

Hello On The Way. My name's Luc Monvoisin. I'm the founder of KATABA, and we're a green-tech company, working in furniture, lighting and building equipment. My background is a bit unconventional. I started my studies in industrial design. That was in 2000. Design has evolved a lot over the last 20 years. When I was at design school, twenty years ago, I got the feeling that basically, unless I was one of the stars of the sector, all I'd be doing would be changing the colour of kettles for SMEG, every year. That wouldn't be such a bad job, but it also wasn't what I wanted to do. And the profession has developed a lot, notably because designers are able to take into account a whole lot of diverse and varied factors, such as marketing, techniques, aesthetics, and so on, and support project teams in developing innovative solutions.

And that aspect of design has emerged over the last fifteen years. And that would probably have suited me much better. But it wasn't like that at the time, so that's why when I left I joined the merchant navy. I was an engineer in the merchant navy.

And that's where my eco-awakening happened. It was in my early years as a merchant navy officer, when I saw what the reality of offshore oil really is, as I started out working for several years in offshore oil. Over there I saw what our work really meant, supplying all that oil that we all need to go shopping, and the concrete reality of it all.

When you're in Africa, in the Gulf of Guinea, it's not at all pretty. And of course, as I've travelled all around the world, I've seen the effects of our way of life in places where there's no waste collection infrastructure, places where there are single-use plastic bags without the infrastructure to collect them and incinerate them, as we do here at home.

And so they're everywhere. You find them kilometres away from the coast, floating in the sea. That leaves its mark on you.

So that was in the 2000s. I was getting interested in all the issues around sustainable development. That was when people started talking about it. And there were starting to be training courses in it.

So one thing led to another, and keeping within my scope, I was thinking about a lot of things, I wanted to do a lot of things, I was quite ambitious about what I wanted to do in my professional life, but without much success. My previous employer, who's now doing a lot of great things for sustainable development in the maritime industry, unfortunately at that time, they hadn't started yet.

And at a certain point, they had to carry out a redundancy plan. And so, being a union representative, I defended my colleagues, along with the management, because in fact we were dealing with our contract being terminated by our clients. So we worked on getting some good redundancy terms, and that's when I left to try to launch KATABA. That was now seven years ago.

When you're a merchant navy officer, you have a huge advantage, and that's having six months leave every year. And during those six months, over the span of the thirteen or fifteen years I spent in the merchant navy, I was able to get involved with the agencies where my friends, who were still designers, were working, and was also able to work with artisans on making furniture for my home.

And that was how I started to get an idea about what would become KATABA.

So I was making a living room table for my home, or rather I had it made by artisans. We'd chosen Volvic stone and oak. And when it was completely finished, it had cost us one third of the price of what we would have paid if we'd bought it from a high-end furniture store, and also the quality was far better.

Because these days, even in high-end furniture, you don't often find solid wood. And so that experience was basically the foundation of the KATABA project, that led me to try and unravel the economic model that systematically leads to industrialisation in factories and industry, as opposed to local artisans, and to try and understand how to re-localise production, and how to get back to using local workshops. And that's really what started KATABA.

I started working on the project in 2016, with one year for maturing it, before getting it started officially, and opening the business with an initial range of furniture, which was made with some students. So we had to bring out that first range of furniture. We officially filed to register the company in 2017, with the idea of working with private individuals, and manufacturing locally for customers, using artisans' workshops.

And, as I said earlier, I was also a merchant marine engineer. Because I didn't go to business school, even though the merchant navy is about business, I didn't really know all the ins and outs of what it's like to create a business. And so I started to learn a lot of things, and to deal with a fair number of hurdles.

Because of course for the private customer market, you can't just turn up with a nice idea and a couple of products in your catalogue. It's a massive market, that's saturated with offerings, and working in that market is no easy feat, especially at that time, when, even though people already had environmental concerns, in 2017 it was more about shops, basically organic shops. But it wasn't about eco-responsible consumption, that wasn't in fashion yet. There was VEJA that already existed, but people didn't yet have that strength of thought and commitment that you see these days. There still wasn't any environmental labelling to help steer consumers. So at that point we were sort of struggling with our model, wondering about where we were going with getting our brand established.

