

When waste becomes food

Albin Kaelin, CEO EPEA Switzerland, explains the concept of cradle to cradle

BY MATTHIAS MUELLER

An important driver for innovation is sustainability, and to date the most radical concept has come from German chemist Michael Braungart and American architect William McDonough in their book *Cradle to cradle: Remaking the way we make things*. Their manifesto of ecologically intelligent design has been taken up by Swiss businessman Albin Kaelin. The former CEO of Rohner Textil AG is in the forefront of implementing cradle-to-cradle thinking as CEO of EPEA Switzerland – a company dedicated to radical innovation.

What is cradle to cradle?

Albin Kaelin: It's a new way of thinking. We have to define products in a way that they become food for other organisms so that we can close a cycle. We don't talk about recycling. We talk about keeping raw materials in a closed loop. The major problem we have to face in the future is that our resources are running out. Cradle to cradle is the solution in maintaining resources for the future at a quality that remains the same over many lifecycles.

What is your personal story with cradle to cradle?

My first experience was with Rohner Textiles. As managing director, I was the first who really believed that cradle to cradle is possible. The approach of 'waste equals food' showed us new opportunities. We

created Climatex®, a 100% biodegradable commercial fabric. It was a huge commercial success: the total output was increased by 30%. So what we have to do now is to change our paradigm of how we work in industry. I come from industry and this is my ambition: to see how we can change the way industry works in the future.

You compare cradle to cradle to concepts such as cleantech, bio energy or reducing consumption and the use of resources: how do these concepts differ?

I think the major difference is that all the other concepts are based on linear thinking. Cradle to cradle is thinking in cycles. The other solutions are end of pipe solutions; with cradle to cradle, there is no end. Cradle to cradle is not based on limits of values – so if an ingredient or a raw material is safe for a biological system or a technical system, you don't need a limit. You don't have to regulate.

Would that mean that the resources of the planet are endless?

Yes, that's exactly the point. How can we maintain them in endless cycles? The key issue is that we have to make sure that the quality remains the same. We don't like talking about recycling, which is basically down-cycling. Cradle to cradle is the real revolution: how can we change the way of producing so that materials remain

at a quality that can be used by future generations?

If I wanted to introduce cradle to cradle in a company, what sort of innovation should I expect?

We are all trained to think in a linear way, and cradle to cradle is suddenly an approach of thinking in a cycle. At the beginning, this gives all of us the impression that it is too complex. There are a lot of ambiguous situations that will occur. Once the individuals and the teams have manoeuvred to the new thinking, then suddenly it becomes clear to everyone that there are some new insights. And these new insights relate to innovations. Additionally, new knowledge acquired through the projects can be used for future projects in the company.

What are the costs of the cradle to cradle approach?

This is a complex question because it depends largely on the company and its challenges, the industry and the different cultures involved. But, generally speaking, the processes are not more expensive than others when implemented. We even have cases where the profits have dramatically increased because expensive processes become obsolete. If you look at the products out in the marketplace, most of them are sold with an added value because they are innovative.

What's the profile of a typical client of EPEA?

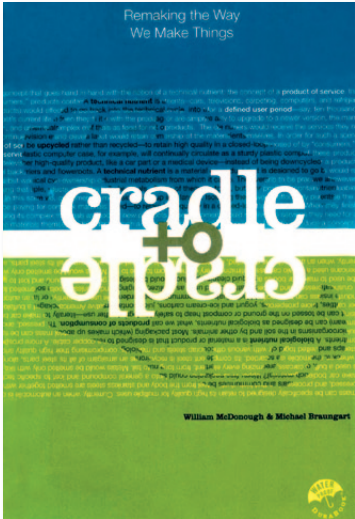
Cradle to cradle applies to all industries. This makes it very interesting because every industry segment has different issues and opportunities. And, of course, cradle to cradle deals with material flows, so materials do not stop at specific industries. We have to work together with all industries. The customers, however, have done their homework: most of the companies we work with are pioneers. They have some very specific product profiles and a unique communication culture.

What are your main goals for EPEA over the next three years?

EPEA in Hamburg is the scientific base and, as such, this will be its main focus. So far, we have products in about 80 industries. With EPEA Switzerland, we are focused on the alpine countries and the textile industry worldwide. The alpine countries are the industrial heart of Europe, so we anticipate establishing excellent examples in major industries such as textiles, construction and consumer goods.



Albin Kaelin



Cradle to Cradle