

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Recycling and Waste Management

Melbourne—Thursday, 3 October 2019

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WITNESS

Mr Marc Lichtenstein, Joint Chief Executive Officer, Close the Loop.

The CHAIR: I would like to welcome our next witness, Mr Lichtenstein, the Joint CEO of Close the Loop. Thank you very much for making yourself available today. I will go to some formal stuff.

All evidence taken at this hearing is protected by parliamentary privilege as provided by the *Constitution Act 1975* and further subject to the provisions of the Legislative Council standing orders. Therefore the information you give today is protected by law. However, any comment repeated outside this hearing may not be protected. Any deliberately false evidence or misleading of the Committee may be considered a contempt of Parliament. All evidence is being recorded, and you will be provided with a proof version of the transcript in the next few days.

Again, welcome. We are in your hands. You may make a 5-minute opening statement if you wish, and then we will go to questions. We are in your hands, thank you. Whilst we did not receive a submission, we have got a bit of information about the good work your organisation is doing in that space with recycling, so please.

Mr LICHTENSTEIN: Thank you very much for the opportunity to present to the Committee. I wanted to focus on three key areas in my opening address. The first part of those three key components is the collection side of the waste and recycling piece—how do we turn that into something useful? And then how do we use it? What is the end market to use this where we have created a superior product? But the real area I want to focus on is the challenges being faced by our business and our organisation at this time.

I will come back to the collection side and the product that we are creating, but for us we are currently in the business of turning a product into a useful upward stream from recycled materials, and the biggest challenge that we currently face in our organisation is the cost of doing business in this state and particularly around the area of insurance. We have seen a significant rise in our insurance. The number of claims in recent times is not associated with Close the Loop, but because Close the Loop is deemed to be a recycling business the cost of insurance has gone up exponentially over the last couple of years.

The CHAIR: Is that because of the recent fire risk? Is that what you are referring to?

Mr LICHTENSTEIN: Yes, absolutely. And whilst we are not in the same business, we are deemed to be a recycler and therefore we fall under the same requirements with a number of major insurers withdrawing from the market. So for us as a business, we have seen our insurance go up, as I say, exponentially—for example, from approximately \$75 000 to over \$530 000 overnight for the same policy. Now, that impacts the cost of doing business, and that is where we need some sort of government support through this process. That really impacts and influences the cost of the products that we are selling. That is a key factor for us and for our business.

I want to go back to the collection side, but perhaps I will just touch on exactly what we are doing within our business to give everybody some background. We run two key components in our business. The one that I really want to focus on is the creation of a product called TonerPlas, which is using soft plastics, and recycled soft plastics, combined with residual toner to create a road additive. The road additive has been developed in conjunction with Downer, and it creates a longer lasting, better performing road. So we have a commercial solution for a waste stream and waste products. That is a key component.

The question then is: how do we drive this and how do we ensure that these unique technologies can be used and supported in the marketplace? The key component is that we need to be creating a product that is superior to the existing product. It is no good using recycled materials and all this investment to create something that is not a better endgame, a superior product, which we have developed with our TonerPlas solution. To that end we also require government support in terms of the acquisition and procurement of the roads which are using our product. As I say, it has to be a product that is a better product, and this has been proven through the technology, which says our roads can last up to 65 per cent longer using soft plastics. So now we have a solution for the soft plastics that we can use. But as I go back and reiterate, the cost of doing business has gone up exponentially, and that is a key concern for us.

I will circle back to the first point, which is the collection process. The better the collection process in terms of the materials being sorted at the beginning of the process by the users, whether it might be via multiple collection bins, so you might have plastics and aluminium going into separate bins—and understanding that a commingled bin may not necessarily work in the best interest. We are after the soft plastics, and I heard you talk about it with the previous person—about the single-use plastics. Well, we have got a solution for the single-use plastics. If you think about soft plastics, it is anything that you can crush in your hand. So the shopping bag is a perfect example. We have a solution to utilise that. The first point is the collection: to make sure that what we are collecting is a cleaner product stream which is easier to use, and we do have examples overseas where they are collecting in multiple bins rather than a single bin. It also needs to be a harmonised collection process across the various councils that is easy to be sorted.

We then talk about how do we turn this collected waste into a product that is being useful. Our example of the TonerPlas solution is doing just that. We have been recognised, and we appreciate and acknowledge the support that we have got from Sustainability Victoria and their infrastructure fund: the \$500 000 grant that we have just been provided to continue to develop and build increased infrastructure to create more of the TonerPlas product that we are talking about. So I think that is a good way for the Government to be investing and to drive sustainable industry across the state.