Shortly after our launch in 2017, we met with the teams from the cooperative MU, which is an eco-design agency who we've worked with a lot, and who we're still working with, and we were very ambitious, we thought that by localising production we could measure the environmental impact of a piece of our furniture from start to finish. You have to go local, that's how you make an eco-friendly product. And, somewhat naively, that's how we got started. And when we met with the MU cooperative, we discovered that there are tools such as life-cycle analysis, that let you understand better how, throughout the production chain, and with all the stages involved in producing an object, you can see the impact of each stage, so when the raw materials are extracted from the environment, when that material is formed, when it's transported to distribution sites, and right up until its end of life, and even during its use phase, everything has an impact.

And so when we met with the MU cooperative, they said "well, that's a great project, except that it's not entirely clear that shortening transport lines is really the major issue in what you're doing." They helped us set up a project and get funding from Ademe to eco-design a range of office furniture.

And that was in 2018, when we released that first range of eco-designed office furniture. And that's when we realised something. Because we discovered that only 15% of the

environmental impact comes from transport in our business, and 80 percent comes from raw materials. So by focusing on sourcing locally, we were a bit off the mark. It's never a bad idea to go local, but in reality, if we're going to cut our carbon emissions by a factor of five by 2050, then we're not going to get there by only focusing on the 15% that comes from transport. So to deal with that, we had to work on our furniture.

And that's why our first range of office furniture was mainly aimed at professionals. The life cycle analysis allowed us to focus on reducing the impacts from raw materials, and we focused on low-carbon raw materials, and naturally that meant wood. And you don't have to reinvent the wheel. But on the other hand there's a lot of work to be done in terms of removing as many steel elements as possible.

Steel has a heavy impact on carbon emissions, and so by ensuring an economical supply chain, by avoiding unnecessary packaging, and so on, we were able to make a product with a 74% percent reduction in environmental impact, so compared to a typical product on the market, we emit four times less CO2 with our product, compared to a standard product.

So that first range of office furniture came out in 2018. And in 2019 we were contacted by the communications team for the Roland Garros tournament, who asked us to make a chair made from the seats from number one court, which was going to be demolished right after the tournament. And court number one had been the biggest court in the stadium for a long time, and so it's got quite a history.

There were major finals that were played there. It had a circular shape, which is why it was nicknamed the cauldron, and so they wanted to mark the occasion and tell a nice story. And so we were asked to use its seats to make chairs that would then be sold as souvenirs of that particular stadium, from that particular court,

during the tournament. And so we made 400 of those chairs, I think. And it was an interesting experience, because in the end we were responding to a request, we were asked what we could do. And in fact, thanks to the experience we'd gained as a furniture designer, we knew how to do it. We knew where to get the expertise and the materials to make that sort of piece. And so right then we put our finger on something that we discovered on that occasion, which is called reuse and up-cycling. And that's been something pretty decisive for us. We put our finger on it without realising it. We also accessed a whole ecosystem of actors who were asking questions about that.

And at that time, in 2017, 2018, 2019, there were quite a lot of people working on reused or up-cycled furniture, a lot of it made from used pallets, and that worked well. They're really interesting, they tell a story, but the problem is that, in theory, pallets are things that can be re-used. So you're not supposed to divert them from their actual use.

And in environmental terms, it doesn't make much sense to divert them from their normal use to make furniture from them. But then that ecosystem of reuse was starting to appear, notably via La Maison des Canaux. La Maison des Canaux is the home of the circular economy for the city of Paris and the Ile de France region, which initiated a first program based around the circularity of furniture, called the "circular booster."

And so people were starting focus on these ideas of reuse. And once again I'd been inadvertently visionary, because I'd thought the benefit of re-use was purely anecdotal, so I thought, well, good, we've been invited to join this group. Let's wait and see... And so decided to work pragmatically and systematically on these topics.

So we weren't going to try to reinvent the wheel. We'd already tried to make our desks using reused desktops, meaning old desktops or chipboard that we could veneer and rework, and make them look like new. So that's what we did, we made our first desk, and we took the data

to our friends at the MU cooperative, who put it through their systems, and they told us, actually your product is pretty good, it works really well! We were a bit surprised, as they told us that in fact we'd divided the environmental impact of our desk by a factor of eight. We'd more than doubled its performance compared to what we'd done before. And so we realised that we had something really interesting, which makes all the more sense today, as the challenge for us in France is to divide our carbon emissions by a factor of five, and dividing our carbon emissions by five is no easy feat. And when we realised in 2019 "We've got a solution on our hands that works, that works by a factor of five, and maybe even more." So that was great, we were really happy about it, as we hadn't imagined we'd be able to provide solutions like that.

