

# Transcript of 'Rethinking Plastic Packaging'

## Season 2, Episode 14, Transforming Tomorrow

[Theme music]

**Jan:** [speaking over music] In today's episode, we'll learn about the relationship of plastic packaging and modern slavery with Professor Linda Hendry from our very own Lancaster University Management School. That's right, it's another episode about the Plastic Packaging in People's Lives project. We'll also cover regrettable substitutes, the use of pea waste for packaging, and Paul's suspicion that a serial killer might be involved in the PPIPL Project.

So, let's get started.

[Theme music continues]

**Paul:** [speaking over music, which fades out.] Hello and welcome to Transforming Tomorrow, the podcast from the Pentland Centre for Sustainability in Business here at Lancaster University Management School. I'm Paul Turner.

**Jan:** And I'm Professor Jan Bebbington.

**Paul:** Jan, we've had an overview of the Plastic Packaging in People's Lives – that's the PPIPL project.

Let's get into a bit of detail, shall we? Where do you want to start?

**Jan:** Well, I think we should start at the very beginning, which is...

**Paul:** [Laughter from Jan] What, what, what the Big Bang. You want us to go back to the, the, the evolution of the universe and discuss how that ended up creating plastics.

**Jan:** Um, not necessarily. We could start a little bit further forward in time and think about where plastics come from, the supply chain for plastics and all of those kind of questions, which I'm sure are something to do with the Big Bang, but not for today.

**Paul:** Yeah, I, I, when you said a bit closer, I thought you were going go to the start of modern civilisation and talk about, you know, the ancient Egyptians in 4,000 BC and, you know, things like this.

**Jan:** Well, it's not, it's not unrelated, 'cause since the dawn of time we've been wrapping things up and moving them around, and it's only just recently we've got into wrapping them up and moving them around with plastic.

**Paul:** Yeah. Do you think the person who we've got as our guest today is gonna be able to answer the question, why didn't the Egyptians wrap their mummies in plastics?

[Laughter]

**Linda:** The answer is no.

[Laughter]

**Jan:** Well, but who was that? Who was that...who was that that just spoke? Tell us about our guest today.

**Paul:** Yes. The voice from the underworld is not an ancient Egyptian mummy, but is rather distinguished - distinguished, Jan...

**Jan:** Thank you, thank you.

**Paul:** ...I'll remember that. Professor Linda Hendry. Welcome back to the podcast, Linda.

**Linda:** Lovely to be here.

**Jan:** And it's really nice to see you again, and our audience will know you from your work on modern slavery, but you are here today to talk about plastics. So how does plastics fit into your work?

**Linda:** Well, I think from last time you'll perhaps remember that I'm an expert in supply chains. So, it's everything that happens from raw materials through to manufacture, processing, distribution, and then...before things get to the consumer. So that's my area. And I'm particularly interested in sustainable

supply chain management and sustainability, as I'm sure you know, from other podcasts, has three pillars.

It has social sustainability, economic, and environmental. So, these two areas to me, really fit nicely together. We've got the social side of the modern slavery, but then we've also got the environmental side, which is how plastics fit in.

**Paul:** When it comes to the Plastic Packaging in People's Lives – PPIPL - project, and I've said it before and I'll say it again, that's not a, a very easy thing to say, and whoever created that, you know, needs a severe, talking to...

**Linda:** PPIPL, PPIPL is easy...

**Paul:** PPIPL's easy to say, but if you say PPIPL to an audience that don't necessarily know what PPIPL means, then it gets confusing. But we will refer to it as PPIPL from now on in this episode. Why then have you focused on the supply chain elements in regards to plastics? What is it about plastics that fits so well with supply chains and your expertise?

**Linda:** So in the PPIPL project, we focused on food, and food - to get to a consumer - needs to go through a supply chain process from the farmer, uh, to any sort of processing or packaging before it gets to the customer. And it will go through various stages of transportation, and it needs to be packaged in some way to get from any point to another point.

So, though we are looking at food, my particular thing has been on how we transport food, how we package it, and what sort of packaging it ends up in before it gets to the consumer.

**Paul:** What kind of work then have you been taking part in as part of the PPIPL project? Who have you been working with and what have you been analysing in your strain of it?