Then the third point that I wanted to touch on was really that there needs to be a market for the product—there needs to be an endgame—and there needs to be some sort of government procurement, and that is where the Government plays a part in putting the products through the system in the first instance. But it has to be a superior product and it has to be economically viable as a superior product. So I talk about soft plastics going into roads. Not only is it a better product, it is also competitive in terms of the cost and the pricing. It is no good if it is a better product but it is going to cost you 10 times more. There is going to be less interest in procuring that product. It is very important that we create superior products. It is also very important that in our view everyone is willing to be green as long as it does not cost them any more, and that is a key point. That is why I talk about creating superior products with an endgame but that are economically viable. It has to be profitable for industry to see a way forward to manufacture the products and have a market out there that we can use.

As I reiterate, and in conclusion, my insurance is a big factor and a big cost of doing business that is not only affecting Close the Loop; it is affecting all companies that are being deemed to be recycling businesses. Then the key is making sure we can produce a superior product with an endgame—for example, our TonerPlas is being used in roads. Obviously it is the Government and government agencies that are responsible for procuring roads and making sure that there is support for local solutions.

The CHAIR: Thank you very much for that. On the insurance issue, apart from government subsidy, which is one of the options you are talking about, could there perhaps be a change of regulation, for example, to change the definitions and maybe talk to insurance companies about recycling? What you are recycling, for example, might be different from recycling cardboard and paper—let us say, SKM—or hazardous material. Is there a process to maybe look at introducing various definitions to basically help lower the premium or have an understanding, or is it a bit of gouging from the insurance companies—so which one?

Mr LICHTENSTEIN: Certainly it would help in terms of expanding the definition to different categories, because what we do versus the SKM example is completely different, and you would have to say the risk profile is completely different in terms of the risk of fire and what have you. Part of what we do is a manufacturing process, at the end of the day. We are responsible for managing take-back programs, and it is quite specific in terms of what we do. We have a take-back program which specialises in print consumables. Really what we are doing is collecting the print consumables, so used/spent printer cartridges and ink bottles and recycling them and recycling the plastics and the metals. Part of that, as I spoke before, the residual toner forms a part of our TonerPlas solution. So it is quite different. We are then taking a recycling project and manufacturing another product out of it.

We talk about the endgame, and that is what we are producing. It is quite different to someone who is taking household waste. We both might be deemed to be recycling and, yes, we do recycle, but specific products. I think there are two answers to the question: there is the increased classification, and there might be an issue with the insurers taking advantage of the situation in the market, but at the end of the day I also understand they are a for-profit organisation and have to weigh up their own risks.

The CHAIR: That is what I am trying to figure out: whether some of it is a genuine concern—because if it is, it is obviously understandable—or just taking advantage of a given situation.

Mr LICHTENSTEIN: I think it is a bit of both.

The CHAIR: I think it is a bit of both. The last question from me is in relation to using the soft plastics and the experiments you are doing with Downer. I think that has been tested on a number of roads in Victoria.

Mr LICHTENSTEIN: That is correct, so it is commercialised.

The CHAIR: So where is it at now? What needs to be done to basically make it happen on a regular basis? Does the procurement policy need to be changed, or is it actually working?

Mr LICHTENSTEIN: Let me classify it—

The CHAIR: Does it need any more help?

Mr LICHTENSTEIN: Yes, we have laid over 1000 kilometres of road thus far in version 1, and now we are up to version 2. Version 2 has the soft plastics. Certainly the procurement policy will assist. We are starting to gain some traction, but procurement policy would certainly assist in pushing that along. The next step for us as well is ensuring that we can invest and utilise the Sustainability Victoria grant to create enough capacity to meet future demand.

Mr LIMBRICK: I want to ask a bit more about the costs. You said there were a number of costs that were rising that were making it difficult to do business in Victoria. You specifically mentioned insurance. Are there other costs that are causing trouble for your business in Victoria?

Mr LICHTENSTEIN: Insurance is the one that is first and foremost for us as a business. The other costs increase like normal, such as wages and other things, but it is not something like, as I mentioned before, going from \$76 000 to over half a million dollars for the same service; that is coming straight off our bottom line at the end of the day and the cost of doing business. So all of a sudden my inputs are going up, or my overheads are going up, which is a key factor for us.

Mr LIMBRICK: And those classifications that you talked about and that Mr Melhem talked about as well, of the types of businesses, are they government classifications, or are they classifications that the insurance industry has made up?

Mr LICHTENSTEIN: No, the insurance industry makes them up as they go.

