

CONTEXT: Interviews conducted as part of an investigation into the barriers to, and opportunities for, achieving Circular Synthetics. Research was funded by Business of Fashion, Textiles and Technology Creative Research & Development Partnership (BFTT CRDP—£5.5 million) led by the University of the Arts London, part of the UK Creative Industries Clusters Programme (CICP) funded by the Industrial Strategy Challenge Fund, and delivered by the Arts and Humanities Research Council (AHRC) on behalf of UK Research and Innovation.

Interview ID: BFTT-WP5-070520-07

Interviewee: Head of circularity, store collection service

**1: Interviewer**

**2: Interviewee**

**1:** Okay, great. Just a warm up question. Can you tell me a bit about the background of [redacted] and also your role at [redacted] now?

**2:** [redacted] is founded in 2009. We are around for quite some time. I know that back then, the concept of circularity in fashion was not established at all. Not even-- I think CSR was somehow an evolving concept but circularity at a level of education and conceptualization has been coming up I think throughout the last years especially with the MacArthur Foundation's reports being published. The first one was 2013 and '17, the new textiles economy one. We've been in this for quite some time, collaborating with brands to collect used garments and shoes from their customers.

The reason why we think it's very important to partner up with the brands, besides there are the traditional collection schemes on the street with the clothing banks, we see our model as an enhancement in order to reach more people in order to make the brands responsible and provide an end to flex solution for the customers and also have a global reach in terms of infrastructure because we share logistics with the brands. To that we we're able to collect garments in more than 70 countries worldwide with many different brands, [redacted] being the biggest one with the only global garment collection scheme. There is currently in so many countries. We're proud of the system that we've built up. My role as a leader of the circularity team, specifically to think about future solutions for what to do with the garments that we collect. We use the existing channels. We use existing recycling technologies. My role is to search for new ways of regulating the textile wastes.

**1:** Okay. Just as a brief kind of benchmark, I guess, do all of your textile that you collect go through [redacted] sorting or is some of it going to a different route?

**2:** Sometimes can go to different routes. It has two big sorting facilities, one in Germany and one in UAE, close to Dubai. This is good for specific geographic regions. For example, everything we just collected in the stores in Europe, then goes to the German facility, but when we collected North America or South America or Asia we have partners that are more close to the area of collection to avoid too long distances shippings.

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**1:** Okay, perfect. We're going to move on to a question about what you think are the barriers to your company, your business that you work for dealing with synthetic waste? I'm saying synthetic waste. I know that's mostly going to be the same kind of barriers for all of the wastes but if there are any things that relate specifically to synthetics then perhaps then raise those as well if that's possible.

**2:** I think synthetics are actually a higher challenge, a larger challenge than natural fibers. I think that's through many-- I mean, there are problems with that when terms of fibers shedding micro fibers and stuff, but whenever we only talk about our part, then there are very traditional mechanical recycling possibilities for cotton and for wool and cashmere before synthetics and the recycling, the traditional recycling many times cannot be applied.

One exception is acrylic, because it is imitating wool. It can be processed mechanically similar to a woolen knitwear pullover and it has some properties that are useful for installation material but it's not a major focus. Specifically when natural fibers are mixed with synthetic fibers too much, they cannot go to the traditional recycling groups. In that moment it becomes a barrier because we don't have the recycling solutions attached on a commercial scale.

**1:** I know perhaps you can't give me specific figures, but your sense of where the majority of synthetic textile waste ends up at the moment currently?

**2:** We try to mix it. We have the numbers. We have around 50 to 60% of the volumes we connect are reusable. Then we have around 6 to 10% waste. Which is everything mixed. Sometimes we have household waste in the collections, especially in the facility. We'll look at the facility level. There's also some of the street collections entering the facility. There's much more solid waste and also waste and everything in the [redacted] collection. There is a waste fraction always. The two major fractions and recycling is wipers and mechanical recycling for insulation products.

The focus is both for wipers, cotton is important. For mechanical recycling, cotton is also an important input stream. What we can do is that we mix some of the synthetic fibers into this balancing them with part of natural fibers to have a final product, which is useful for insulation products. There are also many of the complex synthetic materials like a rain jacket if it's broken a lot and it cannot be reused or repaired. It cannot go to the traditional recycling routes because you cannot make a wiper or an installation material out of a broken rain jacket then this needs to go into thermal energy recovery.

