



Tom Kloosterman

Co-founder

Blauwe Bagger

My name is Tom. I'm a founder of Blauwe Bagger and we are focusing on making the dredge chain more circular.

Dredge is like the soil on the bottom of every river or ditch, so also called sediment. And we with Blauwe Bagger are working on a way to separate this dredge, so we can use it for example in building materials or in soil. And we especially focus on building a pilot machine that is separating the dredge into sand, clay and organic matter.

What drew you to circularity?

So my interest in sustainability and circularity all started during my study times. I studied in Wageningen. So a lot of my friends, professors, fellow students were really interested in this topic. By that I also became more and more interested. And first I got a job in more the social sector. But after a year I realized that I really wanted to do something to make the world a bit of a better place. And for me that was becoming an entrepreneur on a circular topic.

I started focusing on dredge because I was part of a circularity challenge. So I found out that I was really interested in entrepreneurship and in circularity. But I didn't really know what topic to address or what problem to solve.

But then I found out about the BlueCity Circular Challenge, which is in Rotterdam. I signed up and there were different waste streams you could pick. And then I saw dredge. I didn't know a lot about dredge. I knew that it existed. But I was like, this must be one of the biggest waste streams in the Netherlands. So if we can solve that challenge we can solve really a big problem.

Can you discuss your work in terms of circularity?

We are working on several projects at the moment. But I will dive into two of them.

One is more the technical side of what we are doing. So behind me you see our separation machine where we separate the dredge into sand, clay and organic matter. And we are doing more and more experiments to find out what is our actual product at the end. So for the sand you should for example think about the concrete industry. So, we are talking with experts in that field to see what kind of sand do you actually need to put in concrete, so you can replace virgin sand. And with the clay it's a bit more variety. So it depends, if it's really organic, for example, it's really useful for a soil improver. And if it's not so organic you can use it in the ceramic market. You can make bricks out of it or tiles and any of these products.

And besides that we as Blauwe Bagger are also part of the Circular Dredge Consortium or in Dutch het Circulaire Bagger Consortium. And there we work together with more partners on a bigger scale. And there we are trying to see how and what we can actually do with this dredge in a more circular way, on a bigger scale.

It really depends on where you get your dredge from how the composition is. In the west of the Netherlands for example there's a lot of clay. In the east there's a bit more sand. So we want to set up three pilots together with a municipality or a water authority, advisors, contractors, in three different sediment dredge streams. So one a bit more clay, one a bit more sand and one bit more organic matter to see what we can actually make with this. We already have an idea but we also want to see how it will work out in practice with all these different partners.

I think there are many opportunities within this field because you have a really positive story to share. And really people want to believe that what we are telling and what we are doing is also possible on a large scale. Because it will solve a lot of challenges.

But then I think the challenges are really to make it practical. So it's easy to get a foot in the door and have the conversation and people are really open for it. But then putting it in practice and see how they can contribute with maybe money, but also with hours, with expertise. Then most of the times it also becomes more challenging because they see a lot of hiccups. Which I think is a lot of times the case with more innovative startups, initiatives etc.

So the biggest lesson that I learned in these three years of being an entrepreneur is that network is super important. Especially if you dive into a topic that you're not so familiar with, which for me was really the case. So really at the beginning we met another startup already working in the dredge

industry for five years and they asked us to join the Consortium. And we did and we really had a good connection, so they shared a lot of their network with us. And people knew us through them, which gave us also a lot of credibility I believe. And that helped us a lot because now we have a lot of people and contacts in the industry. So if we don't have the answer we always know who to ask for the right answer.

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

We are trying to challenge the linear dredge industry at the moment and we want to show them that there is another way. Because you hear a lot of no's, that it is not possible when it comes to regulations, when it comes to business cases or what other reason there is. And we really want to show them that there are other ways. They can be better for the environment but can still also bring in capital, bring in money.

I think there are two main challenges: Quality. Because you compete with virgin materials. To have the highest standards is really a challenge. And then together with these standards also the price. Because they want it cheap of good quality but you are working with a waste stream or with something that already has been used before.

What I really witness during my work is that a lot of people are open for the conversation. So they open the door and are really interested in what we are doing, what we have done so far, if we have some specific solutions also for them. This is also what I witnessed a lot. But it's good to see that people take you seriously. And take this matter seriously as well. And then hopefully from this open door we can also go to the next step. And we can make it really practical.