**Linda:** Uh, there's been two main parts to our strain. We've been interviewing people from each, uh, tier of the supply chain. So, we've interviewed a lettuce farmer. Uh, we've interviewed a crisp manufacturer, a meat processor, a cheese processor, so various people along the supply chain, and retailers as well. And what we've done is we've tried to understand what they do in terms of packaging and why.

So, the main part of the project is to look at the attitude-behaviour gap for consumers. So, we started by asking those people, what do you think the attitude of consumers is and what is their behaviour? And we then tried to look at how that was impacting the type of packaging that they were using.

Towards the end of the project we then went into some real detail with two companies. So, this was a meat processor and a cheese processor at this point where we spent three months with one and six months with the other, working alongside them to see what they packaged, why they packaged it, what type of packaging they were using, and what options they had to change things to become more sustainable. And that was absolutely fascinating. All of it was fascinating, but particularly the action research part at the end.

**Jan:** Before we get to there, I think you've mentioned two of the three actors that shape what we might do, um, as individuals, but also what we might do as a, as a country or an industry. So, you've mentioned the companies and their way of thinking about things and what they can do.

You've mentioned, and I know we're gonna talk about this in in later podcasts as well, the consumers and around the attitude and behaviour gap. I wonder before we sort of head off down that route, whether or not you could tell us something about government and the role of, that government might have in supporting the removal of, or the redesign of food packaging, particularly with circularity in mind and trying to get plastics out of that process, or if not out of the process, not single use in that process.

**Linda:** Yes, absolutely. So, the government has introduced a plastic tax and during the research that we were doing, that tax was just coming in. So that meant that when we had events where we brought many industrialists together, it was very much in their minds, uh, because I think when a new law comes out, it just brings things onto the, into the boardroom in a, in a way that it's not there most of the time. I think there are other imperatives as well, so I wouldn't want to say that the government alone was doing that, but obviously when there's a cost, then that becomes something that people, sort of concentrates the mind, as it were.

I would say though, that what we were finding was that this tax was saying unless you had 30% of recycled material in any of your plastic packaging, then you had to pay the plastic tax, but the supply chain wasn't ready. So that's all very well if people can get hold of recycled material that's appropriate for their

product. But if they can't, then there was no incentive for getting 25% recycled, for example. It was because it was more expensive anyway to buy recycled materials. So, if you could only get 25%, then you just would use the same as you were from a financial perspective, and I'm not saying that's how everyone behaved, but from a financial perspective, you just carry on as you were and pay the tax. And we were finding people saying, it's cheaper for me to pay the tax.

**Jan:** And that's quite interesting 'cause that's a design of a tax, which is a set number on and off. Whereas you can imagine maybe a gradation...it would be more complex and so more costly to implement...but a gradation might help people come up to the 30% and go beyond it as well. It's an interesting design choice really, isn't it?

**Linda:** It is an interesting design choice and it was an ambitious design choice, but I think also in line with what some of the NGOs have been recommending as well. So, I can see why they did it. But it doesn't always, um, work out quite as, as governments might hope.

So that's one of the things though. But I, I do think that government are right in trying to do something.

**Jan:** Yeah.

**Linda:** Um, I think they need to adapt what they chose.

**Paul:** You do mention there, Linda, that maybe not all companies had that attitude of, I just want to pay the tax because it's gonna be cheaper. Is there a more prevalent attitude among companies maybe that they want to do, take action, to take positive action when it comes to plastics and how they're behaving? Is that what you were finding?

**Linda:** Yes. And there's more than just government influence and there's also consumer influence, which is I guess the main point of our project really. So, there are companies who were experimenting with alternatives. They'd seen the Blue Planet imperative that I think is around as well. And they were worrying about the impact that would have on consumers. But I think one of the really interesting things we found from the crisp manufacturer was they were saying...people like glossy packaging and they, if we make it smaller, then they'll think it's worth less. Um, so there was a worry about that, but I think

we've all seen that many packaging decisions have been to make packages smaller, and they did that and they found they didn't reduce their sales. So that was quite a relief to them. Um, but I think that was really interesting that, that although they were concerned about that, they, nonetheless, they did it because they felt it was the right thing to do.

**Paul:** Where do you stand on crisps?

[Laughter]

**Jan:** Um, well...

[Laughter]

**Paul:** I, I, I, I don't mean, you know, whereabouts do you throw them on the floor and stamp on them. It's always bugged me the opposite, in fact, that maybe the amount of crisps inside were going down and the way it was going down, but the package was staying the same size. It annoyed me more than anything that you were led to a world of disappointment that you weren't getting as much in the packet, that the packet maybe led you to believe. Therefore, a smaller packet that's a more realistic reflection of what's inside would seem to be, to me, as a consumer, a better thing.