**1:** Do you notice anything about the composition of the re-wearable fraction of the items that you are collecting? Is there a big difference do you think between synthetic and natural? Is it more of the re-wearable garments tend to be one or the other? Or is it not really easy to make a comment on that?

**2:** We have never checked that.

**1:** No, okay. Just thought I'd asked.

**2:** Because we don't check the materials but my assumption would be, or my thought would be that there's no difference. The determination if something's reusable or not, is not primarily made based on the material, but based on the style and if it's fashionable, if it's in a good condition. Is it a product category which is currently demanded on the [inaudible 00:13:20] so this is the factors.

**1:** Okay, perfect. You could make collections from specific stores. Are there any specific brands that you deal with where you collect a primarily synthetic type of product. I'm thinking like sportswear which is the sector that we're focusing on. Are there any brands that you work with where you're getting high quantity of synthetics?

**2:** The [redacted] model first is that a customer can hand in everything always. Every branding, every type of garment you can go into an agent and you can hand in an outdoor jacket. You could also go into an outdoor customer and hand in a pajama. It so happens that people tend to give more outdoor clothes into an outdoor shop. The amount of synthetics is higher when the retailer offering the garment connections service is an outdoor. [crosstalk] I'm thinking for example.

**1:** Just final one on that point. Do you deal at all with dead stock? When a brand has an excess stock?

**2:** Yes, we also do with that. This is also simply arising from the brand taking circularity seriously and offering a take-back system and the solution for post-consumer waste. It just makes sense that they also take care of their pre-consumer waste, what we call the overstocks returns, leftover products. We also deal with them. They are sorted in a different place. They're not mixed with post-consumer because it's just very different kind of product. Brand have much more control over what happens with their dead stock than post-consumers just can be everything.

**1:** Would the majority of that go to a re-wearable market? They're not being funny about, "We don't want our branded stuff to be used without--" I've heard about some brands wanting to destroy their dead stock so that it's not devalued in a sense.

**2:** Our solution is more to agree on markets where these goods can be re-sold. Which are more exotic markets where many brands are not operating.

**1:** Okay, great. You're collecting and sorting actually in very centralized areas. You've got two or so. Two. Are you starting to see potential problems with exporting waste to those sites from your collection facilities? I know that some countries have put bans on textile waste imports or any waste imports. Is that becoming an issue, will it become more of an issue in the future?

**2:** I think it will become an issue in the future. Simply when you look at other waste streams with the plastic waste or paper or electronics which are neatly collected in the Western countries but then somehow shipped to China. Once China closed the import of anything which is considered waste then this is a backlog to the collection countries. For textiles there are some countries which already banned the import of used textiles or waste. I'm not so familiar with the specifics but I know that in that moment where something's considered waste legally, then it makes things with transport and import always more difficult than when it is considered a product.

When we collect used garments then they are in many countries considered waste after they have been sorted into certain products we call them products. Then they are again, legal products.

**1:** That's interesting.

**2:** Because there has been a value creation in, take this huge pile of different garments, different qualities. Bad qualities, good qualities, torn things, good things and then extracting an article which could be, some are dresses for women with flower print in a certain quality then definitely this is not waste anymore. This is a product again which can be resold.

**1:** If they wouldn't mind there in the future be an incentive for [redacted] to have more locally more regional sorting facilities? If they're able to sort waste locally, then create a product that they can export or is that not becoming an issue yet?

**2:** I don't know about that, sorry.

**1:** No, no, that's fine. Okay, great. Now I just want to move on to opportunities, more positive stuff. Where do you think the opportunities lie for achieving circular specifically synthetics textiles in the future? What are the big wins, if you like, or the things that could happen, which would really enable circular synthetics to be a commercial thing?

**2:** Well, first of all, I think it is so important to find a circular solution for synthetics. So important because it has so many bad environmental impacts on the whole production and end of use stage. For me, circular, I always like to think of all the different cycles in the butterfly model of the Ellen MacArthur Foundation. Synthetics I think have a high potential of being a durable product. This should always be the first especially when recycling difficult and I think you could make a very durable product out of synthetic fiber. It is a large feedstock because it is becoming more compared to natural and animal fibers. It just becomes more volume, more synthetic textiles that are being produced, used and then finally discarded. There's enough feedstock. You just need to harvest it.

**1:** Do you see the types of solutions coming through to maximize that opportunity? Where do you see the most potential lying in terms of dealing with that feedstock? I'm thinking in terms of I guess, reprocessing, or sorting and also I guess, from the consumer perspective. Are they ready for that product at the end?