And what's really surprising is that in fact, we got these solutions without necessarily meaning to. There's a lot of work in analysing and understanding what the environmental issues are. And so that means using data. And that's a lot of work that was done by the MU cooperative, with the help of Ademe. But behind all that, there's all the know-how that already exists, and you just have to do the mental heavy-lifting to work out how that can be done with materials from deconstructing waste, and so on. But it's not all hot-air, we're not inventing tech out of the blue. Really it's about working with artisans, with manufacturers, and basically what we do is to considerably reduce carbon emissions of everyday products. Currently we have tables for everyday people that are made from old doors, with recycled PVC coverings, and so on, that have exceptional levels of carbon emission reduction.

Currently, KATABA's range is twofold: there's a general public range on our website, with furniture that's eco-designed, using reused and up-cycled materials. And so that's accessible to everyone.

And then we also have a slightly more specific offering, that's for professionals, where we can make tailor-made products.

So we discuss their requirements, which might be things like, "We need furniture" or "We need lighting", or "We have this waste, we don't know what to do with it", and so we bring our know-how to that. We do a study, and we come up with an offering and a value proposition. Then, taking into account their budget and their project, we try and find a nice way of doing something with the materials available, and meet their needs in terms of products.

A good example of this sort of collaboration is when we worked with BNP Paribas Real Estate, who initially asked us to work on an acoustic panel for an auditorium. And then, as things moved on, as we'd already worked with them on learning about reuse, ...as with a lot of real estate actors who have identified that as a significant factor in their transition, they asked us to take things a bit further, and work a bit more on reuse in their auditorium.

So in the end we made the entire auditorium, with the vast majority of materials being reused. We saved over eight and a half tons of CO₂, and we reused over 80% of the materials on the site. And so that made for a project with an 84% reduction in carbon emissions for materials. That's really the sort of learning we do, on the fly, with real estate players who bring us their problems, and we come up with real-world solutions. There's a real R&D element at KATABA, and so that accounts for a good proportion of our turnover. Currently that represents the bulk of our activity, and most of all it allows us to continue to go further, and experiment with materials.

And that now provides us with a lot of understanding, of know-how, and possibilities for materials, and there's still so much more to learn.

At Kataba we've got two types of products. When you look at the catalogue for the general public, there are eco-designed products, basically meaning that we look at where they start from, and we do a life cycle analysis. And we can tell, the product has an impact on this, this and that, so we do the eco-design work and then we try to reduce all this impact. So maybe you have a glass table, for example.

Glass has a very heavy impact, and maybe it's better to replace that glass with plastic, which may seem a bit surprising. But in fact plastic has far less environmental impact, as long as you can easily disassemble and recycle it. Recycling plastic is less energy-intensive than recycling glass, basically because it melts at lower temperatures.

So there you go, lots of small steps, approaches that ultimately let us re-assess things, and say here's our product, it's eco-designed because from the starting point to the end-point, we've reduced its impact by such-and-such an amount. And that's eco-design. And in terms of eco-design, we combine, though not right from the start, and that's why we have products in our collection that don't have reused materials,

so we combine reusing and up-cycling as much as possible. So I'll differentiate between them. Reuse is when you use a material for exactly what it is meant to be used, and up-cycling is when you take a material and you alter its use and you rework it.

And so by combining these two things, we can get to levels of reduction of environmental impact of around a factor of eight. And this up-cycling was part of one of the projects that I really like, that we did for Gecina, who are one of our B2B customers, which we started at the end of 2019, early 2020. So Gecina came to us with some metal sheets from the deconstruction of one of their sites, and they asked us what we could do with them.

They asked us if we could use them for furniture. And we tried, but we weren't all that convinced by the results for furniture. So we had some know-how about metal spinning. And we decided that was something we could try, and we got them to try it out with us.

And so we came up with a proposal for a lamp, called BANVILLE, designed by Clara Rivière. And so we made that piece out of reused sheet metal, and it's just a lovely thing. It's got two lampshades which can be set in one direction or another. And there are eight possible configurations.

It has its own special aesthetic and it's also rather timeless. And it's a product made in 100% of that reused sheet metal. That's why it's something we're really proud of. And when that came out, it was really the culmination of quite a few years of work and iterations and research about how to cut out carbon emissions in products. And it's a consumer product that's on sale on our website.

