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Speaker 1

We have to go a bit further, and maybe commit a bit more, to show that as French people, we're ready, that we want to get things moving, and that's not an issue that should be worked out in back rooms of the government, between lobbyists and decision-makers, that in the end it's us who have the right to decide, that we're part of these movements that want to change things, and, honestly, we're doing that pretty well.

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Speaker 1

Hello On The Way, my name's Benjamin Peri, and I'm the co-founder of Pyxo. It's a solution that's supporting the restaurant sector in transitioning from disposable packaging to reusable packaging. So throughout my life, I've always been quite sensitive about the environment. I already knew at high school that I wanted to work to help environment, to have an impact. But I was also passionate about science.

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Speaker 1

So first of all I did a science prep course, which took me to Centrale Paris, that's now Centrale Supélec, to do an engineering degree. I studied some great courses about sustainable development there, which gave me a bit of an ecological slap around the face, and made me want to go into the field even more. It's funny, when you become ecologically aware, you always get the feeling that you're experiencing a sort of bombshell, and now we're all realising that it's actually serious.

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Speaker 1

But it is what it is, we're all aware of the data, we get it, until the next bombshell. In fact we're realising that it's even worse than we thought, and there's even more work to be done. That's pretty much what's happened. I grew up in the south of France, and in the south-east of France there are lots of wildfires.

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Speaker 1

So even at a young age I was aware of ecology, because I saw all the forests around my parents' house catching fire, and they completely burned down, along with all the fauna living there. And even though at the time I wasn't really fully aware that it was man-made because of global warming, there are more and more fires, and they're getting bigger.

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Speaker 1

So I had this desire to protect nature. That was my first ecological awakening. My real first realisation was on a course at the Centrale school, with experts from the IPCC, who explained their role and how they work, and as we had the scientific knowhow to understand them, for the first time I realised the stakes of the transition that needs to be made, just to limit climate change to 1.5 degrees.

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Speaker 1

And now we're talking more about two degrees of global warming. So, most importantly, what does that mean? Two degrees of global warming by 2050 was the first bombshell: "Actually, it's not fair, it's fine for animals, it's fine for plants, and so on, but it's really a question of the survival of humanity." So that was the first bombshell, but back then I was still a bit disillusioned.

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Speaker 1

It's going to happen through companies, it's going to happen through innovation. What's now called green growth. They've made electric cars with lithium batteries, and that's great. They're going to make hydrogen planes, that's going to be great, it's going to solve that problem. I was an engineer, so I saw technology everywhere.

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Speaker 1

I wanted to be able to solve these problems with science, it's absolutely incredible, and we're definitely going to solve these problems. So I followed that line of thought, and that's why I came up with lots of business ideas, each more technological than the last, to solve lots of different problems. When I finished my studies, I created my first start-up, that actually had nothing to do with the environment, which had more to do with data, and that didn't go so well.

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Speaker 1

It didn't work out, so then I joined BNP Paribas Personal Finance, to co-create an artificial intelligence program at one of the subsidiaries, and then something pretty significant happened, which was the resignation of Nicolas Hulot from the Macron government, after which I resigned from BNP and set up Pyxo, my current company, and after that news I realised that if someone like him, with all his environmental strength was forced to resign,

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Speaker 1

that's when I realised I'd always wanted to work in the environmental sector. And that was the right moment! I'd been talking with a former classmate from Centrale for a while, that was in the summer of 2018. He'd already resigned from his job at the consulting firm McKinsey to set up a zero waste consulting company. His name's François Debré, and he's a surfer.

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Speaker 1

He was a member of Surfrider, an organisation that combats waste, and he was very knowledgeable about the subject. And he knew that I'd spent a bit of time in entrepreneurship, and I was pretty passionate about the subject. So in the summer of 2018 he came to see me with the business model ideas he'd had, business ideas for me to help him with, not really to set up a company with him, but just to give him my opinion. And so that's what I did.