**Jan:** Absolutely. But then also as a consumer, if I was thinking about packaging, I might prefer one larger packet than several smaller ones. And I don't how the area, surface area sort of works out. But at the same time, as a consumer, if I buy a large packet of crisps, I eat all of them. [Laughter] If I buy a small packet of crisps, I eat all of them. So, so I can kind of, there's a, there's, there's a whole sort of consumer health purchasing angle behind all of this as well.

**Paul:** Yeah. Speaking as someone in a household with two small children, I could never buy, um, one massive packet because they would want the smaller packets themselves. We don't send them off to school with packets of crisps, but if they're gonna have a cri, a packet of crisps, which doesn't happen that often, but does happen occasionally, I don't want it to seem like I'm just filling my children full of junk food and hoping they'll go away. Um, but if you have them, you need to give them the smaller packet so that they can have it individually, you can't just have one big packet and..

**Linda:** But Paul, but Paul, you can, as a parent, you can be much more disciplined than you can as an individual. I always felt I made better decisions for my children than I did for myself. So as a parent, you can buy a big packet. You can have a little Tupperware for them, and give them a few each day, and they only go to school with the little Tupperware or whatever container you choose each day. And then they'll only eat that much because they don't know there's a big packet. Little children can be really easily, um...helped!

[Laughter]

**Paul:** Yeah. I, I think that my children have, my children have gone beyond the phase of being able to fool with things like that, they're very definitely aware that crisps do come in packets and not in Tupperwares. We, we can get away with the, with other things like that, but yeah, not necessarily with crisps. Yeah. I, I find that with sweets you can do that ...

**Linda:** right.

**Paul:**...very easily. They're not used to being given a little packet of sweets. They're used to being given a couple of sweets here and there. Again, I need to stress, I do not just fill my children with junk food and expect to go away. More than anything, if you fill them with too much junk food, they become more hyperactive and demand more attention.

**Jan:** Yes.

**Linda:** Seriously, though I do think there are some consumers out there who are making that decision to buy a big packet and take themselves a little bit of it each day to reduce the packaging that they consume.

**Paul:** Yeah, I, I, I can totally agree with where, where that would come from. I just think in my house with two small children, that's just not, not working.

[Laughter]

**Jan:** Well, it's a really nice sort of insight into that interaction between individuals, householders and the, and the, the things that we consume. I think that's a really nice mix.

**Paul:** It is. So, when it came to those companies, then, Linda. Through the PPIPL project, you've identified seven strategies that these companies might have for reducing the amount of plastic waste that is produced through their operations. Can you outline these seven for us, maybe go into a bit of detail on some of them and which you know, which are your favourites?

**Linda:** Are my favourites? Okay.

**Paul:** Yeah. Asking you to pick a favourite child from your seven strategies.

[Laughter]

**Linda:** Well, we've already talked about reducing the weight of plastic packaging, so that's the first on my list. That is actually a good strategy in my opinion, because it's prevention. You're using less packaging. I know it's still plastic and we need to perhaps talk about whether plastic is good or bad, but it is nonetheless a reduction in, in terms of the amount of packaging that we're using.

The second one to tell you about is redesigning and reprocessing packaging to promote recyclability. So, for example, um, some of the companies we spoke to were using mono-plastics. So, it used to be that if you, you use several different components, that's very hard to recycle. But if you try and get your components of your packaging down to one component that is much easier to recycle.

But also things like, uh, the cleaning of, of used packaging can be really difficult. So, we can't be used for food grade packaging unless it's clean. So trying to redesign products so that they are cleaner can be really helpful. Then we've got using more recycled content for our food grade plastic packaging, so that's our third one.

I think there's been some confusion in the past over what is food grade quality, so some clarity has been found around that and we are now able to use more recycled, uh, packaging than we thought we could before.

**Paul:** Just to interrupt there, Linda?

**Linda:** Yes.



**Paul:** Does that tie in a little bit to the second one whereby if you are able to better reprocess and recycle and clean the stuff that you've used in the first place, does that then tie into being able to use more recycled one for food grade packaging yet again?

