

## CIRCULARITY COMPASS





#### BENEFITS

- Visualization of Resource
  Flows
- Identifying Inefficiencies and Waste
- Supporting Circular Product Design
- · Optimizing Supply Chains
- Aligning Sustainability
  Goals



- Initial Workshop: 1 2 days
- Pilot Project: several weeks to 2-3 months
- Full Integration: Ongoing



Project link



Tool link

It is a practical tool that helps businesses understand and optimize their resource flows in order to promote a circular economy. It was developed as part of the European project "EIT Climate-KIC," based on scientific research. Its goal is to assist businesses in shifting from the traditionally linear economic model, also known as "Take-Make-Dispose," to a circular model focused on "Regenerate and Restore."

## The CradleALP project



Fossil raw materials and toxic substances are widely used in production processes in the chemical, plastics, and forestry sectors. The Cradle-Alp project focusses on replacing chemical, fossil or unsustainable materials with more circular, sustainable and biodegradable ones.



Preparation &

 Define scope (product, unit, sector)

Assesment

- Map current resource use, waste and hotspots
- Collect baseline data



- Map resource flows (Particles Parts Products)
- Visualize inefficiencies and identify circular loops
- Generate design and business model ideas

# Pilot Testing

- Test selected initiatives in controlled settings
- Monitor outcomes and iterate based on feedback



- Involve key functions and external actors
- Gather diverse input for system understanding
- Build internal alignment



- Translate insights into actionable circular strategies
- Align with business goals and compliance needs
- Prioritize based on impact and feasibility

Rollout & Continuous Improvement

Scale successful pilots

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## LIFE CYCLE ASSESSMENT





- Full environmental transparency
- Improved decisionmaking
- · Regulatory readiness
- Credible sustainability claims
- Cost & efficiency optimization



 Two to six months (depending on the complexity)



Project link



Tool link

It is a method used to measure the environmental impact of a product, service or process, applicable from the very beginning of the process (raw materials) to the end (disposal or recycling). This approach helps companies understand how their products actually affect the environment at each state of process. Its goal is to identify where the biggest environmental impacts occur and how they can be improved.

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#### Define Goal & Scope

- Set purpose (e.g. design improvement)
- Define system boundaries
- Determine level of detail and target audience

## Inventory Data Collection

- Collect quantitive data on materials, energy, emissions, waste
- Use interviews, questionnaires, flow diagrams
- Ensure completeness of data

## Interpretation & Action

- Identify hotspots and improvement potential
- Validate and document findings
- Integrate results into strategy, compliance, and communication



- Identify internal and external stakeholders
- Choose suitable LCA software
- Gather initial product/ service data



- Classify and quantify environmental impacts
- Map results to standard impact categories
- Use ISO-compliant methods for comparability

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Cradle-ALP





- Interdisciplinary teams from different departments
- Stakeholders dealing with:
- 1. Conflicting interests
- 2.Cross-functional collaboration challenges



#### BENEFITS

- Inclusive dialogue
- Improved decisionmaking
- Regulatory readiness
- Credible sustainabilit claims
- Cost & efficiency optimization



Two to six months (depending on the complexity)



Project link



Tool link

It's a hand-on facilitation method designed to foster creative thinking, inclusive dialogue, and deeper problem-solving within teams and organizations. Lego bricks serve as a universal language, enabling participants to visualize ideas, emotions, and challenges in a tangible way. The tool supports meaningful conversations and helps unlock insights that often remain hidden in conventional meeting formats.

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Cradle-ALP

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# Challenge

- Facilitator poses a specific question or problem to the gorup
- Challange is predefined in coordination with the company



- Participants share their models to the group
- Group members are encouraged to ask questions for clarification and deeper insights

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### Co-create

- Build a shared model
- Combine critical elements from individual models



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#### TARGET GROUP

- Companies starting or advancing in Circular Economy / Cradle to Cradle transformation
- Manufacturing firms & product development teams
- Sustainability officers & corporate strategy departments
- SMEs seeking an initial diagnostic tool



#### BENEFITS

- Baseline Evaluation:
  Assess current state
- Benchmarking: Compare maturity with peers, standards & best practices
- Strategic Planning: Define priorities, guide investments, set actionable goals
- · Continuous Improvement



#### DURATION

- Depends on company size, & structure
- Multi-stage process
- Dividable over several
   workshops
- Several weeks or months



Project link



Tool link

Maturity Assessment Tools are used to evaluate how advanced a company is in a specific area, such as sustainability, circular economy, or Cradle to Cradle practices. It measures progress, identifies readiness for further steps, and offers a structured way to reflect on internal processes, strategies, and capabilities. These tools help companies understand how well circular principles are already integrated and where there's still room for improvement.

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Cradle-ALP

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# Circular Transition

- Measurement of material flows (recycling rates, material reuse, waste reduction)
- For medium or high maturity levels
- Standardized data



- Assessment of circularity potential across supply chains and departments
- For companies seeking a strategic overview
- Diagnostic tool for crossdepartmental improvement

#### C2C Framework & Maturity Model

- Evaluation of processes and material based on core C2C principles
- For companies aiming for deep transformation
- Support for embedding C2C into business processes

Circular Economy– Focused

Circular Economy-Focused

> Circular Economy-Focused

Cradle to Cradle Focused

Focused

Cradle to

Cradle to Cradle Focused



- Model with roadmap for circular development
- For entry-level companies
- Strategic guidance for starting circular transformation



- Product verification based on environmental and social C2C criteria
- For product developers & sustainable brand managers
- Benchmark for excellence in product design and sustainability

#### Cradle to Cradle Evaluation Matrix

 Comparison and assessment alignment with C2C principles

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#### BENEFITS

- · Future-proof your business
- Differentiate your brand
- · Increase operational efficiency
- Strengthen stakeholder trust
- · Unlock new revenue streams
- Drive meaningful innovation



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Project link



Tool link

Traditional business models often approach value creation from a one-dimensional, financial perspective. The Sustainable Business Model Canvas (SBMC) expands this view by integrating ecological and social sustainability into your business model – in a structured, practical, and actionable way.

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#### **BENEFITS**

- Clear assessment of current (sustainability) performance
- Tailored guidance for designing circular business models
- · Improved ressource efficiency
- Risk reduction
- New innovation opportunities





Project link



Tool link

The Quickscan Circular Business Model Tool is a strategic framework that helps organizations evaluate and evolve their business models toward circularity and sustainability. It offers a two-phase approach:

- 1. Assessment of the current model
- 2. Guided development of a future-proof circular model

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- Conduct the Assessment
- Use cross-functional teams
- Analyze the radar results with leaders





- Set priorities
- Choose high-impact areas
  - short-term
  - o long-term

## Design

- Align R-strategies (Refuse, Rethink, Reduce, Reuse, ..)
- Organizational structure
- Revenue logic





- Digital systems
- Logistics
- Workforce competencies



- Small Scale (single procut line or region)
- Track and measure
- Review KPIs



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