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Speaker 1

So we talked about those things a lot over the summer of 2018, and in the end there was this conjunction of events, where I'd got the idea for Pyxo after jogging in the Tuileries Garden. So it was August 2018, in the summer, in the Tuileries Garden. There was a funfair, and I was running past all the rubbish bins in the garden, and they were overflowing with disposable packaging,

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Speaker 1

and it had all come from the food stands at the funfair at the Tuileries Garden beside me. And so when I'd got home from my run, I called François and said: "Listen, people have been talking about zero waste a while now, but there's something that I think makes sense to work on, and that's all this packaging. It only ten metres between where people buy food and where they eat it.

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Speaker 1

That's absurd, it makes waste that's only used for five minutes." So we talked about it. And we thought it was a good idea. At the very start of Pyxo, we thought the solution was simple. We'd give reusable containers instead of disposable containers to caterers, and so to consumers. And then they'd do the right thing all on their own.

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Speaker 1

Well there's always a bit of wishful thinking at the beginning when you set up an eco-friendly company. You get the idea that your eco-friendly solution will of course be acclaimed by consumers, by operators, by everyone really, because there's definitely a growing ecological awareness in France, and that was already happening in 2018, and even more so now, but then you realise that maybe it's not that simple.

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Speaker 1

So the first deployment we did was using our contacts, and so the first deployment we did was at Bivwak BNP Paribas, so moving in the right direction, and we decided to set up a reusable container system at the Bivwak building entrance. We canvassed all the restaurants located around Bivwak, where the people who work there go for take-out food.

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Speaker 1

And we told them that there would be people coming along with these reusable containers, and would they agree to serving them in those containers? And then would they agree to doing a little promotion, giving them a small discount? So we made our reusable containers available at Bivwak, and we made it known around the building that people could go to this or that restaurant, and they'd get a thirty cent, a fifty cent, or a one euro discount.

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Speaker 1

And so there you go, we launched it and we asked Bivwak: "Would you pay us for this service? Because in the background we're taking care of collecting and cleaning the containers, restocking, and so on." So we talked about it, and it worked really rather well. It wasn't an immediate hit, but very quickly there was something of a ripple effect between the employees, between the most eco-aware people who took it up straight away, and those who were a bit less keen, but who were on the same team, who followed, and then there was the financial incentive which also helped motivate people.

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Speaker 1

We got good penetration rates. So we rolled it out at various other companies in the same geographical area, to benefit from the same network of restaurateurs. Except that very quickly the office managers, the site managers, who were paying for the service pointed out to us that it was expensive. It was expensive because you needed reusable containers. You have to canvass restaurants, do the logistics, the cleaning, the restocking.

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Speaker 1

Lots of things that are managed by only one entity, which is the company, which in the end increases the price that the company pays for a meal for its employees. And it was too high. They told us it was fine, they were doing it, there was no problem, but not all companies have those sorts of resources. If your goal is to truly revolutionise the world of packaging and eliminate all disposable packaging, then that wasn't necessarily how you'd get there.

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Speaker 1

So we realised that we'd need another entity to invoice. We couldn't just charge companies. We'd have to find a way of charging restaurants. Except that when we asked the restaurants, they said: "Well we're not going to pay for people who come along with their own containers. That's their problem, We're not going to pay for that," which was totally true.

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Speaker 1

So we realised that to charge restaurants, we'd have to be business providers. We needed to bring them in business. So we launched a zero waste delivery platform. And we quickly built a website. That took a week. We publicised the website to all the employees, to all the companies we were working with in the area, and also to restaurant owners.

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Speaker 1

The restaurants put their meals on the platform, the employees in the companies ordered meals, and we took care of delivery. Except that we did it using reusable containers. So we were bringing business in to restaurants. So there could be a profit margin on the selling price of meals. We also charge companies for logistics, cleaning, and so on, and that balanced out the model a little.

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Speaker 1

It's not a bad idea, and it took off pretty quickly too. But in the end, the problem was that customers soon told us: "Yes, I want more reuse, yes, what you're doing is really good." They said "we want more veggie dishes, more diversity, we want it to change more often", and that's actually understandable.

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Speaker 1

For them it was their midday meal, so it was important, and we had to focus more on the food side of things. We realised that we were doing the same activity as Deliveroo or Uber eats, but with the additional constraint of reuse. And even they were struggling to be profitable. It wasn't sure that it would work any better for us.

