

TRANSCRIPT

LEGISLATIVE COUNCIL ENVIRONMENT AND PLANNING COMMITTEE

Inquiry into Recycling and Waste Management

Melbourne—Tuesday, 8 October 2019

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WITNESSES

Mr Ross Headifen, and

Ms Ramona Headifen, Plastic Free Victoria.

The CHAIR: I declare open the Environment and Planning Standing Committee's public hearing. All mobile phones should now be turned to silent. The Committee is hearing evidence today in relation to the Inquiry into Recycling and Waste Management, and the evidence is being recorded. I would like to welcome the witnesses for this session: Ms Headifen and Mr Headifen. I welcome you both, and I thank you for making yourselves available today. I hope it was not too much trouble coming in today. I understand there have been some difficulties getting into the city.

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

We did receive your submission, so thank you very much for that. We will give you about 5 minutes or so for an opening statement. You do not have to provide one if you do not want to. Then we will go to questions from the Committee and have a bit of a discussion on your thoughts about the subject matter. Would you like to make an opening statement or go straight to questions? It is your call.

Mr HEADIFEN: We can have an opening statement on why we are here.

The CHAIR: Okay, Mr Headifen.

Mr HEADIFEN: We run a group called BeachPatrol. It is a volunteer group that picks up litter off the streets and beaches around Port Phillip Bay. There are about 4000 people involved in our group, picking up litter 500 times a month. So we get a fair cross-section of what we see in the environment as to what constitutes litter and waste, and what we do see and what we do not see. Most of what we see is consumer plastic items: cups, bottles, bottle tops, cutlery, plates—things like that. People use them once and throw them away. Whether they throw them in a bin or throw them on the ground, there are different things at different places.

Ms HEADIFEN: BeachPatrol Australia is part of the Plastic Free Victoria Alliance, which is a group of mostly volunteer groups around the State that are concerned primarily about the issues of litter that we deal with and the effect it has on our marine life, and of course that brings us to the whole bigger waste issue. Litter comes from waste, so that is how we are all tied in.

Mr HEADIFEN: In my professional capacity I run a company that makes biodegradable plastic items. We just saw there was a huge issue of plastic items being thrown away and that are going to last for hundreds and hundreds of years, and people are not understanding the consequences of that. We thought we would try and do something about it, so we started a company making biodegradable consumer items, packaging items, that once thrown away and sent to landfill will biodegrade away and turn into humus. We are trying to eliminate the accumulation of plastic waste over the eons.

The CHAIR: Can you take us through that process in layman's terms? You are making biodegradable products. What does that mean? Can you take us through the whole process?

Mr HEADIFEN: I will give you an example of a product. Almost every company that ships something in Australia puts it on pallet and shrink-wraps it. That product has a life of journey A to B. It may be across town or it may be interstate, but it is a short-term use. You end up with this basketball size of soft plastic waste that is going to go to landfill for the most part. We are able to add an organic additive into the raw plastic which allows the bacteria to be attracted to it. They see that as food and they start eating their way through the plastic, and in the process of eating the food they cleave the long polymer molecules down to shorter molecules, and

they can eat them too. So over a period of five or 10 years, depending on the thickness, the temperature and the rainfall, that plastic will get eaten away by bacteria.

The CHAIR: And what happens to it? Does it just disappear?

Mr HEADIFEN: So the by-product is the excrement of that bacteria, which is humus. If it is aerobic and at the top of a landfill, it would be CO₂; if it is anaerobic and down a few metres in a landfill then it would become CH₄, methane. So most industrial landfills these days are capturing methane to generate green power. So we are able to turn people's plastic waste into gas that can be used to generate electricity.

The CHAIR: So on that, with the methane created in landfill, the leaching and various other things, have you got any thoughts about converting that to waste to energy with a different method, for example, than landfill, as waste to energy could be? I understand that is a consideration, classification, parallels—there are all these technologies available—but I am just sort of talking about the last process, which is either landfill or other processes. Because there are issues with landfill about leaching, about methane gas and about odour. Have you given some thought to other options other than landfill, with the end product?

Mr HEADIFEN: So it needs the bacteria to eat it, right?

The CHAIR: Right.