**Linda:** Absolutely. And that's why this, this project is a circular supply chain project, because it's not just about making sure we use more recycled, we've got to make it more recyclable in the first place in, in order for us to do that.

**Paul:** Mm-hmm.

**Linda:** So the circularity of it is really, really important. Yeah. Yep. So, the fourth one then is adopting reusable plastics. So many of us will have seen refill stations in supermarkets, so that's a clear option where we take in our own packaging. Many, many problems with it, and we can talk about that from a consumer point of view, but it's a good, a good idea nonetheless. Again, it's still plastic. We've then got using biodegradable plastic and that's the composting idea, but that's really the most controversial one. I think a lot of people thought composting was a really good idea, but I think now we know most people don't compost. So, it's all very well, but unless people are gonna compost, why would we do that? So that, that's one that, um, is controversial, but nonetheless, it's one that we've seen people doing.

And then we've got removing unnecessary packaging, and this has got to be the most obvious one to do. So, we saw, for example, packaging being removed halfway down the supply chain, and then something being repackaged just to be rebranded. If you just have a paper label for your branding rather than a whole piece of plastic packaging for your branding, then you only need to replace the paper label.

But obviously that's got to be really easy, peelable at some point so you can put another one on. So, there are problems with it, and I think from an operations management or supply chain management point of view, we've always got to think about the efficiency of all of that. Uh, but there's definitely a lot of unnecessary packaging that goes on in supply chains even before it gets to the consumer.

So that one I think is a, a big one. Um, even things that we see in the, the shops though. So it used to be that a jar of cream, uh, would have a sort of tinfoil top to keep it sealed and then a plastic lid over the top. Uh, often you don't see

that plastic lid anymore. It was thought to be needed in order to stack them, but now it's not thought to be needed in order to stack them. As a consumer actually, I miss my plastic lids, but that's another point. But again, that's something which is gone because it's not necessary for the transportation process. So why would we have it?

And then lastly, the seventh one is using alternative packaging materials. And in the end, our view is that you can't compare that without actually really analysing all of the alternatives against plastic.

So this project was to look at plastic packaging. That's what the UK government asked us to do. But I think the projects as a whole across the UK came to the conclusion that there is a problem of 'regrettable substitutes', and I really like that term because what we were finding across all the projects is that people might go for something else, but we just make a new recycling problem or a new problem in our circularity. We haven't solved it by just moving away from plastic. So, I think we've come to the conclusion that plastic is not the enemy, but more research is needed to see when it's better to use plastic and when it's better to use paper or glass, tins or whatever.

**Jan:** And I suspect that you're going to come onto this in some of our, our, our later discussion, but it seemed to me that some of what you're describing there was a relationship of two businesses to each other.

**Linda:** Yes.

**Jan:** So B2B business interactions where there might be a series of strategies using some of these, and then B2C, that is business consumer, where there might be different strategies. Did, did those kind of relationships really matter? And, and what was possible out of these seven strategies?

**Linda:** Yes, definitely, because I think in business, if it's a win-win for two members of a supply chain, then it's an easy decision and you can control behaviour in organisations...more easily than consumers, I'm not gonna say easily because that's not the case. We, um, we did interview some people who said things like, 'my machine is like my girlfriend, it's really temperamental. I can't just give it a different type of packaging'. [Laughter] So, there is behaviour in supply chains as well.

**Paul [over laughter]:** I'm worried about what they were packaging their girlfriend in and maybe we've uncovered a serial killer some time, and Linda's just not noticed.

**Linda:** No. No, but I think even in supply chains, you know, people, there is, there are behavioural issues, of course. [Jan: Yeah.] And it, it's not straightforward to say, we can direct people, but we can, nonetheless, we have more time to discuss, decide, make strategies, and, and have plans between businesses. But when it's business to consumer, you've then got a big influence job to do as well.

So, you might change the type of packaging you have, but you've gotta somehow persuade the consumer that the new packaging is a good idea and that might not be obvious to them. So yes, I think it, it, it does make a difference. It's a bigger risk, the business to consumer one.

**Jan:** And for the consumers, they have a wide variety of needs as well. So, some of the things that we've talked about around how to deliver crisps, um, [laughs] most effectively in our households, it depends what their demographic is. So, I suppose that, yeah, consumers inherently a bit tricky.

**Paul:** I can't speak as a business, but I can speak as a consumer. And two of the examples that you've highlighted there, Linda, really struck me, one of which was the biodegradable plastics.