**2:** Recycled polyester is something which is already established also at the consumer side but few consumers understand that this is only from PET bottles, not from textiles but the concept of recycled polyester is good and is already there and I think that's a good base to build on but now the challenge is to actually find the recycling solution and scale them. I see a lot of barriers at the moment actually to push this forward. There are opportunities but in my daily work, I am more confronted with barriers.

**1:** Okay that's interesting. If you had to identify the biggest barrier, what is the one thing that stands out as being particularly important to solve in the next 5 to 10 years, I guess specifically, with synthetics?

**2:** I think it's investment because, many say we need technology but I know that there is technology out there. It just needs to be scaled and in order for it to scale, you need to invest in it but it is important to not only think about the technology that needs to be commercialized but also the preparation of the material and this is something that we take care of. Because, there's no technology where you just put in a whole garment of any material composition. Just the magical container where you just put in a garment and then something comes out.

There's a lot of pre-processing and sorting effort necessary. In order to prepare the material that it can go into this chemical recycling technology. We feel that at the moment investment is too little. Investment is too pointed towards the technology. We need investment too as the pre-step for recycling and we're many times forgotten.

**1:** Where are you seeing that most within? Is it throughout all of the investment streams, or are the government funding not enough, or is it the angel funders or is it the brands? Who should be giving you more money? .

**2:** I see the government in a large responsibility and they're doing too less. I like the innovation funds like Horizon 2020. This is great and it's necessary like Trash-2-Cash is super important but this takes a long time actually until we develop something and you get money for developing something but what happens after that, right? I think brands need to be forced to demand and support a new material. Some brands do it on their own because they think when I buy a polyester made from, not bottles but from textiles and then they see a competitive advantage for their customers but this is not always the case.

If the government has more regulations around this pushing and pulling the brands to demand this product and to buy this new fiber, then the whole chain of participants before this profit, they benefit from this market demand because, right now it's a lot of pushing and not so much pulling.

**1:** Okay, cool. Okay, great. I'm just going to move on to the next section because I'm aware of time. I'm just going to send you a link into the chat. Hopefully, this will work, although I haven't done this before, so we'll see what happens. Let me find the chat. Where is it? Okay. It's a Google Doc. Hopefully, you can get into it.

**Interviewee:** Yes, I see it.

**1:** Perfect. Okay, so the idea is really to give you a visual reference but also, I will type into it based on your responses but if you want to, you can also type into it.

People often don't because they prefer to let someone else do it but it's entirely up to you. What you're looking at is our two products which are produced by our case study partner who are a team wear manufacturer who are interested in circularity and bringing secular principles into their products. We're not working for them,

there's no financial exchange. It's more to give some focus to what the research that we're doing so that we can make it more applicable and specific to a particular situation if you like.

For these two garments, I wonder if you could just tell me a little bit about how these garments would relate to your business. Where might they come from, how might they be processed and then where might they go and how you see that part of their life cycle, if you like.

**2:** This is typical wear. They are collected through all kinds of routes. They can be collected through container, street container clothing banks but they can also be collected in the stores. Their typical recycling route would be reuse because it's a high quality product and there is a market of this performance sportswear to be bought secondhand.

**1:** Okay. I'm sorry. If they were in a poor condition, do they present any particular challenges to your processes or the way you deal with them, for example they have-- They're stitched together but they have a identity branding on them which can be printed or embroidered and then this jacket is fleece and has a zipped pockets and a zipped yoke? Would that present any problems for the weight, what you do with them, if they were not wearable?

**2:** Well, at the moment, nobody separates and cuts out a separate from the garment manually. Even if this would be some deep touchable zipper, it wouldn't make a difference because it would be just too expensive to take that out manually. This would be mechanically would be just shredded, and then the hard parts fall down, or if it's metal, they are separated with a metal detector.

**1:** They'd be shredded mechanically, and then what end market would they-- Where would they end up? Sorry?

**2:** Insulation material.

**1:** Insulation.

**2:** Here, I would assume that the leggings would be rather incinerated and mechanically recycled, because there's a lot of elastane in it usually.

**1:** If it was 100% polyester, would that be then suitable for insulation or--?

**2:** No.

**1:** No.

**2:** That would go into incineration.

**1:** Fleece could be insulation. Oh, gosh, difficult to type quickly. Leggings would be incinerated. Then, I'm going to go on to the next slide, which is more about what could happen in the future. If you could see an ideal business model for yourself in relation to circular synthetics, what would that look like? How could you envisage if

you had the power to create the perfect system, what might that look like for these garments?