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Speaker 1

We had these two use cases, so these two financial models that we could try to do. So we attended Viva Tech in June 2019. We had a stand at Viva Tech with La Poste. La Poste was very interested in these issues, and we were actually pitching both solutions. We did a bit of what's called AB testing, meaning that one time we'd pitch the one with reusable containers in companies, and the next time we'd pitch the zero waste delivery platform, and we'd see how people reacted.

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Speaker 1

Well that was the plan anyway. Because when we actually went to Viva Tech, it didn't work out like that at all. In fact, for the whole first day, and really for all three days of Viva Tech, there were Sodexo people passing by our stand. That was because right next to our tiny La Poste stand, there was a huge Sodexo stand, really right next to it.

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Speaker 1

And they came to see us at our stand, telling us that they had a problem. There were customers who were major companies, who had Sodexo staff restaurants, who were asking them to stop using disposable packaging. They didn't want there to be cardboard packaging at the coffee machine anymore. They said that when they bought takeaway food, it was all in disposable packaging, which was happening more and more at that time.

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Speaker 1

They wanted all that to be re-useable, and they didn't really know how to go about it. So we started working with Sodexo. We realised that it was an interesting model. So we worked with them throughout summer 2019. After that summer of 2019, we started experimenting, we started deploying things, we saw what works, what didn't, how we could manage everything alongside them.

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Speaker 1

At the end of 2019, they said great, We got into drafting contracts, it was all ready, we were about to deploy. They had the resources for that kind of service. It was profitable. So we went all out. The contracts were sent out, some were signed, others took a bit more time, and then we came to March 2020, when unfortunately everything collapsed, as the world came to a complete halt, something nobody could have predicted beforehand.

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Speaker 1

Bear in mind that Sodexo was one of the companies most affected by Covid. Their business took a huge hit, and never completely recovered. Probably everyone listening to this is still doing a lot of remote work now, since Covid, and that hasn't been good for staff restaurants. So our model was completely overturned. The summer of 2020 was very hard for us.

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Speaker 1

We did a micro fundraising round with some business angels in January 2020, but that doesn't last forever. But we did have some luck in September 2020, an actor contacted us that we weren't expecting at all. And that was McDonald's. McDonald's said: "There's a something called the AGEC law in France, that means we have to use reusable containers for eat-in sales at our restaurants.

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Speaker 1

So when people eat-in at McDonald's, there have to be containers that can be washed, and so on. And we've heard that you've got some expertise in these subjects. You could help us out on two or three issues." So we started out on a consultancy role with McDonald's, and that grew and grew, because we shared the same values,

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Speaker 1

we realised that we had the same objectives, and we offered to develop an A to Z solution for them, tailored to their needs. And that's what we did, and we had a fundraising round at the end of 2021, bringing in seven million euros to develop the solution. And since then, that's the solution that we've been offering to our customers.

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Speaker 1

It's not just McDonald's. Since then we've worked with Sodexo again, and with others. So our solution is a reuse platform. Every reusable container under our management has a unique identifier, via a QR code or an RFID chip. Our role is to track those reusable containers throughout their journeys, when they're distributed to customers, when customers drop them off at collection points, and when they're sent to the cleaning centre.

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Speaker 1

And with this data we can manage these stocks for the restaurant, making sure that there are always reusable containers for their activity. But we also deal with motivating consumers to return their containers. Because the idea of reuse is that once customers have finished their meals, they bring back their containers.

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Speaker 1

And all that isn't the restaurants' job, they don't really bother working on it. So with our traceability, with our consumer interfaces, we motivate customers to return their containers, using a bit of carrot and stick, with the stick being a financial motivation: "If you don't bring back your container you'll be losing money."

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Speaker 1

So that's not great for you." And then there's the carrot: "if you return back your container, you get loyalty points, they're great, you save money." All that was initially created for McDonald's, and today it's our solution. So there are various questions to ask. There are several different markets in our sector.

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Speaker 1

Three big ones. The first one is company restaurants. So that's Sodexo, Elixior, Compass, and so on. Another segment is fast food, the big fast food chains, as well as the smaller ones too, McDonald's, Sushi Shop, and so on. And the last one is independent restaurants, which are the ones that people tend to think of when they hear about Pyxo.