Yeah, we don't have the capacity to compost in our house, mainly because what, where would we put it? What would we do with it? We have a very small back garden, but nowhere to really put the compost. We can have a small in-house compost, but by the time we'd filled that, it would be...still exactly as it was in the first place. We couldn't just throw it out in the garden where we have nowhere to put it.

Therefore, lots of biodegradable plastics, which can't be recycled, just ends up going in the waste bin, which ends up going back to landfill, which is what you're trying to avoid in the first place by recycling. And then when it comes to the cream lids, yeah, I miss cream lids as well. I don't use cream, but I miss them as a, a concept of something there, 'cause you kind of feel that your food is more secure and gonna keep more fresh in the fridge with a little plastic lid on the top. I don't know if that's true or not, but I just know that's how I feel. And therefore, we for a while kept a couple of the cream lids and then you just

forget that you're not meant to recycle them and then they end up getting recycled and you've got no cream lids anymore. I say cream, it equally applies to yoghurts.

**Jan:** We shouldn't go too far down the street, but also like household demographics. So, if there's just one of you living in a household, then actually being able to put something back on the top is, is one thing. But if there's lots of people, then actually maybe things are single use, because you, you use it all up. [Linda: Yes.] So, it's really, really, really complex, but I think instructive.

**Linda [speaking whilst Jan and Paul make noises of agreement]:** I think it's about trying to educate a consumer to say you can have a container at home that your whole pot can go in. And you can reuse that endlessly and put a lid on it. You don't have to have a lid provided every time you buy cream. Or you can decant it into something. We're just in the habit of not doing that.

**Paul:** Yeah.

**Linda:** So that's the sort of thing. But the other thing, just on the composting, [Paul: yes.] One of the firms that we worked with actually delivered to chefs in London. They were trying to rethink the packaging that went to the chefs. So, it's not always about the end consumer, although we are end consumers in restaurants of course, but, but it might be the chef that's actually dealing with the packaging for us. And one of the things that that company did was change their polystyrene trays into compostable trays that went in with the food waste stream.

And I think that was realistic in a restaurant because there's a lot of food waste in a restaurant. So, if you can just put the tray into the same place as the food waste and it will compost that way, that works. I think the average house doesn't necessarily have a food waste place and a compostable place and, but if they did have a food waste place, then it might be possible to, to use that type of tray.

But then you've gotta make sure the consumer knows that it can go with the food waste.

**Paul:** Yeah, I think my father must be one of the few people - he's got a compost heap that is about the size of this room. It's huge. And he's had that since I was a a, a child. And yeah, so the, the biodegradable plastics can go in

that and you do notice it and you know the heat that comes off that thing when he digs the stuff up once a year to put around the garden and gets it from the bottom and the other stuff falls down. It's like, it's crazy. Utterly crazy.

**Jan:** So, let's maybe come from like our, our stories, and I hope our listeners are also thinking about what's going on in their lives as well, because this really resonates with how we live and, and how we experience the world and, and what we're seeing, um, you know, dads and partners and all sorts of people doing. But I wonder from the study, if we could, you could tell us about which one of these strategies have been most popular among the organisations that, that you've been working with, and then what's been the outcome of companies adopting that strategy? And, and you've already started that, a nice one about, you know, the, the food producers working with the restaurants, but there'll be other ones as I'm sure.

**Linda:** Yeah. I think the nature of the study is such that we interview people at a point in time unless we're doing the action research part. So, I think in terms of looking at the impact, it's only really in the action research ones where we've looked at the impact of, of what we've found and how things have changed.

So, I think it's quite hard to answer a question of what's most popular. What we can say is that we've seen a range of, of strategies being effective or not effective. So, I think really. Our research is more about saying what the advantages and disadvantages of the alternatives are, rather than saying what is the most popular.

But if we wanna talk about the impact, then I do think the meat processor that we spent six months with, that's the one where we can really see the impact. So, I've got a nice quote for you. Shall I read you a quote?

**Jan:** Yes, please.

**Paul:** People brought reading materials. This is a new one for us.

**Linda:** I know, I know. But I, I really like this quote and I, I never remember facts and figures, so if I read it, I'll get the facts and figures right.