(sound interlude)

KATABA is first and foremost an ecosystem. We're six person team, with a designer who's been with us for four years, my partner Florent, who's also been here for almost four years.

There's Isaure, who recently joined us as brand director. We've also got Manon, who's working on sales. And then we've got our intern, Marie-Sophie, who's doing an excellent job. And around us we've got a whole ecosystem of manufacturers and artisans, SMEs, some lovely SMEs who, depending on our requirements, come up with all the tooling and expertise that we need.

And that's basically how KATABA works. And to use a bit of entrepreneur jargon, it's a fables business, meaning that we don't have our own workshop, and so by not having our own workshop we're able to seek out specific expertise according to what we need, to work with this or that sort of material.

And that's what lets us find solutions for reusing glass, stone, wood, or steel. And that's how you create value chains, and you get a lot of people working together on making a product. The Bonneville lamp involves six to seven different actors.

So we use workplace integration workshops, who work on the materials to make them into what are called secondary raw materials, and so into a format that's usable for artisans.

Then there are people to strip materials, there are painters, and workshops that do electrical assembly. And of course we have our metal spinner, Francis, and there you go. So it's that whole combination of actors that allow us to work.

And those are what are called virtuous and decarbonised value chains.

There are two types of actors in our ecosystem, those that are already involved in reuse, and notably the workplace integration workshops who we're involved with and that are set up around these activities.

Because they've got the flexibility to work rather effectively with all kinds of materials, without being constrained by industrial tooling that would freeze them into one approach, into one single format of materials, which is in fact a massive hurdle for reuse. Because of course you're working with materials that don't really fit into so-called norms, and so you have to be able to adapt to that.

So these workplace integration workshops are invaluable for us, because they've got that flexibility. And apart from those, there are a lot of actors that are curious about what's going on in reuse, decarbonisation, and all that, who are following us. Because we go to people with products, and we say:

ok, we need to try and work with reused glass, reused metal sheeting, and sometimes that doesn't even require any change to what they do, and it works out naturally. For a painter, painting reused sheet metal or new metal, it's no different.

So what we've always seen, since 2017, is that consumers have a real appetite for more eco-friendly products, that's always been the case. But there's one significant brake, which is of course the price, which everyone understands. We're all consumers, so it makes sense. And there's one last point, which can be a major one in the furniture sector, and that's the dominant players in the market, who've built an image of furniture as a consumer product, as a product that you replace more and more often. And that goes against virtuous consumer habits.

So to go back to something that's really basic, but that we've all got to bear in mind, is that in terms of products, if you double their lifespan, then you halve their environmental impact. So where your sofa used to last for fifteen years, and now it lasts for seven and a half years, then you double the environmental impact of your sofa. And that's apart from its components or the whole thing being manufactured in China instead of Europe. So it's clear that there's already a mindset that needs to be shifted, and which is shifting, and in fact we're seeing more and more actors moving towards second hand goods, who are realising that they don't need

brand-new products. People need things that speak to them, that correspond to the aesthetics they want to bring to their interiors. And that's not necessarily new items. So that's a rather good sign.

Because if you don't want something new, that also means that having products that last for a long time makes more sense, because when you go for second-hand, they're also products that have a longer lifespan. So that's pretty encouraging.

And then there's another a real hurdle right now, which is the lack of environmental labelling. So currently we're talking about recycling, recyclables, eco-design, and all that, there's this sort of enormous mix. I have been immersed in all that for years now, so I'm able to distinguish between all these ideas, but right now there's nothing to simplify consumers' access to information, so they can know that they're buying something eco-friendly.

We're part of the working group on redesigning environmental fusion, so it's going to happen. We should have the initial test of environmental labelling in early September, in theory. So we're going to have them on our range of office furniture, and we'll do a short experimentation phase. And I hope that in a year's time we'll start to see this sort of thing appear all over.

There's a European regulation pushing in that direction. We've also got French regulations, with the AGECE law, that's pushing in this direction. So it's going to happen. You always think that things aren't moving fast enough, but they do eventually come. And so you'll be able to get a clearer idea, and think, ok, this sofa is maybe three times more expensive than that other one, but it's also ten times better for the environment.

And so you're going to see that being highlighted, and I think that's going to be a real accelerating factor for more eco-friendly consumption.

