



# the man that rocks the cradle

Our profilee is not an architect or designer. He doesn't sell or market furniture. In fact, only a small percentage of his working life is spent in this market. Why then is Michael Braungart the single most influential person in the industry right now?

The answer is simple; Michael is the man behind Cradle to Cradle – the movement that is helping to redefine the way we all look at making things. His book (named, appropriately, Cradle to Cradle) is already an international bestseller, and the C2C concept is, if anything, gaining momentum, with a flood of leading manufacturers from diverse sectors jumping aboard.

No doubt you've heard or read plenty about C2C already (if not, you've clearly not been paying enough attention to this magazine), as leading manufacturers such as Orangebox, Shaw and Desso extol the virtues of this most virtuous of approaches.

Just a couple of months ago we brought you two stories from two of these fine companies, with Orangebox discussing the exciting new Ara chair – its first fully C2C product, while Desso CEO and entrepreneur extraordinaire Stef Kranendijk could not hide his enthusiasm for the concept and his admiration for Michael Braungart.

So what of the great man himself? Where does he come and where has his career path meandered?

Michael Braungart is a German chemist who advocates that humans can have a positive ecological footprint by redesigning systems which support life. A former Greenpeace activist who once lived in a tree as protest, he is now a professor of process engineering.

Founder of EPEA International Umweltforschung GmbH in Hamburg, and co-founder of MBDC McDonough Braungart Design Chemistry in Charlottesville, Virginia, Dr. Braungart is currently a professor of Process Engineering at the University of Applied Sciences in Suderburg, also serving as director of an interdisciplinary materials flow management masters program. ▶▶▶▶▶



Orangebox



Desso

▶▶▶▶▶ He has also accepted a visiting professorship at the Darden School of Business, lecturing on such topics as eco-efficiency and eco-effectiveness, Cradle to Cradle design and Intelligent Materials Pooling. After completing studies in Process Engineering in Darmstadt, Germany, Dr. Braungart went on to investigate the chemical processes of industrial production techniques with the Chemistry Department at Konstanz, Germany. He subsequently led the formation of the Chemistry Section of Greenpeace International. By the time he completed his PhD in Chemistry at the University of Hannover in 1985, he had assumed leadership of Greenpeace Chemistry.

In 1987, Michael founded the Environmental Protection Encouragement Agency (EPEA) in Hamburg. At the heart of EPEA is Cradle to Cradle Design, which creates products oriented toward a life-cycle economy.

In addition to his achievements with EPEA, Michael also serves as Scientific Manager of the Hamburg Environmental Institute, the non-profit research centre which produces the Top 50 Study. This study ranks the quality of environmentally-sound production of companies within the chemical industry.

Dr. Braungart also works together with American architect and designer William A. McDonough in their product design and development firm, McDonough Braungart Design Chemistry. He has initiated scholarly and scientific inquiry into the adverse environmental and physiological impacts of industrially-produced consumer goods.

So how does Dr. Michael Braungart describe himself? ‘I am a chemist, a chemical engineer, a molecular designer,’ he replies. It’s an answer we like. ‘I was inspired by a love of chemistry and my chemistry teacher. I needed a good reason to tell my parents that chemistry made sense for me. I studied here in London. Wherever and whenever I could learn anything, I would. I wanted to be the best chemist I could.’

For 19 years now, Michael tells us, he has been studying the levels of plasticizers and contamination in mothers’ breast milk – with some incredible results. He talks passionately, and at some length, about the subject and we soon come to see that we are indeed talking with a man of science, as opposed to a designer or ecologist.

‘Nature does not make stuff which accumulates in biological systems,’ he concludes. ‘Nature is not stupid. This is the principle that needs to be applied to products. Basically, we – me and my colleagues – are molecular designers. We help to develop stuff to be good for the biosphere. Not stuff that’s less bad – too many less bad things is still not good. That is like telling someone to only hit their child three times rather than five times! You cannot protect by destroying less.’

We move on to talk about Cradle to Cradle, and Michael tells us a little about the background to his and EPEA’s work. ‘The European Union first did a five years’ test programme. Then they did some monitoring. Then they did five years of toxicological debate. Then they did five years of economic studies. This was 2002. Then it reached the political arena and it took four years of legislation before the European Union banned pvc plasticizers from children’s toys under the age of three. This is about 1.5% of the real outtake. The real outtake is from carpets or armrests or flooring or wallpaper.

‘Today we know about these plasticizers. We know what they can do to fertility. If you take a town like this, already something like 20% of men who want to have children cannot have children.

‘This is why we must first look at what is in a product. Children’s obesity, diabetes – these are things that can be linked back to pvc plasticizers.’▶▶▶▶▶



▶▶▶▶▶ Shocking stuff. But Michael is quick to move the conversation on to the positives of Cradle to Cradle and, in particular, the realistic benefits for a manufacturer looking to move their business forward. ‘The process of our work is different for different industries,’ he says. ‘Sometimes it’s a little difficult because top management needs to look to be effective. There’s a difference between efficiency and effectiveness. Efficiency means doing things right. When you do the wrong things right, they are perfectly wrong. An un-efficient Neo-Nazi is better than an efficient one. I explained to George Bush about eco-efficiency and being ‘less bad’. I proposed that if he ran the electric chairs in Texas on windmill energy, they are still electric chairs! He is a very funny person, a nice guy – but he was in the wrong place.

‘This industry has to be at the forefront of this process though. If you look at the air quality inside a building, it is 3–8 times worse than the air quality outside. If you try to minimise energy and you seal the building, it will make it even worse. Top management often cannot see this.’

Orangebox MD Mino Vernaschi is not afraid of agreeing with this point, having formed a relationship with Michael Braungart through the passionate belief of his own younger team, who were quick to understand and eager to digest the Cradle to Cradle ideology. Mino also admits that, through the development of the Ara chair (Orangebox’s first C2C development), this philosophy has positively impacted on the company as a whole, with everybody buying into the idea of wanting to make a change.

Shaw, similarly, has carpet collections that are fully Cradle to Cradle and BRE certified, using Ecowerx technology and EcoSolution Q face fibre. Last year’s NeoCon saw the introduction of the Essay of Clues collection; developed with William



Shaw

McDonough, Michael Braungart’s close collaborator in the Cradle to Cradle protocol.

‘We have helped increase their profit by 40% in the last year,’ Michael says of another carpet manufacturer, Desso. ‘Stef (Kranendijk, CEO Desso) doesn’t see this as an ethical thing – the same as Mino and Orangebox. They understand it is a quality thing. In times of crisis, like we are seeing right now, ethics go out of the window.

‘People say that they want their (emissions) output to be zero. I tell them to shut down their factory right now! I want to be important, I want to be beneficial...but zero?’

Our very own chemical brother is realistic to the last. Let’s hope more companies follow suit and realise that by benefiting the wider world, they will be benefiting themselves ●