Mr LIMBRICK: Do you feel that there is sufficient competition within the insurance sector at the moment, because you said some of them have been pulling out?

Mr LICHTENSTEIN: Not in the recycling space.

Mr LIMBRICK: Because they are pulling out of the market.

Mr LICHTENSTEIN: That is the problem; they have all pulled out of the market. There is no competition. We have to have our insurance covered overseas because the Australian-based organisations have all withdrawn from the market.

Mr LIMBRICK: They do not want to deal with it.

Mr LICHTENSTEIN: No.

Mr HAYES: I just want to ask you how TonerPlas works and how much of the ink cartridge you use and all that, and how you recover the stream and whether it is sufficient to base an industry on.

Mr LICHTENSTEIN: Absolutely. Let me give you a bit of background on how it works. We currently run a take-back program, which is currently a voluntary and free program that we offer. Cartridges 4 Planet Ark is

our partner, who you may be aware of and have come across. We really manage the program on their behalf as well as our own program. We have approximately 30 000 collection sites based around the country. We collect the cartridges. Some of it might be through retailers; some might be through business. For example, government organisations will have a box next to the printer where the spent cartridges end up. When it is full they will ring us or they will log on online, and we will collect it and it will come back to our facility in Somerton.

We collect Australia wide. We then take the cartridges, we check them in, we understand where they have come from and, depending on what the cartridge is, we do what our original equipment manufacturer asks us to do with the cartridges. So some of them will be cleaned to be re-used. Some of them will be sent off to other organisations to be refilled, and some will just simply be recycled. We are a business, and our policy is zero waste to landfill, and that is our key motto. When we recycle the cartridges, effectively what we are doing is separating the residual toner—because there is about 10 per cent toner left in the cartridge—the plastics and the metals. The plastics and the metals can be sold as a commodity on the commodity markets. Over time we discovered that we needed a use for the toner, and that is what brought about the development of TonerPlas.

The first version of TonerPlas was predominantly using the residual toner as the key ingredient. The second version has been taking soft plastics, and there is no shortage of soft plastics. We touched on the shopping bags, but it is cling wrap, it is the offcuts of any packaging material, it is bread bags and pea bags. There are plenty of soft plastics around, and we have developed a commercial solution. So getting the soft plastics is the easy bit. Using the toner is one of the key ingredients—not the key ingredient, but one of—and then combining that in a formulation to form almost like a plastic resin bead. The toner or the residual ink, as you might want to call it in layman's terms, is a form of plastic with a very low melt point. So combining that with the soft plastics forms a little resin bead, and that resin bead gets mixed in the bitumen and forms part of the road additive. So the bitumen is almost like the glue that holds the stones down, and that is the bit that then gets added in. So we are substituting—

The CHAIR: What is the temperature tolerance on that—living in a hot continent?

Mr LICHTENSTEIN: It actually works better in a hot continent. The challenge we have now is trying to develop a product that we can utilise in the US in particular, because we have operations in the US. So in the US the product has to work from minus 22 to plus 70-odd. In Australia we do not yet tested as low, and this product works really well because of almost the stickiness of the product holding the road in place. It results in the road lasting up to 65 per cent longer.

Mr MEDDICK: That actually covers something I was going to ask you about on that, which is the durability factor. So thank you for that. That is great. I have a couple of quick questions then around that but then one about the Sustainability Fund. Despite the durability, is it safety tested as well? How are the RACV looking at it? How does it conform in, say, braking distances under different conditions and cost versus conventional road surfaces?

Mr LICHTENSTEIN: So let me go back to the last question. The cost is the same. In fact it is actually a bit cheaper than conventional road systems. Bitumen is a commodity, and we replace some of the commodity, some of that bitumen. It is a standard oil-based commodity priced on the bitumen index. Our product is significantly cheaper, so there is a benefit for Downer and for whoever else is using the product. The product has been tested extensively by the various road authorities. We have had some challenges, particularly with the New South Wales EPA in recent times. We have done extensive testing, and Downer have done extensive testing on our behalf using this as part of their road solution, and the tests thus far have been positive.