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Speaker 1

That was our first sector. When we worked with the Bivwak, it was them that we went to see. The problem with independent restaurants is that it costs a huge amount of money for us to approach them



one by one. In fact they're all only available at the same time, after their midday rush, so around 3 to 4 p.m., and you have to go visit them one by one to make the transition.

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Speaker 1

So we saw a lot of growth with them at one point. Then we stopped that a bit, because doing it wasn't at all profitable. So we got a little smarter, and we asked ourselves: "who's in contact with independent restaurants, who already has them all in their address book?" That's Metro, who supplies them. All the restaurants in France: I think they cover 98% of restaurants in France.

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Speaker 1

And so it turned out that Metro was running a call for tenders, which we won, to push our solution to their network of restaurants. So there's a pilot scheme that's soon going to be deployed in Paris. There was a first one in Rennes. So in the meantime, if you're looking for Pyxo restaurants, there are fewer than there were before.

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Speaker 1

We've scaled back a bit. There are 150 of them, and you can find them all on our app. There's a map where you can see the restaurants available, and it's going to grow.

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Speaker 1

The AGEC law is a bit of an unknown quantity in the world of environmental and ecological laws. Honestly I think it took all the lobbies by surprise when it was voted in. It was a spectacular feat Brune Poirson, who hasn't been in government since, but she did a wonderful thing with this law. So it was voted for in 2020, in a rather obscure way.

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Speaker 1

It's hard to say how she managed to get it across the line so easily, and it's a world first: a total ban on disposable packaging in a market segment that covers any restaurant in France with over twenty seats, they're no longer allowed to serve customers on-site using disposable packaging.

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Speaker 1

And it's in force as of January the first, 2023. So it's been in place for a few months already. There's been a lot of attention to it from overseas. Everyone's watching what's happening in France, because you have to bear in mind that fast food was based around various principles, and one of those founding principles is disposable packaging. Without disposable packaging, fast food would have had trouble developing back in the day,

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Speaker 1

in the 1950s, so a whole segment of the catering economy is being called into question. And now everyone's looking at how McDonald's, Burger King, KFC are getting along. Are they managing to do it, and how? For a large group to make a shift and really make things happen, there has to be an internal willingness.

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Speaker 1

And of course, when they do start moving in the right direction, it can have an amazing impact. Even though McDonald's already had reuse projects running in-house, about whether they could do it or not in France, there's no guarantee that without this law they wouldn't have shifted so dramatically. And that's for the simple reason of the prisoner's dilemma, where even though McDonald's is the absolute leader in fast food, if they implemented reuse at their restaurants, which would cost them more overall, KFC, Burger King wouldn't have to follow suit, and they'd risk losing customers.

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Speaker 1

The advantage of laws is that for companies trying to do things properly it removes this prisoner's dilemma. The idea that if I do it, but my competitors don't do it, then I'm making problems for myself. And for sure there are some companies that are really leading the way. McDonald's was all for the AGEC law in France.

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Speaker 1

And that's because McDonald's started to move very, very quickly in France, and the other major brands said: "Well if McDonald's is following the law, then that's a law that's going to be followed, so we've got to follow it too." So the AGEC law was really a massive accelerator. For our part, in a way we're much more useful when we're dealing with take-out, home delivery flows.

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Speaker 1

Where the idea of motivating customers to return their containers is more significant. But the fact remains that it gave us access to contacts at McDonald's in September 2020. Once you've worked with McDonald's, that opens up doors for lots of other chains, because McDonald's is the leader in fast food. Everyone keeps an eye on what they're doing, because they are very, very, very, very strong in R&D, in change management.

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Speaker 1

So that allowed us to work with a lot of brands, but the debate is not over, and the transformation isn't over either. January the first, 2023 has come and gone, but the government has given deadlines for restaurant chains to comply, stating at the end of 2023 they all have to be ready, because of course they'll risk being fined.

