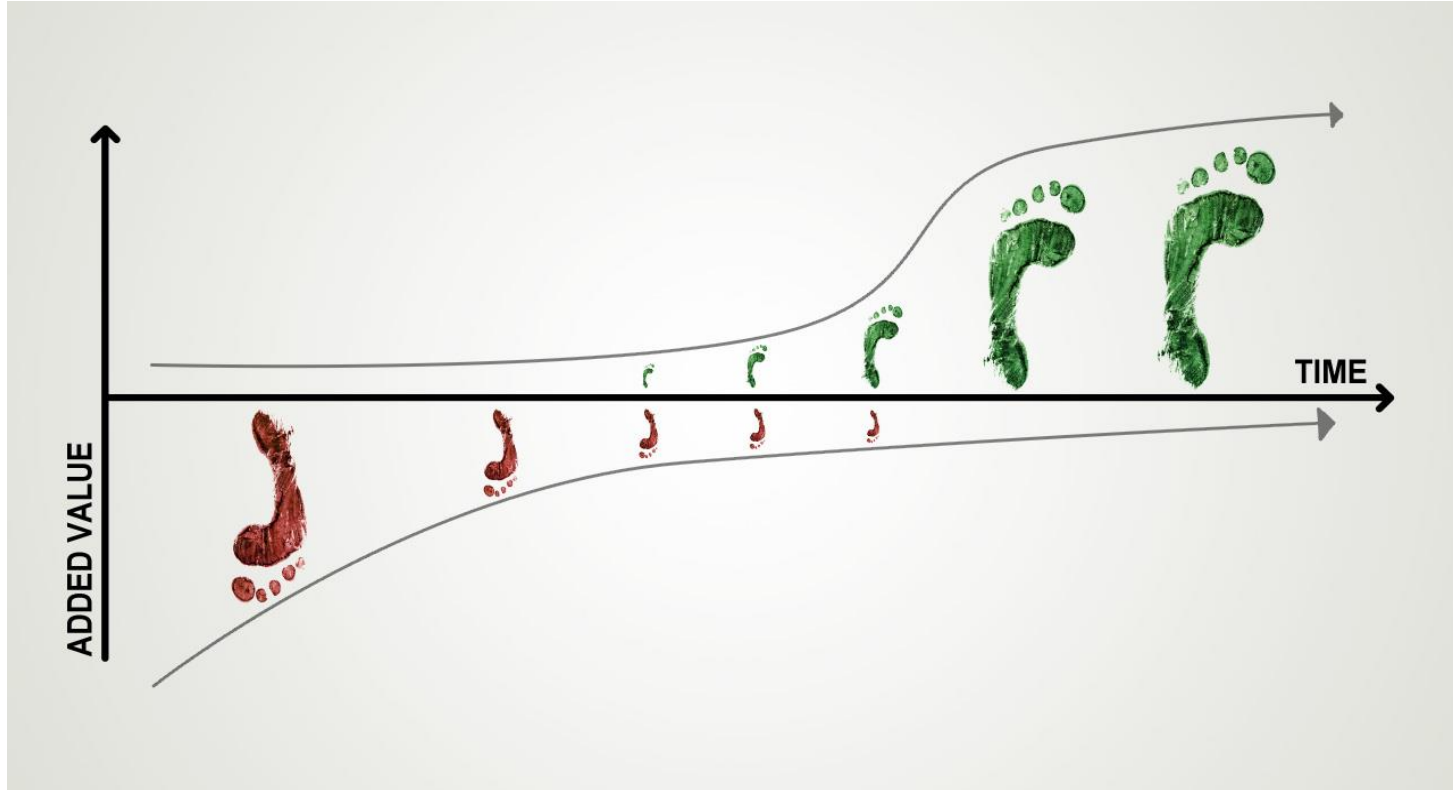


CRADLE TO CRADLE®

ALL-ENCOMPASSING QUALITY AND USEFULNESS



Eco-effectiveness & Eco-efficiency



EPEA - The Cradle of Cradle to Cradle



Founded 1987 by Professor Dr. Michael Braungart

International consulting- and research institute

Head office Hamburg

About 22 offices and representatives on four continents

interdisciplinary and international team of scientists and engineers

EPEA Worldwide



EPEA Brazil



EPEA Netherlands



EPEA France



EPEA Switzerland



EPEA Taiwan



EPEA Turkey



Representatives

<http://epea.com/en/epea-international-offices/representatives>

EPEA Offerings



COMMUNICATION

- Cradlebility™ Report
- Quality Statement



ANALYSIS

- C2C® Quickscan
- C2C® Material Assessment
- Feasibility Study



GOAL SETTING

- Strategy Development
- Roadmaps



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The Cradle of
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OPTIMIZATION