The challenge is perhaps some of the resistance to change, but it does not impact the performance. Some of the tests have been invented as we go. If you think about it, the big challenge we have is what everybody says, 'What about microplastics?'. Well, actually, what happens to the tyres on the car? You put a new tyre on the car and it weighs 10 kilograms. You take the tyre off the car and it weighs 8 kilograms. For our microplastics the format and the formula is changed; it is built into the actual bitumen itself. It is melted in and it forms part of the glue. The bigger risk is the tyres coming off the cars, not our product. We have got to go through extensive testing to prove that is the case, because we are coming to market with a new product. That has been one of the challenges. Everybody wants to know about microplastics. Well, ours is actually better. The tests that we are

doing have never been done on regional roads, because regional roads are also a form of polymer; they are also a form of plastic. So all we are doing is replacing one plastic for another. We are not actually doing much more than that in layman's terms. But we have a commercial solution for soft plastics, for which there is no other commercial solution that I am currently aware of—the Committee might be. This is a significant opportunity.

The question was asked before: do we have sufficient raw ingredients? Well, we certainly have unlimited soft plastics down the track. That is where we as an organisation will continue to invest in R and D to work out how we can use more soft plastics and less toner over time.

Mr MEDDICK: The only other question I had then was around the Sustainability Fund. You said that you received \$500 000 from them.

Mr LICHTENSTEIN: Yes.

Mr MEDDICK: I just wanted to ask: how was the process? How did you find the process? Was it easy to access? Was it difficult? How did you feel that whole situation played out?

Mr LICHTENSTEIN: So far, so good. So far it has been very good, and we acknowledge the support of the Sustainability Victoria infrastructure fund. We are now going through where we are putting the funding agreement in place, so we are still quite early. We have just recently been awarded the grant, but we have had a number of smaller grants along the way, and they have been quite—if I can use the word—seamless. There has been no problem. As long as we fill in the paperwork and do it correctly, there are no challenges.

Mr MEDDICK: Great. And from start to finish—the time frame from when you first filled out the paperwork to when you received the funding?

Mr LICHTENSTEIN: About two to three months.

Mr MEDDICK: Fantastic.

Ms TERPSTRA: Thanks for your presentation. I just wanted to ask a question around the soft plastics and whether you have had any interest from, say, supermarkets, because obviously there are a lot of soft plastics that are used in wrapping around things like cucumbers. You know, you talk about bread bags and all these sorts of things. Has there been any interest in perhaps supermarkets partnering through that Planet Ark kind of arrangement to supply—because some supermarkets are offering receptacles for people to bring their soft plastics back to the store? So can you expand on that a little bit for me?

Mr LICHTENSTEIN: Yes, I can. We have signed an agreement with REDcycle and Plastic Police, and REDcycle are doing the collections on behalf of those supermarkets. So where you touched on where you can bring your plastic back, that is being collected by REDcycle and delivered to our premises to be used.

Ms TERPSTRA: And which supermarkets have signed up to that kind of—

Mr LICHTENSTEIN: I think it is Coles and Woolworths, and there is tremendous interest from industry to provide their soft plastics. For example, we have tried soft plastics from a pet food company. We have tried all sorts, because the film is slightly different, and we are also trying to find the best performance of the solution. The road is quite forgiving at the end of the day, but certainly those soft plastics are ending up in our hands from various supermarkets.

Ms TERPSTRA: And through the REDcycle collection process how many tonnes are you getting?

Mr LICHTENSTEIN: The challenge is how many tonnes we can use at this juncture, not how many we can collect.

Ms TERPSTRA: So how many are you getting and how many are you using, then, perhaps, if—

Mr LICHTENSTEIN: No, no. We are using everything we are getting, but the challenge is there is so much soft plastic out there that we cannot use it yet because we have not developed a big enough market for our

solution. That is why we talk about needing government procurement and just going through the last of the testing and the challenges to get this into the roads.

Ms TERPSTRA: So what is the volume that you are getting at the moment through the REDcycle recycling program?

Mr LICHTENSTEIN: At the moment it is approximately 20 to 30 tonnes. We expect that to grow into the thousands of tonnes over time. But, again, we need the government support for the procurement.

Ms TERPSTRA: You need a market.

Mr LICHTENSTEIN: We need a market. We cannot just take plastic. We are a for-profit organisation.

Mr HAYES: Can I just ask, in regard to that soft plastic, you just take it as raw, just as it comes from the supermarket, and then do you need to sort it further yourself?

Mr LICHTENSTEIN: No. It is getting baled, and we get a bale of soft plastics. We do need to do a very basic sort in terms of there are some contaminants in there, so we cannot—

Mr HAYES: Do the supermarkets sort it for you, or do you do it?

Mr LICHTENSTEIN: No. It is the likes of REDcycle that will sort it for us. And we still have to do a basic high-level sort, which is where the grind comes in, to make sure that what we are putting into the system is appropriate, because we cannot really take metals and some of the food waste and that sort of stuff. So we have just got to be careful what we put in, but the vast majority, as long as it is small enough—as I say, our road is quite forgiving.