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Speaker 1

But in any case, the challenge has been met in terms of France's international visibility, as there's not a single restaurant chain that has not succeeded in making at least some initial restaurants ready for reuse. And that proves that it's perfectly possible. And so these different steps actually lead to ever more reuse, and push the chains, once they've managed to deal with the AGEC law for on-site catering, to look to the future and say: "well ok, tomorrow we'll have to do it for take-out, for home deliveries."

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Speaker 1

And that's why we can work on these topics, notably with Sushi Shop, who immediately looked at the future, saying: "We want to pilot take-out, and even though the law's forcing us to make this transition, it's also in line with our values. So let's do it."

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Speaker 1

So, the RFID chips? It was quite interesting to set that up at McDonald's, because one of the ideas was that even if we didn't get into the mechanics of incentives to return containers for on-site food, now at McDonald's, having this traceability at least allows us to see how consumers are behaving. How many of them make mistakes in sorting their packaging?

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Speaker 1

Because these days, I don't know if you often go to McDonald's much, but now they've changed their sorting stations to include a specific bin for reuse. So how many people get it wrong and don't put reusable containers in the right bin? And how many leave with the containers? And if they do leave with the containers, then why? Is it theft?

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Speaker 1

Are they just forgetful? Is it because they haven't finished their Coke? Or that they just wanted to finish their meal somewhere else? And so all this traceability allows us to measure it rather well, and also to see any evolutions in customers' behaviour. McDonald's serves 2.2 million meals every day in France, so that's just astronomical.

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Speaker 1

So they have all types of customers. There are tourists, people who don't speak French, people who can't read, children, seniors. So that's what it has allowed us to measure. For on-site catering, what we've seen is that there have been peaks in thefts, especially when the media got involved in January 2023.

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Speaker 1

Articles came out everywhere saying: "there are thefts of containers from McDonald's, and so on." So there was a peak in thefts at that time. But what's interesting is that little by little it's decreasing. Inevitably, once people have some at home, they're not going to carry on collecting them.

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Speaker 1

So what we're trying to measure is how long this plateau will go on for. Where will the limit of this decrease in the theft rate come? I can't reach any conclusions about that right now. What is sure, is that not everyone has the same level of eco-awareness about these things. There are some people who straight away said that's great, that's brilliant, it makes sense, why didn't they do that before?

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Speaker 1

And they use the solution. And there are others who completely resist, who say: "no, no, I don't want a container that's been cleaned, that means someone else has used it". And you can very quickly answer

that it's the same case in all traditional restaurants, and so the question makes no sense. But there you go, it bothers some people, so not everyone's on the same page.

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Speaker 1

It also means we need to know how to reach every customer, who are all different, but in the same way, by avoiding having blocks of explanatory texts in restaurants, you can't rely on everyone reading all the cleaning conditions, and why we're doing it, the environmental impact, and all that. Things don't work like that in real life.

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Speaker 1

People just need to change their behaviours, no matter where they come from. It's tricky. Reaching everyone is no easy task. And when we do take-out sales, home delivery, that adds extra complexity, because we're asking customers to return containers to a place that's potentially far from where they eat their food.

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Speaker 1

And these are the things we're analysing. What's certain is that with all the laws that are coming, including on the EU level, there's going to be no choice. We're going to have to invent all these new usages. It's going to become much more widespread. But our role is to make sure that it's simple for customers, so they don't have to download 500 apps, that they don't have to worry about how they're going to return their containers, and so on, and support them in this transition, understand them, and accompany them.

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Speaker 1

And on the restaurant owners' side, it shouldn't be their problem. As far as possible. So their job is to make food, and not to manage stocks of reusable containers that have been scattered around in the wild, because some people bring them back after five days, and others after three months. Managing customers who come and complain, saying: "but you took my money but I didn't get my loyalty points, I swear I brought back my reusable container, so I'm supposed to get my loyalty points."

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Speaker 1

That's not their problem, it's ours. And that's pretty much Pyxo's position on this. So that's why we're talking more and more at Pyxo about being a reuse platform. Because it's this idea that we have access to all this data, so we're right at the heart of things in terms of reuse.

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Speaker 1

Now we're not doing everything alone. Typically with our data, we help the restaurants manage their stocks. But we're not the ones who deliver the containers when there's a shortage. In the same way, with consumers, we're not holding every customer's hand to bring back their containers. We have lots of interfaces with consumers to motivate them to do the right thing, to communicate with them, hence our positioning as a platform.