Mr HEADIFEN: And the by-product of the bacteria is a biogas and a biosolid, so it is inevitable it is going to be CO₂ or methane that is the biogas that is coming off the product as it biodegrades away. So in a landfill biodegradation process you have the humus as the solid mass and the CH₄ given off, whereas in an industrial incineration plant you have got all the heavy metals and all the other stuff coming out of the smokestack as well as the combustion of the solid plastic, which is essentially a fuel. So you have got a lot of other by-products coming out of the smokestack that you do not have coming out of a landfill.

The CHAIR: My understanding is some of the landfill emissions could be far greater than some of the waste-to-energy technology used in Europe and around the world—it is actually much less. Is that something that we can compare apple to apple, or are we comparing apples to oranges?

Mr HEADIFEN: No, not apples to apples. But when you look at what is coming out of the smokestack—everything that is not remaining as bottom ash—your sulphur dioxide, your nitrates, your carbon dioxide and all that stuff and any heavy metals that are getting vaporised, they are all coming out, whereas in a landfill, if it is a well-built landfill, they are sitting in a contained mass of the landfill still.

The CHAIR: Do you live next to a landfill?

Mr HEADIFEN: No.

The CHAIR: Well, I do, and I can tell you it is not a pretty place. It is not a nice place to live next to.

Mr HEADIFEN: No, I understand. You drive down the road out to Tullamarine and they are turning it over and there are birds everywhere and plastic is flying all over the place.

The CHAIR: I just want to congratulate you for all the work that you do, by the way. I think you are doing excellent work, reading your submission. Can you take us through: do you see in any part of the work you do and, with any of the businesses you are associated with, any behavioural changes recently moving with the plastic ban coming online on 1 November? Have you seen many changes with businesses looking at alternative product or changing the way they do things?

Mr HEADIFEN: Yes. From a BeachPatrol point of view, because we get a snapshot of the litter that is loose in the environment, it was not that many years ago that if you were down on the beach just doing a clean on your own you did not have to look very hard to find a plastic bag to put all the rubbish in. We do not find many plastic bags now—not that they are not there; we just do not find as many as we used to find. Because often, once they have been in the bay a few days, they get ripped and all we see is the shreds of them. You cannot even tell if it was a bag; you just get a bit of plastic film that may have been grey or it may have been

white. But we would often find a bag in a bush or a tree somewhere to put it in. We do not find many of those at all now, so that has gone down.

We used to pick up, on a clean, 200 or 300 plastic straws, but now we are down in the dozens. That item has made a significant reduction. We piloted a program in Port Melbourne where we went around about 20-odd cafes and gave them three months worth of paper straws and said, 'Will you put these on your counter instead of the plastic ones? Even better still, would you put them under the counter and make people ask for a straw?'. That worked really, really well. Paper straws are about five times the cost of a plastic straw, so a lot of them were averse to that increase in cost. One cafe, after the trial we went back to them and because in our company we also bought paper straws for the reason of getting rid of plastic ones, we said, 'We will give you a special deal if you buy the paper straws from my company'. They went, 'No, no, we are just going to stay with the plastic, but what I have done is I put the plastic under the counter and made them ask for it. We do not hand them out anymore'. She said consumption has gone down 95 per cent.

The CHAIR: I do not know why you would drink gin and tonic with a straw. It doesn't make sense.

Mr HEADIFEN: It is the way that staff are trained, because cafes get so busy. They do not have the time to stop and ask everybody, 'Do you want a straw?'.

The CHAIR: It is habit, isn't it?

Ms HEADIFEN: It is changing the habit.

Mr HAYES: I am interested in your submission here, talking as you did about compostable plastics, and I am very interested in the bag situation. You talk about making cling wrap out of compostables, the possibility of doing that. Is that possible? I am looking at trying to make people using bin liners to go to a compostable product so that when it goes to landfill or into the recycling stream or whatever, it just degrades away—but it has to be strong enough to hold maybe rubbish that has got moisture in it and stuff like that for a week or so at least. Is that possible with your compostable plastic?