The same thing has to happen with textiles. We've seen the effect it's had on nutrition. We still drink Coke and eat junk-food, but at least it's clearly marked! You know it's not very good for you, but it's there, you have to educate consumers, and I think that one of the first things to focus on, beyond the environmental impacts of products, is what happens to them at the end of their life. So that's the first thing. And so the end of life of a product is about whether it can be easily disassembled, separating the wood or plywood carcass of a sofa from its cushioning. Here I'm going to promote some friends of mine, Julien and William de Bold, and the sofa they made for Camif.

They made this sofa. Its steel structure is separate from its seat cushions. That way you know that you can dismantle the steel from the rest of it, and so at least the structure can be recycled and not incinerated. Steel is easy to recycle, because with a good magnet you can recover almost any steel. But the ability to dismantle a product is very important at the end of its life. That's the first thing.

And then if you look at the materials aspect, there's really a question of durability, so are you going to buy an entry-level product with a short life? And we all have a bit of an eye for that sort of thing. When you look at the seams of a tee-shirt, you can tell if the seams are strong and well made, or if they're going to come loose. And that's just a basic question of the sewing machine settings for going more quickly. It puts less tension on the thread, and that means seams will break.

So has the sewing machine been adjusted to make solid seams? We can all see that when we buy a product in a shop.

I also think it's important to see products in person before buying them, and not just buying them online. Because judging the quality of products online isn't always that easy.

And for the other aspects that extend the lifespan of a product, that means asking how you can make it continue to be desirable over time? How are you going to be able to bring it in line with the evolution in our tastes, in the colours of our interiors, and so on? Can you re-upholster that sofa? When you've got a good quality sofa, you can take off all the fabric, take it to an upholsterer, and get it redone.

These approaches can make it possible to extend the lifespan of a product, which is what we're trying to achieve with our wooden furniture, working with finishing oils that allow people to renovate a piece of furniture and rework its colours.

Do you want to move towards a warmer, lighter toned wood? Do you want to give it a tint, maybe even colour it? So there are ways of working on the finish of furniture that also allow you to vary the colour. I think we can all remember the fashion in the 90s and 2000s of whitewash finished furniture. So people would take all this old solid wood furniture, and sand it down or brush it, and whitewash it, and give it a nice contemporary feel.

So now we can do that with all our wooden furniture at KATABA. And for steel furniture, you can also strip and repaint our pieces.

So there you go, there are some interesting approaches to look at.

When you buy a piece of furniture, you have to ask yourself: in ten years time, if I want to change my interior design, can I change it whilst still keeping this piece of furniture, simply by changing its colour or re-upholstering it?

And there are materials that are more or less carbon intensive. There aren't really any truly bad materials, but there can be bad uses of materials.

So if you put a steel element in the right place, and that allows you to join together two pieces of wood, which is a low-carbon material, then it makes sense to use steel, and if that allows you to reduce costs, and be able to access a market, then that's better for the environment than if you made a complex assembly in glued wood, that prevents the product from being disassembled, and transporting it to customers to customers is more complex, and so on. So it's really all about construction, brand, products, and price.

But of course steel is very carbon-intensive. If you compare a wooden or chipboard storage unit to steel furniture, steel furniture has between five and 20 times more carbon impact than a piece in wood or chipboard. And that's a major order of magnitude. But what I mean is that steel is not necessarily a problem in itself.

So our little Pile stool is entirely of steel, but that makes sense because it's a single material. You can strip it in no time, it's almost indestructible. And when you put it in an educational establishment, as has already happened, that piece of furniture doesn't break. After three years it's still intact, and it can go for another ten years with just a coat of paint.

So there you go, there are materials to avoid, but at the same time, and in certain circumstances, it might make sense to use them.

But for wood there's a real problem, because forest management certification standards have been implemented over the last 20 years. So those are the FSC, and the PEFC, which work pretty well, especially since the Cash Investigation looked into them and brought them back into order.

But it's a good base, it's fundamental to have a base standard like those. So we obviously favour those woods. We also favour wood from French forests.

The question of deforestation, which is of course a concern that we've all got to bear in mind in France, it's not really about human action, or more specifically, it's not directly human actions that are the problem.

What's problematic for wood in France is global warming. And those forests are starting to be unsuitable for the climate that they're now being exposed to. It takes decades to grow a forest, and global warming is moving faster than that. So currently, the timber industry, that we're frequently in contact with, tells us that the race against time today is the adaptation of forests.

