

# Circularity for Educators BLOCK III Circularity in Architecture and the Built Sciences Practitioners Interview Series

#### Mirjam Schmüll Co-founder Brokkenmákers

My name is Mirjam Schmüll. I'm one of the founders of Brokkenmákers. I'm also a circular expert and we are actually in our office at the moment.

Brokkenmákers is an enabler for the circular economy. We're working in a building environment and we always choose the right scale to make an impact. One thing we always do, we work with other companies. That's the only way to reach our goal. We look for the right people to find the right answer to the question.

#### What drew you to circularity?

As long as I can remember, I'm always aware of the negative impact we have on our environment. I grew up close to the beach and I was always overwhelmed by the greatness of nature. But on the other hand, I saw, after every sunny day, all the rubbish on the beach.

Now, where I can change that from the rubbish that we left on the beach for future generations into a call to action was when I started working at one of the founders of Cradle to Cradle, William McDonough + Partners. They gave me the tools to really reuse those materials, but also start thinking about a new way of designing. Designing for disassembly, designing for reuse, designing for circularity, as we call that nowadays.

## Can you discuss one of your projects in terms of circularity?

I would love to tell you more about *Gebouwenmarktplaats*. *Gebouwenmarktplaats* is a marketplace for buildings that are going to be dismantled. It's our own initiative. Why we think it's circular, but also why it's very important to do this, is because if we don't want to exceed the 1.7 degrees global warming, we need to reduce carbon.

If we want to make an impact, we need to reuse the big components, the big construction parts, and the skin. To explain this a little bit more how we do that is, for example, if you have a big real estate company, it could be a university also or a municipality, they have a catalogue of buildings that are going to be dismantled, but they've also got a catalogue of buildings that are going to be built. Normally, if you dismantle buildings, you give to the market all the materials, and for the buildings that are going to be built, you buy it back.

What we do, we want to integrate it. How can we reuse the materials which are going to be dismantled for your new building? You want to see which components are going to be available, and that's actually, that are the ingredients that you're going to design your new buildings with.

Gebouwenmarktplaats, actually, is more a movement, a movement where we want to change the way we build buildings, but also demolish buildings.

The challenges we encounter, actually there are a lot of challenges. The regulations don't fit with this new type of process, because it's a new process. If you're going to design a building, you have to start with the existing environment, existing buildings, and buildings which are not demolished, but are going to be demolished. The knowledge, how to do that, as a whole chain, there's a lack of it. So one of the challenges is that we have to work together.

The opportunities are the reduction of carbon emissions, and that's a big challenge, and the Gebouwenmarktplaats, or the way we think about this process, will help. And, of course, a new architecture that we're going to design with our built environment gives us a new toolbox, a new inspiration to create an environment for the future.

One big lesson we learned is that if we want to make big steps and reduce carbon, do and work together as a whole chain. Everybody has their own perspective, like the dismantler, the architect, developer, the constructor. We need all the knowledge from everybody to realize this.

### How does the transition towards a circular built environment challenge the role of the enabler?

In a transition towards circularity, acts for new roles. Our role in the chain is an enabler, an integrator. Actually, we look at what's missing now to reach our goal towards circularity.

What you see is that a lot of things are written on paper. We know in theory how to do it. And there are also a lot of dots who do the right things, and actually, we are the ones who are connecting the dots, bringing it from paper into reality, trying to integrate all the expertise to realize the goal.

Therefore, we start our own initiatives, and also we do projects.

Now, the first thing, which is really important, that we always have to look for the right answer to the question. And sometimes it's a new design, but sometimes we don't need an architect, we need somebody else. It's what is needed to reach our goal and to answer the question and that's always where we have to start with. Do we need a building? Or can we refuse to do anything? Because that's actually the highest level of circularity.

One thing we know for sure is that the future will look different than we can predict right now. So if you do something, if you build, if you create, if you design something, always take into account that you can adapt to future innovations, but also to changing needs. The last thing, which is really important to take into account, that with the challenges we have, the climate challenge we have, that we use our existing environment and existing buildings as a source for our future environments. So we have actually all the material banks already around us. And use that, use that for our new architecture and new future.

To make this transition happen and to stay a step forward, it's really important that every part of this chain, every architect, every dismantler, but also we, take our ownership and make new game rules to challenge this and to make our new future together.