Mr HEADIFEN: If I can just back up a little bit of what you said, compostable is now split into two categories: commercial compostable and home compostable. Commercial compostable has to go to a commercial compost facility. It has got to be exposed to 60°C as the bacteria that will eat compostable plastic live at 60°C plus. If it is cooler than that, the bacteria die and the bag will sit there like a normal plastic bag for hundreds of years. It needs lots of oxygen, which means they have got to go in and till or turn the compost heap to keep it oxygenated as the bacteria only breathe oxygen. And, like us, they need moisture, so they have got to spray water on it. So if you do not have all those three parameters and you put a commercially compostable plastic item in there, not much is going to happen.

Mr HAYES: Is that called biodegradable or compostable? I mean, the terms get thrown around.

Mr HEADIFEN: Thrown about way too loosely. In the US they have the green guide encouraging people away from saying biodegradable. You have to say biodegradable where, like biodegradable 'in a commercial compost facility'.

Ms HEADIFEN: So you know where to dispose of it. It is tricky.

Mr HAYES: What about the other sort of compostable, then?

Mr HEADIFEN: Home compostable?

Mr HAYES: Yes.

Mr HEADIFEN: So a commercial compost facility, if you put a product in it, it will biodegrade away for about 12 months—very good, very fast. If we do it right, it works good. Home compostable, it will biodegrade in a home compost, which is a lot cooler. It takes a lot longer, and they do not put a time on it. The standard says it will biodegrade away over a measured amount of time, which is probably two, three or four years,

depending on the moisture. You still need the moisture, but you do not need the higher temperature. It is a different set of bacteria and microorganisms that are eating away at the plastic.

Mr HAYES: But it will eventually break down into organic matter?

Mr HEADIFEN: Yes, just the same as our landfill products. It is the same by-products.

Mr HAYES: Sorry, say that again? Just the same as?

Mr HEADIFEN: The landfill biodegradable plastics that we make in our company.

Mr HAYES: That end up in landfill?

Mr HEADIFEN: They biodegrade down to the same by-products as a home-compostable plastic would in a compost bin or a commercial one.

Mr HAYES: Could you make bin liners out of that sort of plastic? Is it sturdy enough?

Mr HEADIFEN: We do that in our company. We just started producing a line of home-compostable bags.

Mr HAYES: Right, okay. You are talking about a ban on all products containing plastic microbeads. That would be a huge range of products, I imagine.

Mr HEADIFEN: Yes.

Mr HAYES: Do you think that is possible for a government—

Ms HEADIFEN: Toothpaste, beauty products, yes.

Mr HEADIFEN: I think they have done it for products made within Australia.

Ms TAYLOR: I cannot believe it is in toothpaste.

Ms HEADIFEN: Some, not all—but yes.

Mr HAYES: It is in sunscreen, it is in toothpaste, lots of pharmaceutical products.

Mr HEADIFEN: We have done it for the domestic industries. We just need to apply it to the importers now. I do not know why the importers get a free ride when people are trying to manufacture it. You might not be able to import a Colgate product made in the US. That is the argument we would have to have. Does the market really want that product over it?

Mr HAYES: And helium balloons—I mean, it is pretty obvious, but that is because rubber balloons just collapse to earth and are a pollutant.

Ms HEADIFEN: Yes, they will come down.

Mr HEADIFEN: Balloons are made of latex, which is a naturally biodegradable product. But given where they land—predominantly around here in the waterways or the oceans—the six months, 12 months, two years or whatever it takes for them to biodegrade away is the problem time when wildlife are susceptible to eating them. They have nice bright colours, they stand out, they flop around in the water. The balloon industry in the US has a very strong lobby, and they say, ‘Well, we’re making a biodegradable product; there’s nothing wrong with it’. But when you look at what the reality is, until it biodegrades away that is where the toll on wildlife is occurring.

Mr HAYES: Yes, okay. Just one more on banning single-use plastics: do you recommend banning single-use plastics? And where do you draw the line? What is single-use plastic?

Mr HEADIFEN: Yes, exactly. There are two schools of thought: ban them or incentivise people not to use them through either a surcharge on the final product or a surcharge on virgin plastic products to push the

industry to look for alternative materials to make a product out of. Then you would not have the waste problem. Why do we use disposable coffee cups? Because they are cheap and easy to make. But if there was a 50-cent surcharge on a disposable cup of coffee, we would see everybody bringing their keep cups. We were talking to some friends just last week. In California they banned straws, so the industry said, 'Okay, we'll do away with straws', and they brought out a plastic disposable cup called a 'sippy cup'.