For me, as a consumer, the KATABA experience has taught me a lot about the issues in my own consumer habits. And maybe that's also because my background as a merchant navy engineer taught me to repair things.

Anyway, what I take away from these two experiences, which definitely add to one another, is that a lasting relationship with objects means objects that you can keep for a long time, and that you can maintain. And to be able to keep objects for a long time, and look after them, you have to actually want to. And that desire to look after and keep objects for a long time, is first of all about taking your time over your purchases, taking your time to choose, and not buying in a hurry, not just thinking "well, I need this, I'll get this."

Taking your time to compare, taking your time to understand what's on offer. We often talk about understanding an offering when it's in the B2B sector. But as consumers, really, what we're doing all the time when we buy things is that we're validating the offering of a vendor or a brand. And so we need to look at these offerings, and what's behind them, take a deeper dive, and understand how they're making their products. Take a closer look, and look at what the company's environmental policy is, how are they certified? How do they do all that? What issues do they focus their efforts on? I think that's interesting. Anyway, I always do that when I buy something.

There are some really imaginative approaches around the economic model, because, fundamentally, that's what it is: how do you continue to create value, keep people in work, while limiting access to resources that are limited, with energy that's potentially carbon-heavy? And in those terms, some really interesting things are gradually starting to happen. How do you get furniture (as I was talking about earlier) that will last, and that you're able to take care of? How does all that allow us to move towards more sustainable consumption? Also, how is access to such items made possible by financing offers which let you think: "Well of course I don't have enough cash to buy a table for 4.000 euros," and I think we've all been there at some point. "But maybe there's a company that could make that sort of table accessible to me? And it's a table that I know I can pass on to my grandchildren." Because it's a classic design, it won't go out of fashion in a couple of years, and you'll always look at it as a real feature when you see it in your living room. So I think it's about how you create attachment to objects, and how you humanise that act of consumption.

The downside of industrial society is that it's given us the idea that there are no longer any human beings behind the objects we buy.

And I think we have to bring them back to the forefront again, because ultimately they're still there. There are still people working in factories. But we need to better understand that there are human hands making all these objects for us. They produce work that has great value, and manipulating materials can no longer be done irresponsibly, and that will inevitably have an impact on us and on future generations. And it's crucial nowadays to be aware of that when you buy things.

So you can clearly see that happening currently in furniture. There's Fermob, who have launched a repainting solution for their furniture. So that's really going to extend the life of their furniture.

And as manufacturers we're all going to have that, that underlying responsibility. But what does extending the life of furniture really mean? It means reducing its environmental impact. So it's clear that the topic of environmental impact is going to be crucial, going forward. And so in fact I think that we're going to see a move upmarket. And that's really rather reassuring, when you look at the transition: the objectives we've currently set for limiting global warming to one and a half degrees aren't going to work, the transition can only be successful if we move upmarket, so as to guarantee the durability of products. Personally, I think it's going to move in the direction of consumers being less and less passive, and environmental labelling will help with that a lot, as opposed to poor quality products, manufactured quickly in order to generate a profit under poor conditions.

Because that's what you find when you dig down into these questions of environmental and social impacts: making products badly also means making them under poor social conditions, in countries where labour laws are not the same as they are in France. So I think people will start to opt for products that are fundamentally more virtuous.

That's not to say that we're all suddenly going to become angels. But anyway, I think we're going to pull the market upwards with this transition. And I hope KATABA will be playing an important role in that! Anyway, it's clear that KATABA's job today is to build those value chains that allow us to work with re-used materials.

And we're one of the only actors who know how to do that. We're definitely the only ones that are able to do that with such a wide variety of materials, that's lucky for us. And so we want to continue to doing that, continue experimenting, and continue coming up with solutions where we can say: "Look! We've made this out of pre-used sheet metal, with pre-used glass, and so on."

It's about building solutions for future consumer patterns, and also making them accessible to everyone. And we're going to need a change of scale at KATABA to do that, it's about being able to transform, as well as to move a bit further into the general market, because right now our products are more high-end products. And make these low-carbon solutions a bit more accessible, even though we know that we'll never be competitive compared to a low-end product made in China. But that's not really the goal either, because soon we'll have environmental labelling that will explain why there's a price difference.