Mr HAYES: It seems to be a good model for product stewardship to have these collection bins that are at retailers, say, and then you come and you pay the costs of picking it up and transporting it.

Mr LICHTENSTEIN: No, we do not pay that. We are actually paid a gate fee to receive and process the soft plastics, which is significantly lower than the cost of landfill, so there is an incentive for us.

Mr HAYES: For you to come and get soft plastics. But the toner cartridges too, they—

Mr LICHTENSTEIN: We currently run a free program in terms of the take-back, but we are remunerated by the regional equipment manufacturers, because we are handling the cartridges on their behalf. A cartridge has a value in the market. If it is in the hands of a third party, it can be refilled and resold. So there is a value for us too. We are the trusted partner of the OEM and we do with the cartridge as they instruct us, but they are also happy with the solution: that there is a sustainable environmental solution for the residual toner rather than going to waste to energy or landfill, which is a lot of the competition essentially.

Mr HAYES: Yes, it is a good model for product stewardship though—it does work down the chain and everyone works by agreement in it.

Mr LICHTENSTEIN: Absolutely, in this particular situation yes, but again it comes back to my original comment that there has to be a superior product in the market for the product at the end of the day to make it worthwhile. So in the case of the OEM, that cartridge is worth a lot in their hands where they can re-use it and resell it. That is where the stewardship program works, because it has got a value. If there was no value at the end, the question then is, ‘Who is paying for this?’.

Mr LIMBRICK: I just want to clarify: you talked a number of times about government procurement policies. I am just wanting to clarify specifically what you are referring to there, because from what you said the product that you are producing is of higher quality and lower cost in comparison to bitumen. So wouldn't the market just sort that out anyway? Why wouldn't government just choose that product anyway if it is higher performance and lower cost?

Mr LICHTENSTEIN: There is a resistance to change.

Mr LIMBRICK: So is this like a specification thing?

Mr LICHTENSTEIN: It is a slightly different specification, yes.

Mr LIMBRICK: Because we have heard this from a number of suppliers, from a number of people who have presented, and there seems to be two things with procurement policies from what I have seen. One of them is saying we need a certain percentage of material in it, and then the other one is that people have said, 'The current specifications for procurement are a bit too strict and our product does not quite fit that specification'. Is that more of what you are talking about with the specifications or the mandated quantities?

Mr LICHTENSTEIN: It is a combination of two. It is the specifications: we only sit within certain specifications at this juncture, and you need to be able to have the authorities working with us to make sure that it is approved for other specifications; or willingness to change—we have seen a reluctance to change from some organisations across the spectrum.

Mr LIMBRICK: They do not want to change the specs on the roads because it is difficult.

Mr LICHTENSTEIN: They are happy with as it is: 'We don't need to try nothing new'; 'I don't get into trouble for doing the same thing I've done for the last 20 years. I can't lose my job'; 'If I do something new and it doesn't work'—what is the incentive for the individual to go down that path?

The CHAIR: Is that a combination of VicRoads and councils?

Mr LICHTENSTEIN: Some of the councils are a lot more open to this process, a lot more willing to work with us. We have certainly had some resistance from VicRoads.

Mr LIMBRICK: But you have had some success already. You said you have laid 1000 kilometres.

Mr LICHTENSTEIN: Yes, with some of the councils.

Mr LIMBRICK: Has that been through them mandating certain quantities or being flexible in their specifications?

Dr CUMMING: They have been happy to trial.

Mr LICHTENSTEIN: They have been happy to trial, and the key point we have is, 'We can use your soft plastics if you use our roads'. That does not apply to VicRoads. So you have got some councils who are looking for a solution, who are willing to be more sustainable, have a greater greener footprint, willing to use us. It is quite different if you are laying this road in a suburban street, as if it is on the Monash Freeway. Perhaps the product will work just fine, but the testing and all the rest is a lot lower risk. The specifications are slightly different.

Mr LIMBRICK: So you are offering value as well as providing the product, but you are offering value through your gate fees being lower than the landfill levy?

Mr LICHTENSTEIN: Absolutely, and a solution for something that they do not have at the moment.

The CHAIR: Thank you very much. It has been an eye-opener, and I just want to congratulate your company on the great work that you are doing, and hopefully out of this report we might be able to assist as well to make sure that can be expanded.

Mr HAYES: Stay in business.

The CHAIR: So thank you very much for that, and we appreciate you giving your time today.

Mr LICHTENSTEIN: Thank you for the opportunity to present, appreciate it.

Witness withdrew.