Ms HEADIFEN: The lid is like a straw.

Mr HEADIFEN: People would use the cup once and then throw it away, so they just went around the issue. But if you incentivise industry the right way to make the right product, then the consumer will still get the convenience they want but we will not have this plastic waste issue.

Mr HAYES: Yes. I suppose you are saying: put a charge on all plastics, then basically whether it is used once or it can go back to make a bottle or—

Mr HEADIFEN: Yes, a charge on virgin plastic or a tax on virgin plastic would be a good incentive.

Mr LIMBRICK: Thank you so much for your submission. One of the issues that we have talked about a bit in this Inquiry is substitution, so if you ban single-use plastics or bags or whatever, you are going to substitute it for some other product, which you have already mentioned in your evidence. In some of the research that I have seen overseas—I think it was in California, actually—they banned plastic bags and other things and everyone switched to paper, and that increased carbon emissions because it is much more carbon intensive to make these things. Are they acceptable compromises, do you think? So on the one hand you are getting rid of the plastic that may end up as litter in the ocean and stuff, but then the trade-off on that is that you are increasing something else, such as increasing carbon emissions. Do you think that when those two things are balanced up against each other it is worth it to do that in the end?

Mr HEADIFEN: I do not think you can make that trade-off. That is what the manufacturing industry will tell you—that it costs a lot and it takes a lot more water and a lot more energy to make a paper bag than a plastic bag. But what they refuse to talk about is the back side—what does it cost to get rid of that bag? So you cannot just look at the production side, the production expense; look at the back side. What does it cost us to get rid of a plastic bag out of the economy? In San Francisco they said it would cost them 50 cents for every plastic bag they had to pick up—it would cost San Francisco council that. And the toll on wildlife.

Mr LIMBRICK: Are you talking about bags in the wild? Yes, right.

Mr HEADIFEN: Yes. All our big cities are on the oceans for the most part, so it is inevitable they are going to get in the drains and wash out there. So the toll on that—is that worth mentioning in the trade-off? We cannot just look at the production side. We have got to look at the bigger cradle-to-grave cycle.

The CHAIR: But that is not costing the manufacturers directly. It is costing other people by saying, 'It's not costing us; it's costing someone else more.'

Mr HEADIFEN: That is right. The manufacturer is pushing that cost onto the public to pay that through a tax—with the council having to go and clean the beaches, sweep the streets or pay people to go and get bags or bottles or whatever the item we are talking about is. So that is a cost that we are bearing, yet industry is responsible in some way for making that product. We think there should have been equitable sharing there. The public is not innocent—do not get me wrong.

Ms HEADIFEN: I guess I was just going to add in that when people say, 'Oh, it would cost more to do that', it is because we are not paying the true cost right now. So to produce a product they are paying for the material they use to buy and marketing. Then once they sell it, basically we say, 'You're off the hook.' to industry. We say, 'You don't have to get the product back to you. You don't have to recycle it. You don't have to make sure it's not littered. You don't even have to pay for its waste', because the taxpayers are doing that. Volunteers are picking up rubbish.

Mr LIMBRICK: The ownership of the object is transferred, so the manufacturer does not own it anymore. The consumer owns it and then it is their responsibility to do whatever.

Ms HEADIFEN: Which is how we have lived since the industrial revolution. That is why we are in the problem we are in, I think.

Ms TERPSTRA: That is what you are saying that the true cost of that item over its life cycle might go from one pair of hands to another, to another, but there was the production of it; it is being used. Then how do we get rid of it? The cost to society or the economy as a whole is not truly accounted for.

Ms HEADIFEN: Exactly.

Mr HEADIFEN: From the manufacturing point of view, if I am a manufacturer and I am making an item that I know is going to be heavily littered or cause destruction in the environment, am I allowed to do that? The EPA says no in a lot of cases. Just because we are making a clean item that sells to the public and does not cause chemical pollution somewhere, but it causes a physical pollution problem somewhere, I do not think I should be getting off the hook. I have got a responsibility for the environment just as much as the rest of us do, so I should be willing to accept some of the cost of being responsible for that product.