So the, um, sustainability manager from our meat processor. When we asked him recently about the impact, he said, “as you can see, we have been historically using a lot of polystyrene. We've calculated that we were sending approximately 4 million cubic centimetres of polystyrene waste, direct to landfill or incinerator, incineration every year. That's equivalent in farming speak to just over an acre or 60% of a football field for diehard United fans.”

**Jan:** Wow

**Paul:** I was with you until it was diehard United fans at the end.

[Laughter]

**Jan:** It's just a football field, other teams are available.

**Paul:** And that's what, he didn't have to say diehard United fans, did he? But no, he did, he did. I liked the man until he got that far. You can tell him that..

**Linda:** So that's one of the impacts. But he, they were also looking at reusable trays as they deliver meat from one place to another. So, there are other things that they're doing as well. But I think what we're seeing at the moment is experimentation and then some success, and that's really great to see, and I think that's where industry is. It's at the experimentation stage.

**Paul:** And we're gonna be speaking to Booths, of course, at a later stage in this series on the Plastic Packaging in People's Lives project, and we'll be seeing what changes they've made. They're, they're not a producer of all of the goods that they sell, but sometimes they, other people produce it for, some of the stuff is actually produced by them.

And we'll find out how they've adapted, what of these strategies they might have used. So that'll be interesting to see. They'll get us, you know, that follow on example from what a business has been doing.

**Jan:** And the other businesses I'm thinking about now, and maybe we can come on to chat about, are the packaging suppliers. Because ultimately these are the people who are responding to, you know, corporate demands, but also ones that are maybe seeing the, the way forward to a circular economy. So, from your investigations, how ready are the packaging suppliers to actually make that step?

**Linda:** Yeah. I think the packaging suppliers, there are some definite, some entrepreneurs out there in the packaging suppliers arena who are trying to do new things. So, one of the things that we did as part of working with the meat processor was we talked as packaging suppliers with them to find out what the options were. Um, and I think it was complicated. I think it was a genuine desire to make some changes that would work for the specific needs of that particular meat processor.

But there's no one size fits all for all types of food. I mean, I think I learned so much about food actually. I'm not really a great cheese eater, but I discovered that cheese requires different types of packaging depending on how much it needs to breathe, I think was the words.

**Jan:** Oh, wow.

**Linda:** Yeah. I mean, don't quote me on that. I might not be, I've got that quite right, but, but there are different types of packaging that cheese needs and different types of cheese need different types of packaging, and that's just one product. So, you can imagine as you go through all the products, there's many different types of, of packaging needed.

So we've gotta really think carefully about that. But I do think that there are some suppliers out there who are really trying to find new solutions, but I think this is where supply chain collaboration is so important because, they've got to try and invent something that the next tier of the supply chain's gonna want to use.

So, there's a real need for everyone in the supply chain to try to work together. Um, in these 10 projects that the government funded, of which PPIPL was one, there was somebody looking at, at making new packaging from recycled pea waste or something. I, you know, so people are experimenting and researching new packaging materials at the same time as we're trying to research what's happening.

So, there's so much still to be done, but I don't think they're ready yet. And I think that that was clear because people couldn't get the 30% recycled content that they might have wanted. It wasn't available.

**Jan:** Well, one of the things that we've really enjoyed from our podcast is that every time we have a guest, I end up thinking more, in a more reflective way

about my life and what's going on. And indeed, after we had Emma from the World Federation of the Sporting Goods Industry, I've been much more active. I, I promise Emma that in terms of, you know, sort of, we're not doing running podcasts yet, but certainly more active.

**Paul:** I was just about to raise that point. We did say it to Emma. We'd start doing the podcast on a treadmill or something. We've, we've yet to do that.

[Jumbled laughter and talking from everyone.]

**Jan:** Not yet, not yet.

**Paul:** We're not even pretending that we're doing that.

**Jan:** So I, I, I wonder because you've been sort of immersed in this project, how has your purchasing and recycling behaviour at home changed as a result of doing this project?

**Linda:** Well, I think probably the big change is that we now recycle, uh, crisp packets [laughter] So the flexible packaging. Now, many supermarkets would collect the flexible packaging that they didn't at the beginning of our project, but even before that. I discovered an NGO which has volunteers around the, the cities in the UK and including in Lancaster. Um, and there's a little wooden hut outside a house, which is about five minute walk from me where you can take your, your empty, crisp packets.