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Speaker 1

And finally, in terms of cleaning, there's always been this big question of how containers are cleaned, where, and so on. In the vast majority of cases, we try to get containers cleaned onsite, for the simple reason that many restaurants have dishwashers, even though sometimes they need to augment their dishwashing operations a bit because that they aren't used to having such large volumes.

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Speaker 1

Usually they have dishwashers. This limits logistics, it avoids truck movements, etc, as much as possible. But there are restaurants that aren't able to do it. They can't deal with the volumes. They don't have the space, because that wasn't planned for. They're forced to outsource dishwashing. When they outsource dishwashing there are companies, cleaning centres, that help them out.

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Speaker 1

There are lots of different typologies of cleaning centres in France. They all launched thanks to the law, which motivated them, and helped them to find financing. They're all over the country, and we connect them up too. So we don't do the cleaning for them. We don't even organise the logistics for them to transport containers.

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Speaker 1

But thanks to the data, we get them to set up a routine for collecting, cleaning, as well as scanning containers once they're clean. So that we know that there's a stock of clean containers at a given location at the washing centre, and that we can take it into account in stock management.

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Speaker 1

But this scan at the washing centre is also interesting for making sure customers haven't cheated the system. If a customer scans their container at the collection point and says: "Here, I returned it, don't take my deposit, and give me my loyalty points," and we do that, but in the end they keep hold of the container,

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Speaker 1

the fact that containers are scanned at the washing centre means that we have an additional checkpoint. So we can tell if someone has played fair, and returned the container back to us. So that closes the loop a bit, and so we're really in this mindset of being a platform that interconnects all these people, without getting involved with their professions, which is complicated.

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Speaker 1

Reuse is a huge chain, with lots of different players, so we don't want to do everything ourselves, but we do want to try to streamline and harmonise all that circuit. Among all the challenges we have to deal with for reuse, there are two that particularly stick out. The first is that reuse tends to be a bit expensive, at least for purchasing containers.

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Speaker 1

When restaurants buy their containers, there's a whole stock they need to purchase. That's often a hurdle for them. When they have the choice to move to reuse or not, they say to us: "We'd like to do it, but in the end, you're still asking me to make a big investment in something that I'm not sure is going work." So at Pyxo we often say:

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Speaker 1

"Ok, in that case, we'll make it easy for you, and buy the containers for you. And we'll rent their use out to you. Once you use a container, you pay for that, but Pyxo deals with the purchase cost." Every time

we deploy to a restaurant, we have to invest in a certain number of containers: that's the first challenge! The second challenge, as we talked about earlier, is consumers.

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Speaker 1

There are customers who are really up for it, very motivated, and that's great, and we love them! But there are some customers where it's a bit more complex. They don't really see the point. They're being asked to do 500 eco-actions every day. That gets too much sometimes. And so we needed to motivate customers, make them feel that this is a serious transition, and that it's not just a change of packaging:

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Speaker 1

We're going from using something disposable, to something that's reusable. Ok, so now what? So for this, we solved the two problems in one year. We've created a financing solution, where every time we need to buy reusable containers, instead of buying them ourselves, we have them financed by consumers themselves, in a geographical area where these containers will be deployed, customers can invest in these reusable containers.

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Speaker 1

Except that to really motivate them in the reuse system, they're not going to be repaid like a loan, as in, pay them a monthly payment for their investment. Nor are they investing in Pyxo. It's not really crowdfunding as we know it. But rather, every time the reusable containers that they have invested in circulate, meaning that a restaurant uses them because a consumer has requested it, and the restaurant is invoiced for this use of the container.

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Speaker 1

And we pay a part of this invoice to the investor. Which means that investors only earn money when reuse works. This means that if they have invested in reusable containers from the geographical area where they're located, then the more they make sure that reuse works with their family, their friends or themselves, they ask for reusables in restaurants, then the more money they earn.