2: That those garments can be chemically recycled and the polyester could be extracted. One moment, I need to plug in my battery.

1: Okay, that's fine.

2: Okay, sorry.

1: That's fine. They don't pose you particular problem from the rewearable point of view, but they do if then they're non-wearable?

2: Yes.

1: In terms of collecting them, is there anything that could be more ideal from what's happening at the moment, or the way that people treat them, hand them in or don't hand them in or the way that the brands engage with that? How could that be better or improved?

2: With the leggings, a major reason why they're not able to be reused is the waistband. When there's elastic material, and at some point, if it's very old, it breaks easily. It's not so elastic anymore. I don't know if you know what I mean.

1: Yes, the elastane perishes, doesn't it?

2: Exactly, you tear it and then it doesn't go back. This would be, with this article, the typical reason why it would be considered as not rewearable more. If this could be made with a better elastane, then it could prolong the lifetime of the garment. I don't know how this is being done. I'm not a product designer, but this I would say is the first thing to break.

1: What about the- you mentioned the zip, what would be a bad decision? Are they often broken and does that mean that they're not wearable anymore or how--?

2: With fleece, it's peeling.

1: Peeling. You find that that's more associated with polyester or synthetics than natural, or is it both?

2: Peeling can also happen with cotton t-shirts. I don't know how this is related to the material.

1: Perfect. In terms of how they're collected currently, is there anything that the consumer or the brand could do differently to help with the way that your business is currently, the way that [redacted] is currently collecting these types of garments? Do you find that at the moment, actually, it works really well, and there aren't any particular challenges from that point of view?

2: Well, I think the major challenge is that we don't know what is inside. There are opportunities like digital ID, that ID that can be built into-- This is really future.

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1: Yes, that's fine. We've got to think big.

2: Yes.

1: When you say this is really future, what timeframe do you imagine that to be really?

2: When brands start to build in digital IDs today, and they're now are the first movers. Let's take it--

1: Are you allowed to name them?

2: Sorry?

1: Sorry, are you allowed to name them, to identify the brand?

2: I don't know which brands are currently thinking of it.

1: Oh, okay.

2: If they do, and then more brands will follow in the next year, then the garment is worn a few years, and then we receive it back. We have at least, let's say, five to seven years until there's an significant amount of garments with a digital ID coming back to a sorting facility.

1: When brands first take up the technology of tagging. Yes, that's a good point. It's going to take a long time for it to follow through, isn't it? The way that the type of the-- How do I say? The condition that the garments are in when you get them, is that okay at the moment, or do they tend to be dirty, or people would give the clothes in a condition that they would consider them wearable?

2: This depends on the country.

1: Well, that's interesting.

2: It depends on the wealthiness of the country. It says a lot about the social and economic structure of the people living in that country. When we collect things from Germany, there are good clothes in them because they just discard them because they don't like it anymore. If we collect in Kazakhstan, for example-- I don't know numbers, but people tend to wear things as long as they can because they're economically not so wealthy to buy new clothes every now and then.

1: That's really interesting. I'm going to put that on the previous slide. Wealthier, in other words, wealthier countries tend to produce more rewearable?

2: Yes, exactly.

1: Not produce, keep or waste more.

2: It's keep, waste, yes.



**1:** All right. That's really interesting. Fantastic. Moving on to the third slide now, and what we want to do within the project is to build a roadmap. We want to identify the areas where there's a particular challenge, but also a particular opportunity and find ways of leveraging particular solutions, if you like, or things which need to happen. Also, we hope to provide policy paper and put pressure on government based on our findings. If you think of on the left-hand side, that's now, and the middle is in five years time, and then 10 years time is the far right. What timeframes would you hope for some of these things to happen? If we take, for example, chemical recycling, you identified earlier.

**2:** Chemical recycling is in a lab scale now, but I think the technology itself has been proven. In the next five years, there needs to be investment into scaling up this technology and helping the companies to build larger plants. In the next five years, the soldier needs to be supported to buy and develop material recognition and pre-processing machines.

**1:** Okay, material recognition. [redacted] are quite involved quite a lot in technology projects. They've been involved. Have they in some trials of tagging and product ID. Are they are they involved in those conversations?

