

Cradle to Cradle® Roadmaps

1. General Description

The Cradle to Cradle roadmap describes in graphical or textual terms the progress made on a certain topic towards one predefined Cradle to Cradle goal.

Figure 1 shows a general representation of the roadmap. The X-axis describes the passing of time. The Y-axis describes the beneficial effect in each point in time. The beneficial effect can be measurable on a scale of 1-100%, but can also exceed 100 % e.g. if a building produces more C2C energy than it uses.

Those measurements are described by milestones along the roadmap. For example, the roadmap can represent the progress towards *Cradle to Cradle*® energy in a production plant. In 2011 a milestone of 30% *Cradle to Cradle*® energy will be reached. In 2012 40% etc., until the goal of 110% at 2020 is reached. Milestones can also represent requirements which need to be met on the way to achieving a goal, e.g. obtaining information about the composition of a product. Such goals are only semi-quantifiable and are represented schematically.

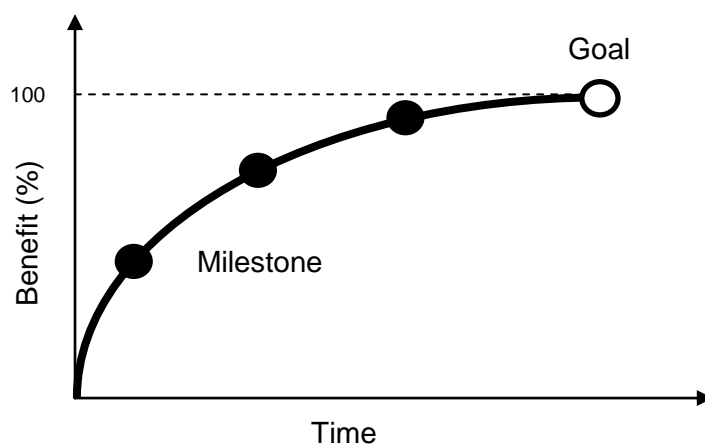


Figure 1: A Cradle to Cradle® Roadmap and its components. Basic Structure.

2. Steps to Implementing *Cradle to Cradle*® Roadmaps

2.1 Overall Planning

The following steps can be taken to implement C2C roadmaps in an organization:

1. Identification of goals.
2. Conceptualization of various types of roadmaps e.g. product, business unit, corporate.
3. Development of roadmaps by dedicated teams, including adaptation of the roadmaps and milestones so that they fit in with the organization's structure and existing KPIs.
4. Periodical review of progress along the roadmap, and revision of the roadmaps for future periods.

To have an authentic roadmap which motivates employees, it will preferably be conceived by employees themselves, in co-operation with EPEA. This can be done by educating and inspiring personnel about *Cradle to Cradle*®, and holding a series of roadmap-design workshops. Presence and engagement of top management during the process is necessary. People need to be encouraged to think out of the box and raise seemingly wild ideas.

During the process of developing a roadmap, the following tasks and questions can be used to help enter the *Cradle to Cradle*® mindset, formulate goals and milestones, and plan the implementation of the roadmap. There are many questions to be asked, so the process should be streamlined in advance (e.g. choice of important questions for this organization):

2.2 Framework Steps

1. Inventory. First know what you have – check if you have basic information to plan.
2. *State your intentions*. What measurable goals do you want to achieve in 5-10 years to implement one or more of the *Cradle to Cradle*® principles? A good goal is one which can't be achieved today!
3. Tradition, Evolution or Revolution? Is your intention to optimize conventional sustainability or move to *Cradle to Cradle*®? Are you optimizing traditional business or transforming the business via evolution or revolution?
4. Imagineering. Crazy ideas. In a perfect world, what would this product/process be designed to do for the customer and what additional functions could it perform?

2.3 Back to the Basic Principles

- Waste = Food. Defined use. Will the product/process fit into the *Cradle to Cradle*® biosphere or technosphere, or is it a combination? If it is a combination can it be separated into biosphere/technosphere?
- Waste = Food. Defined content. Can the contents of the product/process be defined?
- Energy. Could the product/process measurably use or generate *Cradle to Cradle*® energy?
- Diversity. How could the project measurably support bio-, cultural & intellectual diversity?
- Diversity. Stakeholders. How complex is the stakeholder structure? Can partnerships be formed with these parties? Are some of them already part of the *Cradle to Cradle*® community?

2.4 Existing Barriers and Tools

- Regulations. Are there legislative barriers to improving the product/process? How could those be overcome?

- Research & Development. What technologies would be required to improve the product/process and does your organization have those?
- Internal Networks. Do you know if similar approaches or products done in your organization or does this still have to be investigated? Could the project link with other projects to achieve economy of scale or data consolidation?

2.5 Details of the Roadmap

- Which steps have already been taken?
- What are the next steps that have to be taken?
- What is the timeframe for the roadmap? For the milestones?
- For each step define: timeframe, who is involved, needs and gaps, KPIs

2.6 Implementation of the Roadmap

- How will next steps be organized?
- What kind of tools can be developed to enable good follow-up?
- How can the roadmap be made visible, internally and externally?
- How can the roadmap be accessible for work to all those who are using it?