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Speaker 1

And the longer the reusable containers last, the longer their lifespan, the more money they earn, as we always charge the same price to restaurants. So if a container does 10 cycles, or it does 500, there's not



the same profitability for financial products. And finally, the faster the containers come back to the point of sale, the more the users bring them back promptly into the circuit, the more money they earn.

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Speaker 1

So basically our goal was really to motivate consumer-investors to the same reuse metrics as us. In the end we have the same interests, and it turns out that our interests are more aligned with the environmental impact. And ultimately, every time an investor makes money, disposable packaging has been avoided. So that's what's called money for impact.

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Speaker 1

It's direct. So if you want to invest and take part in this venture, there's a dedicated website, "Pyxo.erable.com" It's a platform with our partner "Érable" (maple), that lets you register find out about every fundraiser we're going doing in this area, as well as to buy reusable containers, and there are two possibilities for doing that.

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Speaker 1

If you're used to the Web3 and the blockchain, you can use a wallet to buy containers, which is the most direct way to do it, and that avoids certain intermediary commissions. And if you don't know anything about it, and you don't want to know about it, or it maybe even scares you, then there's Érable, who have developed a solution that lets you to buy the containers directly via your credit card.

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Speaker 1

That way, Érable becomes the manager of the underlying wallet on your behalf. There are more commissions, but on the other hand it's much easier to access. Once you've invested, you get access to a dashboard that gives you access to all the data about the reusable containers that are circulating, and so on. For our part, every week when we receive money, we pay into a fund shared between all the investors who have taken part in this fundraising, the money that's collected, and at any time you want to get back your money, you just click a button.

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Speaker 1

That terminates the investment, you get your share of the shared fund, and you exit. But if you don't feel like withdrawing your money, the containers theoretically have a pretty much infinite lifespan.

Because what happens is that if someone steals a container, we collect the deposit that they've left, and with the money from that deposit we buy back another container to replace it.

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Speaker 1

So the lifespan of the containers is sort of the key to the environmental impact of the solution. Right now there are a lot of LCAs, life cycle analyses/environmental impact assessments coming out about reuse, that say reusable containers have to reach a certain number of uses for them to be better than disposables. And that makes sense: a reusable container is sturdier, it's more robust, so it costs more in terms of resources to manufacture.

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Speaker 1

So if it's lost after its first use, in the end it's worse than using a disposable container. Frankly, that depends a bit on the circuits. It's hard to make a generalisation, for example when containers are used for onsite sales, where they're never transported, are cleaned onsite, and rotate within the same restaurant, then within few cycles, after 7 to 10 uses, then they're much better than disposables.

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Speaker 1

It's not too much of a problem. When containers start to move around a lot, especially when they're going to outsourced dishwashing, then it depends a bit on the distance to the dishwashing centre. The more kilometres they travel, the less the truck is full, because it depends on the loading level of the truck, the less full it is, the more expensive it gets.

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Speaker 1

There was a great study done in Michigan, for a city in Michigan that went to zero waste, in all of its flows, which was a sort of city-scale test. They worked out that on average it takes between seven and fourteen cycles for reusable packaging to be better than disposable packaging.

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Speaker 1

Now, the question that we're often being asked by restaurant owners is: "Ok, so out of your catalogue, which are the most durable reusable containers, which are the most sturdy?", and so on. Except that it's not really what you need to be looking at these days. You have to bear in mind that today, reusable containers disappear, not because they're damaged, but because they're stolen.

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Speaker 1

It's a question of mathematics. If you have a container return rate, statistically what's the percentage chance, when you distribute a container, that it comes back to you? That consumers play the game? If you have a container return rate of 95%, which is roughly what Pyxo has currently, you see that it's not the real lifespan of the container that's the issue.

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Speaker 1

It's more the fact that it's going to be stolen, long before it reaches its end of life. And that's why companies like Pyxo, as we're not the only ones doing this, are working so hard on the customer experience, and on motivating customers to return containers. It's not about hassling them, but rather because the environmental benefit really stems entirely from that metric.

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Speaker 1

So we've been making efforts that are definitely going to help a lot. There's also the idea of standardising containers. If Burger King, KFC, and McDonald's used the same containers, and there was no logo on them. If they were all grey. Then maybe they'd be stolen a bit less. Or once people have a small stock of them at home, they'll stop.