- C2C® Consulting
- System and Product Innovation
- Workshops & Trainings

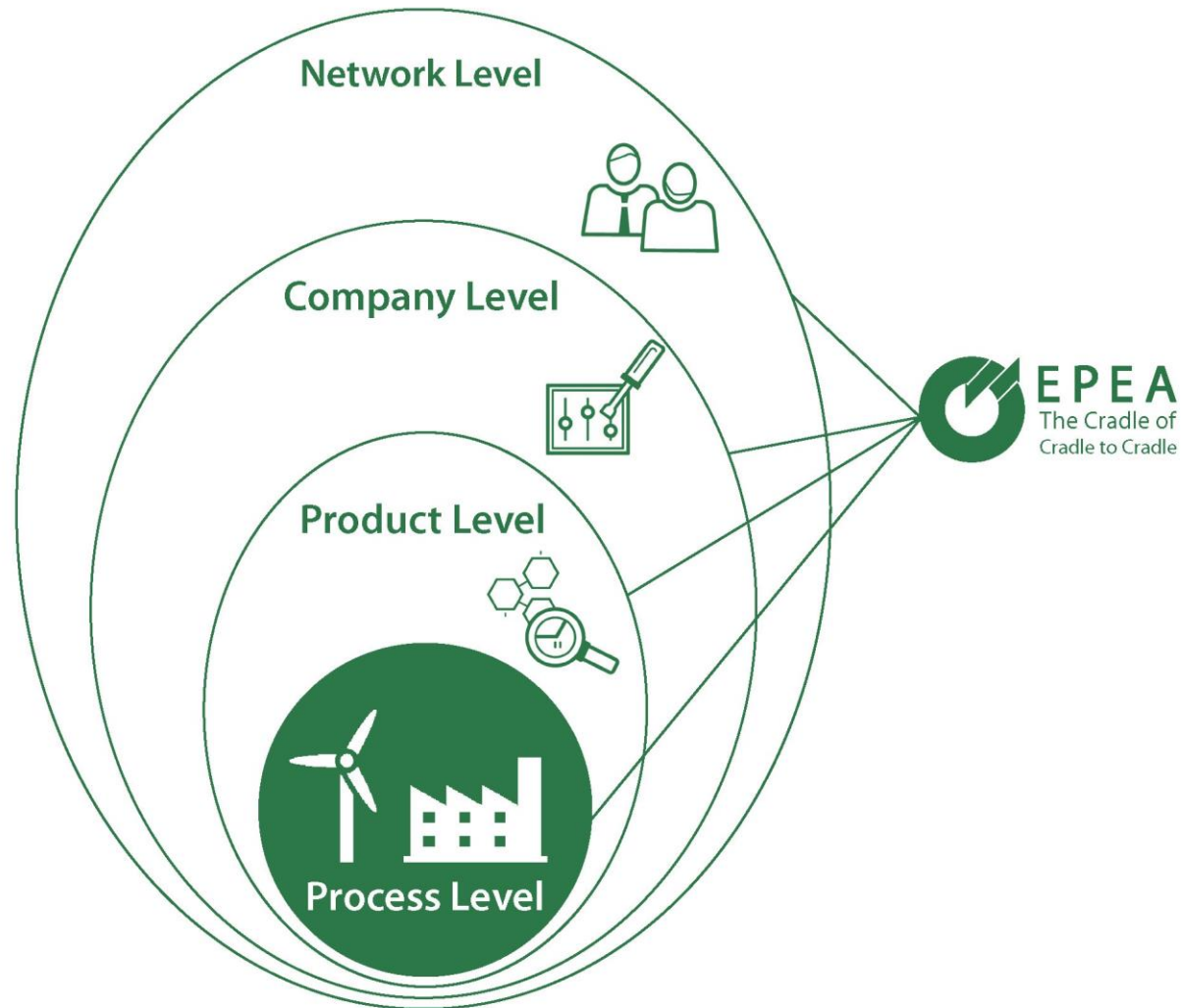


ACCREDITATION

- C2C Certified™
- Material Passports

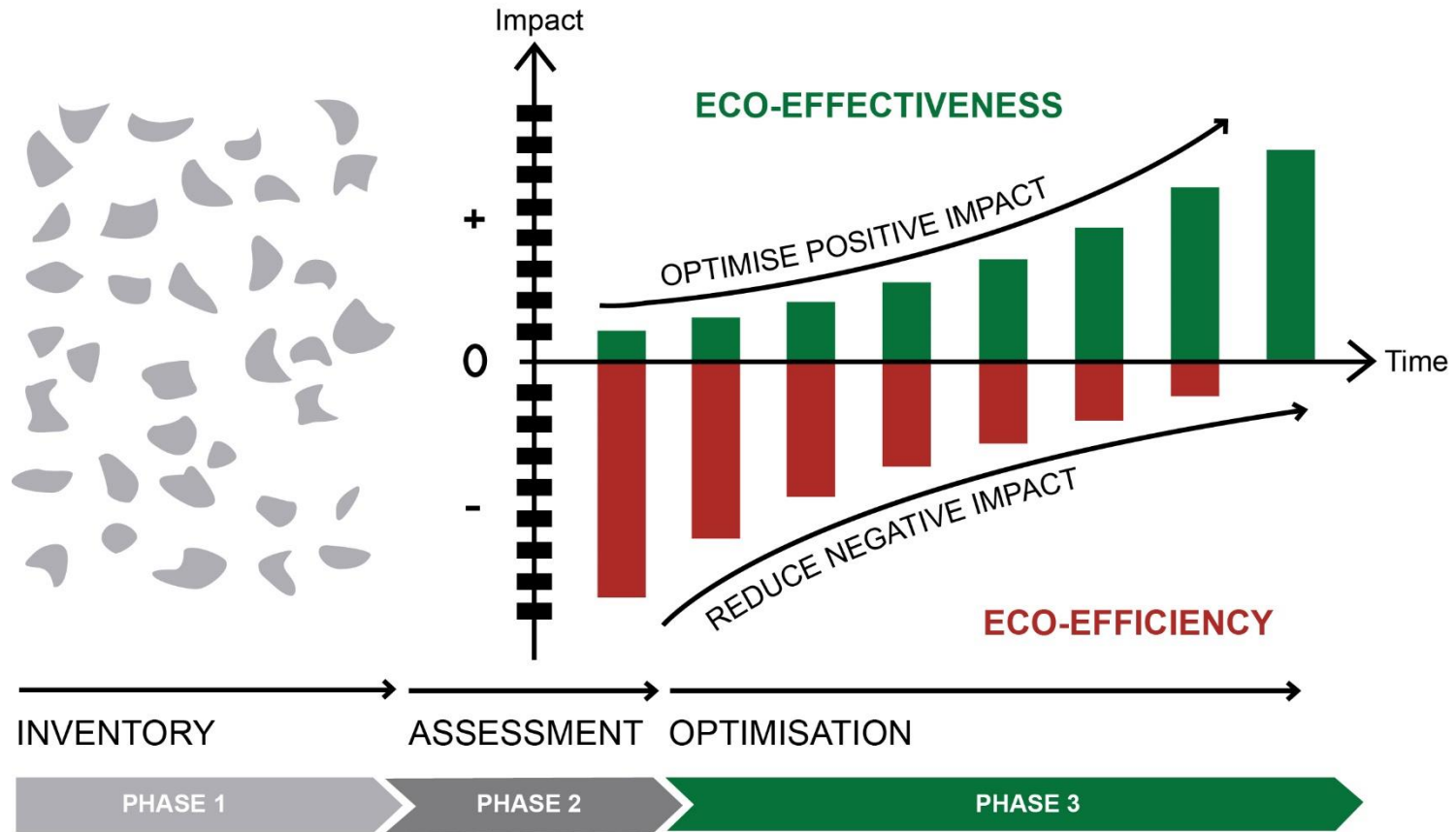
Towards a business transformation

The implementation of Cradle to Cradle needs to take place on several levels

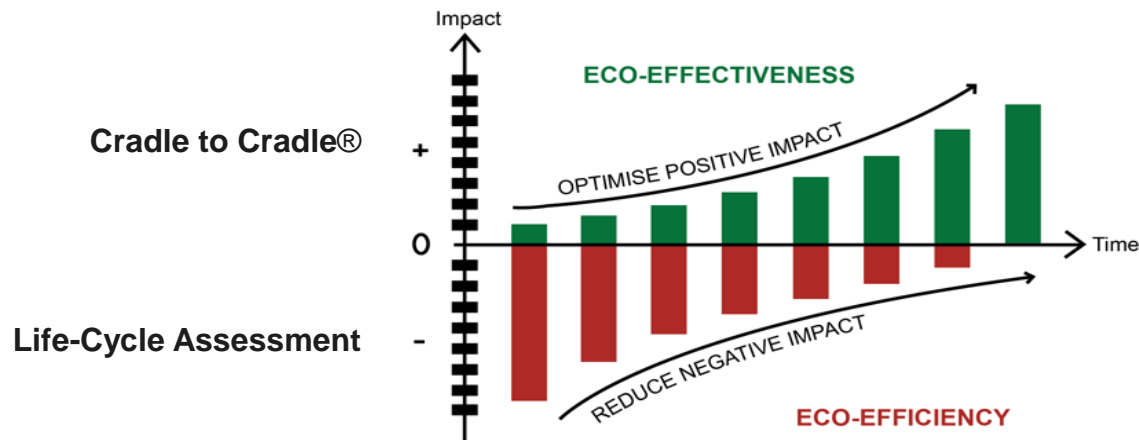


Cradle to Cradle® Design process

Cradle to Cradle® DESIGN PROCESS



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- Apply a product innovation concept that incorporates **true design for circularity**.
- **Avoid shifting of burdens** between and across life-cycle or within supply chain.
- Take a stronger precautionary approach to material and substance compliance – **design for future-proof compliance**.
- Take **energy, water and carbon** footprint of product alternatives into account.

Although our cooperation just started, we already have some valuable combined offerings that enable you to kick-start Cradle to Cradle® product innovation:

Joint Cradle to Cradle® & LCA strategy workshop

Cradle to Cradle® Banned List Screener

Cradle to Cradle® QuickScan

Combined EPD and C2C quality/material health statement

Cradle to Cradle Certified™ certification

Goals:

- familiarize with both C2C and LCA
- identify and describe opportunities and synergies for integrating Cradle to Cradle and LCA approaches at company and/or product level.
- identify new roads for product innovation

Dates:

Correction: June 19!