Mr HAYES: So you tax the manufacturer for making the product or make them pay for the disposal further down the line. But he will pass the cost on to the consumer, of course. Then I suppose that creates an incentive for other industries to come to other—

Ms HEADIFEN: Re-use this instead of keeping on buying a—

Mr HEADIFEN: A great example of that is a container deposit scheme. The companies are now paying an extra 10 cents. They are passing that on, so they are not out of pocket. The consumer is paying an extra 10 cents. They are going to take it back. The ones that do not get redeemed are the ones that are funding the scheme. Everybody is happy. We go from 25 per cent recycling to over 80 per cent recycling of that one item.

Dr RATNAM: Good segue. Thank you so much for your presentation to your submission and all the incredible work that you are doing for our environment—really appreciate it. I too was going to ask about the container deposit scheme because, as I understand it, you have been quite big proponents of a container deposit scheme. Particularly from BeachPatrol's perspective—I guess you have got a number of hats on today—it would be good to understand what you think the impact of a mechanism like that would be. Also you represent quite a large alliance of member groups in terms of Plastic Bag Free Victoria, so anything you could convey to us from what is coming through those groups in terms of the urgency of action that they want to see would be really helpful given there are so many. The question is: what kind of impact do you think a CDS would have, particularly the work that you are doing on the front line, and what are your member groups saying in terms of the priorities for action?

Ms HEADIFEN: We do collect data as well when we do our beach cleans. We also clean off the streets now as well. We started a group called Love Our Street four years ago because we know that most of the litter that we pick up off the beach, although some of it has been left by beachgoers, a lot of it gets washed in after it has been on the street down the stormwater drain. So we are trying again to stop it at the source. You can help me with how long it has been—probably the last four years about a third of litter we collect is containers, and that is pretty standard across the board, whether it be Rye, whether it be Hampton, Port Melbourne or Altona. We have 30 different groups.

Mr HAYES: Glass and plastic containers?

Ms HEADIFEN: Yes, and cans—glass, plastic and cans. We count each individual and then we weigh them compared to the weight of the total amount of litter. We have special BeachPatrol bags that we use. They are re-usable, so we use them each month at our cleans. The number of bags of containers compared to the number of bags in total is almost always 30 per cent, 30–35 per cent. So that would be a huge bulk of litter that would not be on the street, because even if people are going to return the bottles themselves, as we have seen in other jurisdictions, other people pick them up—and they will pick them up. Like, we had a clean on Saturday. We collected 300 bottles and cans, so that would have been \$30. Other people are incentivised even if the person buying the drink is not incentivised.

The other things that we find from containers—now this is specifically from the plastic ones—is the bottle label, which is made of plastic as well. It comes off. It separates. The top of the bottle as well as that little ring, those get separated. The bottle itself will start to break up. So you can have four pieces of rubbish all of a sudden from what used to be a bottle that somebody had a drink out of two weeks ago or however long it took to get down in the stormwater drain system. It is just that takeaway society that we have created. It means it is convenient, take it away and then just leave it wherever I am. Sometimes it may be left on a park bench or a bus stop, but that is still litter. The minute a wind comes or the rain, there it goes. So all of those takeaway things that we think are convenient are not really convenient, again when we are looking at the big picture and the waste that is being created.

Dr RATNAM: So you think from a litter perspective there is a big benefit from—

Ms HEADIFEN: Yes.

Ms TAYLOR: I just had a couple of questions, but I commend you for what you are doing. Thank goodness you are doing it. It is quite addictive. When you are on the beach, I always think, 'Bring gloves', because you see it and you just want to bring it up, because it is wrong and it should not be there.

Ms HEADIFEN: It is very addictive.

Ms TAYLOR: It is. I have done the Love Our Street in Caulfield. Of late I am not finding the time, but it is enjoyable when you do it, so it is very good. First question—and sorry I missed this and forgive my ignorance—the bacteria you were talking about that can break down the plastic at a certain temperature, is it naturally occurring bacteria?