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Speaker 1

There are lots of metrics like that, but that's the key metric, the container return rate, and that's what makes reusable containers better.

So what are the challenges for Pyxo? Honestly, our number one challenge right now is the laws. French law is really good, and unique worldwide. There are already countries copying them, but there's a European law that's coming out at the moment, which is going to be put to the vote anyway, called the PPWD, and which would set objectives for reuse for the entire European Union.

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Speaker 1

We were discussing this with a parliamentarian last week. It's the first time in all his time at the European Parliament that he'd seen so much money from lobbies being spent on opposing this law. It's astronomical. Remember that the packaging market worldwide is worth 1000 billion dollars. If the PPWD

passes with high reuse targets, that means that by 2040, when you go to a supermarket, all your pots of flour will be in standard containers.

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Speaker 1

So why would you choose Farine Francine instead of another? In the end it might be more about its quality, and less about its packaging. It would mean a total rethinking of a massive number of business models, as well as the money spent on packaging every year. Bear in mind that disposable packaging accounts for 40% of all the paper consumed in Europe, and 50% of all plastic.

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Speaker 1

So these are astronomical issues, which makes it a great challenge for us to ensure that these laws continue to be approved, because their environmental impact is undeniable. So that's the major challenge right now. And beyond that, we're not limiting ourselves to quietly waiting for laws to be passed.

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Speaker 1

We're continuing our with explorations, notably with Érable, the container financing platform, to try and motivate and involve customers in this transition. Finding a way that they have something to gain from it, and that they get involved with the transition, and that for brands or restaurants where it can be a bit complex to switch to reuse, it scares them a little.

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Speaker 1

They realise that consumers are asking for it. Everyone's pretty motivated. If I were a restaurant manager, I could buy my containers to be reused at my establishment, and earn a bit of money along the way. So we're sort of playing both sides, making sure that on the one hand, laws are increasingly ambitious, and on the other hand, from a consumer and restaurant point of view, that it's more and more accessible, and that they're motivated to do it.

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Speaker 1

So the role of Pyxo is to support this transition from disposable to reusable, by simplifying the lives of consumers and restaurant owners. And as an individual, as a consumer, increasingly I think this is the

way forward. You have to consume responsibly, you have to turn off lights, you have to limit heating, of course. Unfortunately, these days that pretty much has to be your baseline.

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Speaker 1

That said, have to go a bit further, and maybe commit a bit more, to show that as French people, we're ready, that we want to get things moving, and that's not an issue that should be worked out in back rooms of the government, between lobbyists and decision-makers, that in the end it's us who have the right to decide, that we're part of these movements that want to change things, and, honestly, we're doing that pretty well.

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Speaker 1

And the really big realisation for me on these subjects happened during lockdown. Like a lot of people, I finally had time to read, and notably I read books that I'd been recommended, but had never had the time to read, such as the Meadows Report, and Pablo Servigne's How Everything Can Collapse.

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Speaker 1

The Age of Low Tech by Philippe Bihouix. Absolutely brilliant. I recommend them. These books make you realise that no, technology and science can't save us. Because there's this obsession with growth. And that's not possible in a world with finite resources. And so that was a real bombshell for me: "Ok, so I created a company," Pyxo already existed. "But a company's goal is to grow.

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Speaker 1

So actually how do I fit in there? How can I be consistent with myself, if only because I have a business." So there's a certain logic. Pyxo brings a benefit to the planet, and most of all we're growing in a market that's ever more harmful currently. So basically we're stealing market share from something that's much less good for the planet.

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Speaker 1

So really, companies aren't going to get us out of there, or even public authorities, they're doing things well, they're passing laws that are restrictive, and so on. But to quote Jean-Marc Jancovici, the difference between sobriety and poverty, is that sobriety is chosen and that overall, that's what you have to do. You have to choose sobriety.

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Speaker 1

We have to restrict ourselves in our consumption in a pretty drastic way, so that we reach our goals. And not just waiting for nice impactful companies like Pyxo to come along, and I'm happy to be making my contribution. But really we're not going to solve everything. We also have to drastically change our consumption patterns.