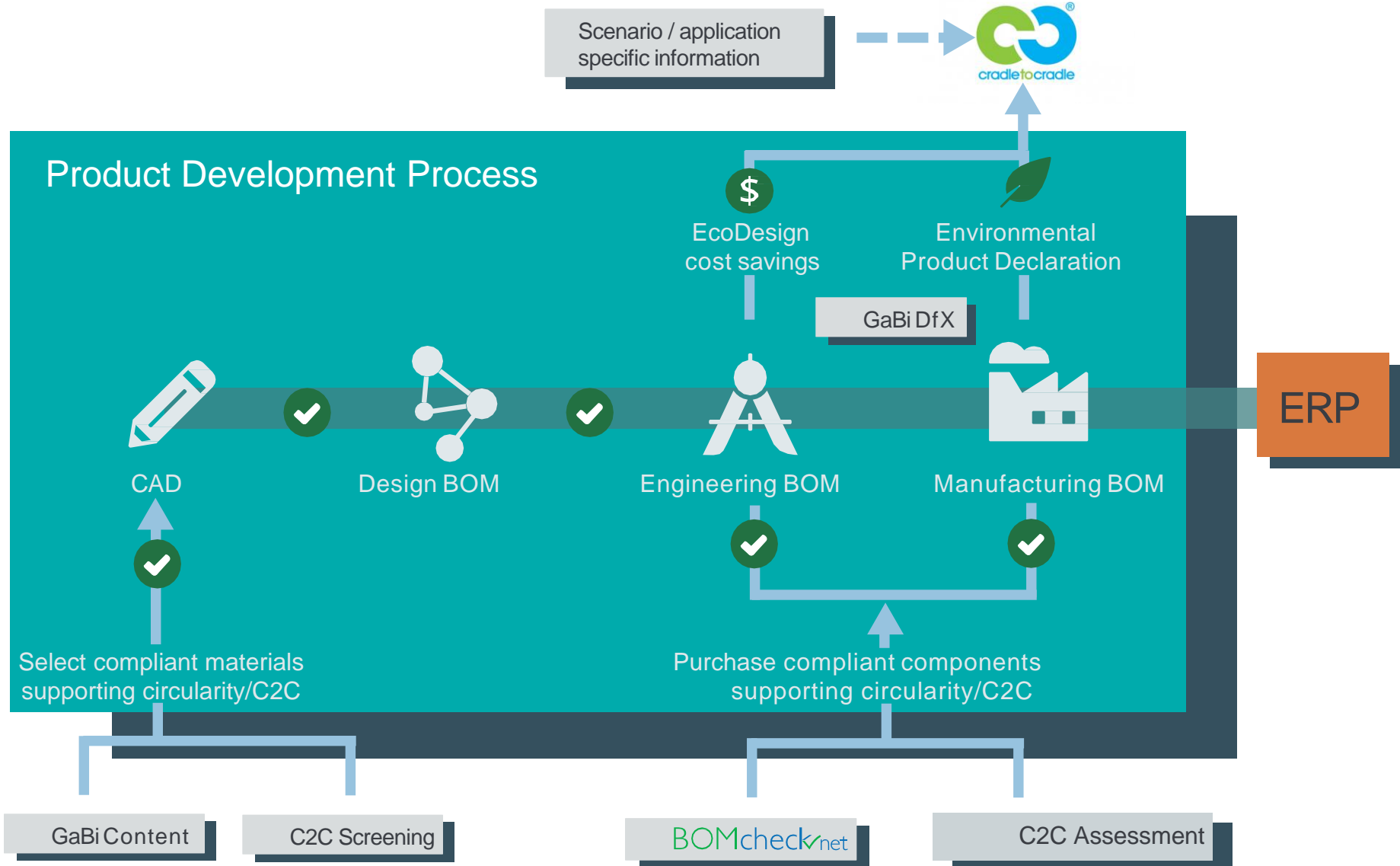
- Berlin, ~~June 20~~
- Copenhagen, June 27

Details:

- 1 EPEA & 1 thinkstep consultant
- € 750,- / participant



Design 4 Compliance & Circularity



C2C Banned List Screener



thinkstep

Grading

Grade a BOM

Rule Sets for grading:
Banned List of Chemicals for Biological Nutrients v3.1, Banned L

Select Current

Upload BOM:
Upload BOM for grading. Browse ...

Select and grade sample BOM:
Select sample BOM for grading.

Grade

Grading Result

Bill Of Materials Detailed Results

Generate PDF Report

Graded At: Mai 15, 2018 10:50

Level	Name	Banned List of Chemicals for Technical Nutrients v3.1	Banned List of Chemicals for Biological Nutrients v3.1
	Sample Product	Fail	Fail
	Sample Part 1 [B31]	Pass	Pass
	Sample Part 2 [B18]	Fail	Fail

Part Detail

Part	Banned List of Chemicals for Technical Nutrients v3.1	Banned List of Chemicals for Biological Nutrients v3.1
Sample Part 2 [B18]	Fail	Fail
25 g Polychloroprene (9010-98-4)	Fail	Fail
31 g ethyl acetate (141-78-6)	Pass	Pass
17.5 g Naphtha (petroleum), hydrotreated light (64742-49-0)	Pass	Pass
17.5 g butanone (78-93-3)	Pass	Pass
7 g Naphtha (petroleum), hydrotreated light (64742-49-0)	Pass	Pass
1 g Rosin (8050-09-7)	Pass	Pass
1 g zinc oxide (1314-13-2)	Pass	Pass

Report number: 180515-20567

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C2C Banned Lists of Chemicals Declaration

Product name Sample Product

I hereby certify that all provided information is truthful and complete, and all undisclosed ingredients are also compliant with the Cradle to Cradle Certified Product Standard v 3.1, banned lists of chemicals.