**2:** Yes, but at the moment it's more in the preparation phase. Most of the garments that we receive back, they don't have any ID yet but we are involved in the development of standards on how information should be put into a circular ID and what information are important for us [unintelligible 00:40:59]. We're involved in the circular ID or, we're partnering with the circular fashion in Berlin and we're part of Connect fashion in the US. Both are very similar approaches.

**1:** One was a Circular Fashion in Germany and what was the other one? Sorry, connects?

**2:** Connect fashion.

**1:** They're both developing material ID systems, or?

**2:** Yes.

**1:** You're able to give the sorter perspective.

**2:** Yes, but there're basically two ways of determining the material of a garment in the future. One is material recognition, where you just scan the surface of a garment and the other one is an ID. We will need to develop both of this parallelly because we cannot wait for the moment that everything has an ID. We need to start today to scan surfaces and then the machine says, okay this is 50% polyester and 50% cotton so both machines are important to have as a sorter.

**1:** The fabric scanners, that would be part of potentially a production line like the fiber sort.

**2:** Yes. Exactly.

**1:** In terms of fabric scanners, who would you need to work with on that? Who are the key partners, would you think?

**2:** That would be companies that produce these technologies. With [redacted] I think the one that sells it is [redacted]. This is simple. When it is development, it's a simple investment decision. Do we buy this machine, or not?

**1:** Let me go back and see if there's anything else to pick up from what needs to happen over the next 10 years. Digital ID.

**2:** They need to be on a political level. There needs to be an exploration of EPR models.

**1:** EPR models and policymakers. Who do you think is at the forefront of that? Because I know in the UK it's going to take very long time but are there other countries who are further along?

**2:** France.

**1:** Are you able to work with them, or is it more a case of you waiting? Are you in consultation on that all or?

**2:** We're part of the policy hub which is a group of experts from SAC. The Sustainable Apparel Coalition and Ezfafi. The Sports Association and the Ellen MacArthur Foundation.

**1:** Ezfafi. How do you spell that?

**2:** E-Z-F-E-F-I.

**1:** Oh, okay.

**2:** Yes, and the Ellen MacArthur Foundation. This is a policy hub that talks to the commission

**1:** That's really interesting. To the EU Commission?

**2:** Yes.

**1:** France is pushing it or they are involved because of the EU involvement?

**2:** France has already an EPR system even before it is being made necessary from the EU Commission. They did it [crosstalk] by themselves.

**1:** I think I knew that but do these things have to happen in parallel or does one need to happen before the other?

**2:** Oh, in parallel. Definitely.

**1:** Within the next five years?

**2:** Yes.

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**1:** Is there anything in the further 2025 to 2030 bracket that would need to happen after that to cement this as a strategy or as a commercial and effective solution?

**2:** I think it's the market development. The first things that you wrote down, this is something which is a precondition in order to create a circular structure and the circular technology for recycling of synthetics and once this is ready and it's being marketed, then the customers needs to like it in order to demand it further and the brand needs to create that demand in order to increase volumes and develop this market.

**1:** By the customers, you mean the brands or do you mean the end users?

**2:** No. I mean end consumers.

**1:** You mean consumers, okay. Consumers [inaudible 00:46:11]. Consumers need to like it. Then that leads on to the brands. One of the first things you said was that polyester could be a very durable product. Is there anything that I could add on here which needs to happen for that point of view? When we talked about the other garments, you suggested some things which could be improved in the design of the garments to make them last longer and make them more suitable for a wearable market.

**2:** They should be part of the EPR because if it's a good EPR system, the amount of financial contribution is depending on the product they sell. It is lower or it's called eco-modulation of fees. Oh . It just says, if you market a product with recycled content, you need to pay less fee. If you market a product which is made to be durable, you pay less fee. If you market a very cheap quality, fast fashion product, your fee would be higher.

**1:** It's leveling the playing field a little bit isn't it? One question I didn't ask before and I'm going to ask it now. I meant to ask you before, how has the pandemic situation changed your vision of what's going to happen over the next 10 years? Do you think at the moment it's going to have a very big impact, and if so, in what way?

**2:** I think it has a big impact because, it has a big impact on the economics of the fashion industry in total. I'm afraid that the more in trouble a fashion company is, the more strict it needs to look on their economic numbers which can hinder innovation projects to have enough attention. I'm afraid that this is negative for sustainability initiatives within the company but it very much depends on what company it is. If it was committed before, it will most likely continue. If it was not committed before, it might not be super engaged when it is in a difficult economic situation.