So, one of the things I've been doing is collecting them, and actually I don't really eat crisps, so this is not a huge contribution I'm making here. But any crisps consumed in our house, I am now gathering them together and taking them there. I'm really spoiled at home. I don't do the shopping or the cooking, so I can't say that that that's trickier because, and then that's one of the things we found.

You know in households if you are not the one responsible for it, you can't go home preaching to those who are already trying very hard. So, so I think for me, it's been about seeing what we are putting in the bin and just seeing whether there's anything I can do to help us recycle those things.

**Paul:** What I take from all this is that Linda's obviously got a butler.



[Laughter]

**Paul:** Doesn't do any work at home.

**Linda:** I think domestic engineer is the title.

[Laughter]

**Paul:** [speaking over other's laughter] Domestic engineer. Okay. You have a domestic engineer, right, okay.

**Jan:** [speaking over other's laughter] We're all dreaming of a domestic engineer, aren't we?

**Paul:** And not for the reasons you might be thinking. Right. Um, so that's how your life has changed Linda, and how maybe you've made that, those small changes in your behaviours and stuff, but what tips would you maybe give our listeners for how they can maybe make a positive difference. Maybe as a consumer, but maybe also if we've got listeners who are operating businesses, maybe things you've come across that they can maybe do as well.

**Linda:** Yeah, so if we start with consumers, I, I really believe that if we all do a little bit, we're gonna make a huge difference. So I think if, even if it is just you start to recycle your flexible packaging, which is more feasible now that supermarkets are gathering it, even if it's just that, start with that. And there may be some cynicism out there where people say, well, is it actually getting recycled? Not sure. I can't, can't tell you definitely it will be, but it doesn't mean it won't be if we all start to do it and there begins to be a volume of that being collected in.

So, I think start small, use less packaging if you can. Many of us already use less packaging. We have our own cloth bags for getting our onions, whatever. So use those things but don't feel like you're not doing enough. Be pleased with yourself with what you are doing. Because if we all do a little bit and each year we try and do a little bit more, maybe, then gradually we're going to, we're gonna crack this problem together.

So we have quite a number of recommendations for businesses. We've sort of said, don't blame the consumer. That's one of the things we've said. Um, so the attitude-behaviour gap was all about saying 'we can't do anything because

consumers don't behave like they say they want to'. But, actually what we are saying is, that might not be true. And we found that with the crisp packet, a smaller one does still sell. But do experiment with alternatives.

Try and see where you are in terms of how much plastic packaging waste you're producing and prioritise the...the, the waste that's greatest, and try and crack that one thirst. But it's not going to be solved tomorrow. This is, this is a problem that's gonna take a lot of iteration. So there's also other things that businesses need to do, like collaborate, as we've said, across the supply chain to educate consumers to think about what goes on their labels.

Uh, they do say we don't read the labels. So, and I'm not gonna say consumers should read labels because that's just not realistic. So it's just, it's trying to find things though that are realistic, um, that we can all actually achieve. That's the only way we're gonna solve this. Otherwise, we all end up on some big guilt trip, which is no use to anyone.

**Jan:** And I like those two words that popped out to me. Collaboration and experiment. And I feel that's really the essence of, you know, the Pentland Centre and the work that we do, but also the work that our colleagues that are members of the centre does.

**Paul:** Well, let's do more collaboration. [Jan: Indeed]. Cooperation, collaboration, anything that begins with a 'c' and ends in 'ation' we'll, we'll do that. I'm sure we're, there's some words that probably are suitable for, for this podcast, uh, in there. But yes, that's it. Linda. Thank you very much. It's been really nice to have you back on the podcast.

**Linda:** Thank you. My pleasure.

[Music]

**Paul:** Wasn't it nice having Linda back?

**Jan:** It was, and, and also to see that continuity of that whole supply chain discipline and how it can contribute to thinking about supply chains in many different ways.

**Paul:** Yeah, because it wasn't immediately obvious how modern slavery and plastics fit in. And I wouldn't necessarily say that they, even after speaking to

Linda that you know, you would research modern slavery and plastics at the same time, but seeing how Linda's expertise on how supply chains operate and how that filters into both of the subjects we've now spoken to her about was really interesting.

**Jan:** I know she was looking at supply chains, but also the treatment of plastic waste will also have a big modern slavery angle to it as well as to who's doing that work and is it safe, et cetera, et cetera. So, it, it's all tied in.