Date: 15.05.2018

Signature

Overview

This report documents the compliance of the Bill of Materials/substances list used as an input against the Cradle to Cradle Certified Product Standard v 3.1, banned lists of chemicals. This does not cover a full Material Health assessment of the chemicals.

Regulations	
Banned List of Chemicals for Technical Nutrients v3.1	
Banned List of Chemicals for Biological Nutrients v3.1	

Substance	Worst Result
(68131-74-8)	Pass
(1317-65-3)	Pass
(2002-09-7)	Pass

First example on scaling C2C through software:
checking C2C product certification feasibility through web-based application.

Work jointly with the two market-leaders: EPEA - the cradle of Cradle to Cradle and thinkstep – the no. 1 market leader in EPD solutions worldwide.

EPD

declare the product life cycle's environmental profile in a standardized format (ISO 14025)

provide quantitative information on relevant environmental impacts (e.g. raw material, energy use and efficiency, emissions, waste generation)

used as a data source in full building Life Cycle Assessment studies

asked for by green building certification bodies



Cradle to Cradle

design products to the principles of an ideal circular economy

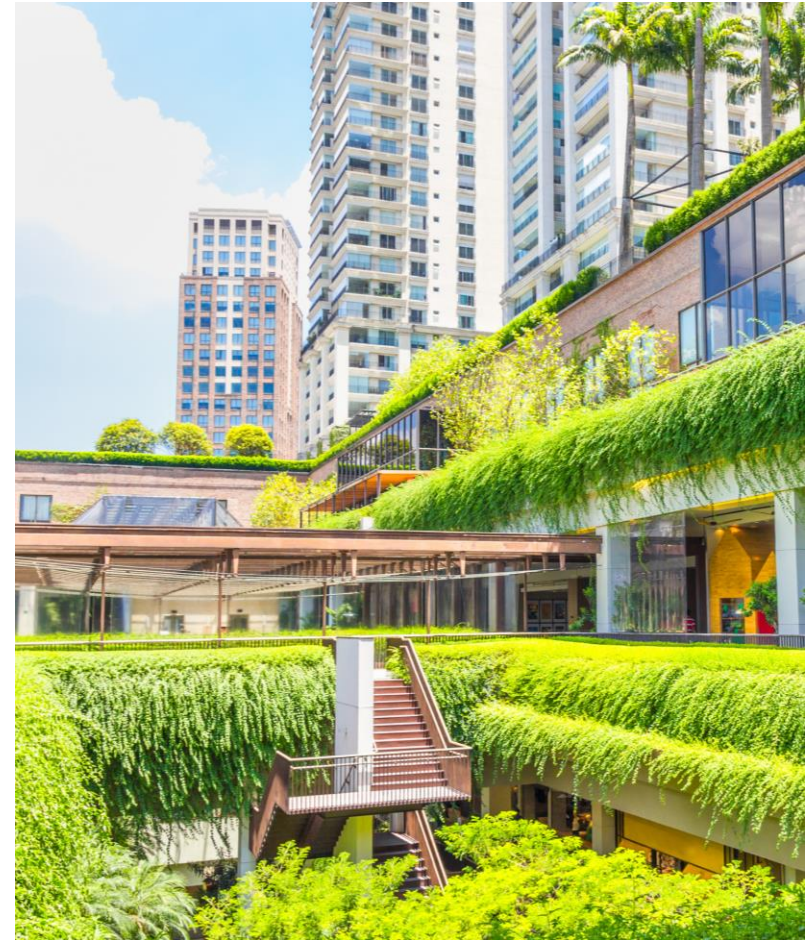
set goals for renewable energy, clean process water and improved social responsibility

assess Material Health and Material Reutilization potential of a product

increasingly used as requirement for buildings and building materials

Compile your EPD and Cradle to Cradle® quality statement in one project!

- ✓ Have one point of contact for both objectives
- ✓ Joint data collection – save time and assure consistency
- ✓ Benefit from automation-focused software solutions – let us discuss your needs
- ✓ Be prepared for green building projects
- ✓ Learn from both perspectives and step into product optimization with us





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**Together,
we can.**



thinkstep

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