**1:** That's a wider trend perhaps. What about specifically around the collection of textiles and how the waste? Because, I know within the UK, they're noticing that actually, while people are lockdown they're getting rid of a lot of textile waste and it's not being collected and then the markets are changing. What can you see happening in that way?

**2:** Exactly the same. People are clearing their closets and they want to give it to someone but the collectors are closing. The charity stop collecting and we stop

collecting if the stores are closed but our sister company who is doing street collections with clothing banks, they recognize that there's a lot more garments that are handed in, but we cannot process and sell them because the markets for us are closed. There's a huge backlog. Garments are collected, but we don't know what to do with them. This leads to many of the collectors stopping their collection which makes even more pressure on those remaining ones.

1: How would this be alleviated. Do you think I guess in the short-term, but also in the long-term?

2: I think it becomes clear to many people and I hope also the policymakers that collecting of textile waste is the-- In German we say system critical.

1: That makes sense .

2: Sorry?

1: That translates well to English, I think.

2: It's critical for the system to continue. Because of this waste collection we were not perceived as a system critical industry before. I hope that this is turning the minds of the communities and the states to value this industry more and financially supporting their work because right now, it is the other way around.

The textile collectors are buying the waste from the community. They're not being paid for their service, but the other way around. This is something which cannot continue because then the collectors will also stop doing this.

1: Okay. That's really interesting. Before moving to the final section, is there anything you wanted to add at all that you don't think we haven't covered in relation to--?

2: No. I think it's fine.

1: Okay, great. Did you have a chance to have a look at the definitions that I sent through? Circular synthetic fibers. They're also on the last slide.

2: Yes.

1: I'll read through the first one just because it may be a make easier. The fibers are really of course the foundation block of this. Then textiles is to with the design of the fabric. Then the garments is to do the design of the garment to support that circularity.

At the moment, this definition reads, a synthetic polymer-based fiber which has been synthesized using waste feedstocks. To be considered circular the fiber minimizes negative social and environmental impacts during manufacturing and should be of equal or higher value than the waste it was generated from and have the technical social economic potential to become the feedstock for further equal or higher value processing at the end of any subsequent use phase.

Is there anything that you would change or add about that definition?

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**2:** What I like about it is that you opened the path for a cascaded circular approach. You use waste feedstock without saying textile waste feedstock. You use higher value processing at the end and you leave it up to what it can become. It doesn't need to become textiles again. This is something which is very often discussed. Doesn't need to come from textiles waste. It doesn't need to get again into a textile product.

This means circular for me, it is open. Circular economy is not limited to one industry. I really like that open definition.

**1:** Okay, great. After this interview is over, if you would like to send any additions, you can email me at any time. I'm wondering as well having spoken to you whether you would put something in about longevity and the other circles if you like. This describes our recycling I guess a faster-

**2:** You put that into the garments so-

**1:** Okay, you're right .

**2:** That's good.

**1:** Just a final point because you've mentioned the cascading on the open system. I know there has been more recently some thinking around how you could pool waste resources to create a certain stream of for example PET for synthetics. I don't know if you know The Green Blue report which looks at PET waste sheds where basically they look tabs. A region in America and look to all of the potential waste sources of PET including car pits and all sorts.

They proposed this idea that you could regionally collect all of the PET and then process it chemically to I guess to create a more stable feedstock I guess than maybe if you rely on one type of product. Do you have any thoughts on that? You sound like you support that kind of thinking.

**2:** It is always better if textiles are collected separately. It's always better because there's always contamination otherwise streams can be just different. It should be better if they are independently of their material composition. Synthetic garments should be collected together with other garments.

**1:** I should have explained myself. I don't think they were collected together. I think it was more that once they've been set-- they had say for example a collection of PET, or primarily PET textiles. Then that would be brought together with other sources to be processed together, I guess.

**2:** That makes sense. That's also the approach of most of the chemical recyclers I've talked to. They also look at PET packaging polyester all kinds of input streams.

**1:** Great. Okay then, I'm going to say thank you very much. It's been really interesting to talk to you. You've raised some really interesting points. I think will be very useful for our research. If there's anything you'd like to add at all, have any thoughts related to this, then please just let me know.

If you would allow me to when we've done all the interviews and put all of our thinking together, then I'll come back to you with what we've come up with and see what your-

**2:** That would be grate

**1:** -feedback would be. [unintelligible 00:57:12]

**2:** Thank you.

**[END OF AUDIO]**