**Paul:** Yes. And we'll be covering the treatment of plastic waste in one of the later episodes in this PPIPL mini-series, of course, 'cause as we've said throughout the episodes that we've done so far, and I'm sure we'll say throughout the episodes that are coming, everything is interconnected in this. It's not just, you can take one part of the plastics issue and separate it from all the others. Consumers will always be connected to businesses, will always be connected to waste processes, and so on and so on.

**Jan:** And I, I did wonder something that she said, she talked about action research and I, I know you're an expert in all sorts of things, but I wondered whether or not you think I should say more about what action research is for some of our listeners.

**Paul:** [sarcastically] Oh yeah. 'cause I'm an expert in action research. Yeah, yeah, yeah, yeah. No, my PhD's in that. Yeah. [Sincerely] No, Jan, I haven't got a clue. Action research. Go on.

**Jan:** Action research is an approach whereby you work closely with somebody who's actually doing the thing that you're researching. So, she was talking about the cheese manufacturer and then also like the, the meat manufacturer as well, working with them and alongside them to understand what, um, could happen, what lessons might be drawn from it.

We, we do a lot of action research in sustainability, because ultimately we're wanting to affect organisations and what they do. So the SeaBOS project is a, it's a longitudinal action research project. So that's sort of a fancy way of saying, you know, joining arms with people who are doing the things and trying to understand what's going on.

**Paul:** Yeah, don't just throw in the word longitudinal there as though everyone uses it on an everyday basis. Not all of us are research academics who are just living in our glass houses, you know? That's it.

**Jan:** Yes. Longitudinal. Yeah, you're right. You're right. So, partnerships, long-term partnerships, whether it be three months, six months, six years, these, these are really great for figuring out what's going on.

**Paul:** Yeah, and a lot of the people we've spoken to here on the podcast over the last year and a half have been taking part in action research. They've not necessarily used the phrase action research, but they've explained how they're working with people on the ground in the work they're doing, uh, either studying what they're doing or working with them to try and affect change to, to it as it's going on. So there's a lot of that going on here through the Pentland Centre, through our members, through people who we work with outside the Centre.

**Jan:** Absolutely. Now, there was a phrase of, of Linda's that I loved: regrettable substitutes. Um, I just thought that was a superb way of sort of cautioning against a solution becoming a problem.

**Paul:** Yeah. I didn't like it when you looked at me when you said regrettable substitutes. So I, I was thinking, what, what, what have I done here to warrant this? Are you thinking about substituting me or was I a regrettable substitute to someone else?

**Jan:** I was just gazing around. Whatever you inferred is in your brain as a enthusiastic United supporter.

[Laughter]

**Paul:** [speaking over laughter] I've, I've been called many things in my life, but nothing quite so offensive as an enthusiastic United supporter. Um, yes, regrettable substitutes. Sometimes you make a change thinking it's gonna be for the better, and it's not. It ends up being for the worst. Everyone in their life has made a regrettable substitute at some point or other.

**Jan:** Yes, indeed. So where are we going to next in this journey with our PPIPL pals? Yes.

**Paul:** PPIPL pals. I like that. That's it. I, I've called them the PPIPL people before, which reminds me of like the Purple People Eaters who, um, you may or may not know of from the same context as me, which is the, uh, Minnesota Vikings defensive line in American football.

You were thinking of something totally different when it came to the, uh, the, the Purple People Eaters, but that's what I think of when I say that.

Um, next time we're gonna be looking at the consumer side of it. We're gonna be having two Marketing professors, James Cronin and Alex Skandalis in here with us, and they're gonna be talking to us about consumer attitudes, consumer society, how this all ties in with plastics.

**Jan:** And that's really nice 'cause then that attitude to behaviour gap and business to consumer. We're heading into the world of consumers, and I'm a consumer, you're a consumer. Loads of our listeners are going to be consumers beyond, our producer is a consumer. So, it'll be really interesting.

**Paul:** Every single person in the world is a consumer of some kind or another.

**Jan:** Absolutely.

**Paul:** Yes, we don't all just produce and then not consume anything because we die essentially if we don't consume at least something, um, food-wise, water-wise, et cetera. So, on that gloomy note that we're all going to die if we don't consume, yes, thank you very much for listening. [Theme music fades in] We will be back next time with more on the Plastic Packaging in People's Lives project.

I'm Paul Turner.

**Jan:** And I'm Professor Jan Bebbington.

[Theme music]