Mr HEADIFEN: Yes.

Ms TAYLOR: Okay. Cool.

Mr HEADIFEN: If they are commercial or home compostable, they are all made of plant-based materials; they are not made of fossil fuel. So it is a ready source of fuel, a ready source of food, to the right microorganisms.

Ms TAYLOR: Cool. So that is readily available—that is what you were saying—in the environment, or will it will depend on the health of the environment and the health of the soil, do you think?

Mr HEADIFEN: If you think of it as the bag or the product has to be eaten, if you throw it away in an environment where there is no bacteria, like letting it loose in the ocean, it is not going to biodegrade.

Ms TAYLOR: No. Got you.

Mr HEADIFEN: If you bury it in your garden, there is not a whole lot of bacteria there either. They will not eat it. But if you take it to a commercial compost or a home compost facility that is full of worms and stuff crawling around, the population is there to eat it.

Ms TAYLOR: Beautiful. Well, it is good to understand that, so that is helpful. The other thing I was thinking about is, with littering generally, it is almost like we have a cultural problem with a lack of respect for the planet, with those people who are just leaving stuff. And I have seen people even on a tram, and somebody's had their drink and they just leave it there, and you are like, 'Somebody else has to sit there'. But I know sometimes if you say, 'Don't do that', you will inspire them to do more, and I am generalising. So I am wondering, in addition to all the other things we are doing, how we can nurture greater respect without just saying, 'Please respect the planet'. Sometimes the guilt button—I do not know what it is, but do you know what I mean? I think there is an issue there as well, but I just do not know what the answer is.

Mr HEADIFEN: And education is a very expensive process. You guys would know better than us. Trying to run a national campaign would cost millions of dollars, and it is a five-year time frame to get people to change their mindsets. That is the hard part, but that is what is needed, a broadbrush approach to turn the society around to make us think before we start throwing stuff away. There used to be Keep Australia

Beautiful. In New Zealand we had Be A Tidy Kiwi. When those programs ran they made a difference. But Keep Australia Beautiful stopped in the 70s or 80s or whatever.

Mr HAYES: Can I just ask on that—public education is important—do you think there is a place for making fines for littering more? I just know from going to Singapore, you never see any rubbish in the streets. It is over \$500 if you throw something away in the street.

Ms HEADIFEN: It is a strong incentive. I would say most people do not run a red light because there are cameras and they are going to get caught. We cannot just drive like we want; we have rules we need to follow and there are restrictions on certain behaviours because we all need to live together. And, to me, littering is one of those—

Mr HAYES: I think people think on the train, ‘Oh, I’ll just leave it. They have cleaners that come at night, you know. It’ll be all right’, or something.

Ms HEADIFEN: We get two kinds of responses. It does get addictive picking up rubbish, because you will never walk by and not see it again. We do corporate group cleans sometimes, and we kind of say that to them up-front, ‘Let me just warn you that once you do this—look at this beach right now and it looks clean, and you come back 30 minutes later and everybody is like, ‘Oh my, I can’t believe all that was there’. You start seeing it once you are looking for it. I think having a group or a community mentality—like you said, ‘What do you say to people?’. Sometimes I just pick up behind them. I have no idea what that does in terms of their reaction, but I do not always feel comfortable saying to someone, ‘Excuse me, you dropped that’, because you never know what is going to happen. So I just try to make an example, and then sometimes people think, ‘Well, I could do that too’—you know, join a group or just that kind of on the side. It does not have a huge impact, probably, but it is—

Mr HEADIFEN: When people join BeachPatrol they sign up on the web and they just nominate what postcode they are in. We get them to answer a question, ‘Why do you want to join BeachPatrol?’, because we want to get into the psyche of what makes them want to volunteer their time. The answers are fascinating. They are all around, ‘I want to do something for my beach’, ‘I want to do something for my area’. They do not have a lot of time, but an hour a month—that makes them feel like they are doing something. And out of that we get probably 10, 15 new signups every week. People say, ‘I don’t have a lot of time, but I want to do something for the wildlife or something for my area. I want to come and help pick up plastic’. Four thousand volunteers over five years is not a bad growth curve.

Ms HEADIFEN: I was going to say that like Plastic Bag Free Torquay, you do find smaller communities—this is not Victoria, but Noosa has a lot of programs where they actually are coming together as a community saying, ‘We don’t want this in our community anymore’. I know Torquay are a surfside—that is their livelihood, people coming to the beach. You do not want to come to a beach that looks like it has been trampled on. If we do not stop what we are doing, we are heading in that direction, I am afraid.

Mr HAYES: Could I ask you also about re-using containers, like washing containers out? I know glass probably is not your specialty, but I heard someone on the radio talking for Coca-Cola, how they are trying to use recycled material in all their products now, and they were asked about re-washing them like the old days. They were going, ‘Oh, no, no, we’ve found it’s better to melt everything down and remake it’. They were saying, ‘What about the energy?’, and they were going, ‘But you must consider the water in washing it, and water is more important than the energy component’. This is what the manufacturer was saying—

Mr HEADIFEN: Exactly.

Mr HAYES: but I am wondering what your view on that is.

Mr HEADIFEN: If you think about it, somebody goes and buys a VB—a little stubby—they drink it, throw it away and the glass gets crushed. Even if it was recycled, they took it somewhere and they re-melt it down, make a new bottle, exactly the same and fill it up again. Why not just wash it and re-use it? It has got to be far less energy, far less water—

Mr HAYES: We used to do it.

Ms HEADIFEN: We used to, yes—save your crate with all your—

Mr HEADIFEN: The cafes around town, they used to have a kitchen area where they washed the cups and plates. Now they have gotten rid of that, turned it into a service area, selling more stuff and everything is takeaway plastic now. So they have gotten rid of the people that were required to watch the things—the reusable crockery—and it is all gone to single-use plastic. It is just a crying shame.

Mr HAYES: It is interesting. You would want to, probably, standardise bottles or encourage the use of a standard-size bottle or something.

Mr HEADIFEN: Exactly.

Ms HEADIFEN: Yes.

Mr HEADIFEN: That even opens up avenues for new businesses, because what if a business started where they supply cafes with their daily supply of crockery—they came in at 4 o'clock in the afternoon, picked up the dirty ones, gave them 300 new sets, took them back and washed them that night and brought them back the next day? That one company could service a dozen or more cafes, and they would make a living out of that—and the cafes would not have to change their current operations.

Mr HAYES: Interesting.

Mr LIMBRICK: One of the bits of legislation that came through recently was the plastic bag ban, and there were a lot of questions at the time around that—that it also banned biodegradable plastic bags. Did that affect your business, that ban?

Mr HEADIFEN: No.

Mr LIMBRICK: So you did not make those types of bags?

Mr HEADIFEN: No, we do make those bags, but we made a conscious decision not to make a biodegradable bag that would be handed out at a check-out. We make bin liners. All the hue and cry was, 'What am I going to put my rubbish in if I can't get a bag from Coles?'. Even if you could buy them, people have that thought—

Dr RATNAM: We have had a lot of conversations at this panel about that.

Mr LIMBRICK: So it probably did affect your business—in a positive way, because you are selling a lot of bin liners now, maybe.

Mr HEADIFEN: That is right.

Ms HEADIFEN: Well, yes.

Dr RATNAM: Industry growth—what we want to see. It's great.

Mr HAYES: That is what we want to see, yes.

Mr HEADIFEN: The same thing happened in Wales. Once they brought in their 15p charge on a bag, sales of biodegradable bags went up, which is what we want. We want to get rid of the non-biodegradable and for people to use biodegradable bags.

Mr HAYES: But we want these things properly labelled too.

Dr RATNAM: Very confusing.

Ms HEADIFEN: That is the other thing, yes. Sometimes you see something like 'bio cup' or something has a green leaf on it, so you have this vague idea, 'Oh, it must be earth friendly'. But we also do not have labelling on things to say where to dispose of it. So, again, if you have a compostable cup, you drink out of it and you put it in a bin that is going to landfill, you have not made any difference, other than whoever bought that cup

probably paid more for it. They saw it was compostable, it will cost you more, but you are doing the right thing for the earth, but if there is no place to put it, if we do not have the infrastructure set up to have all these different commercial compost facilities and landfill and whatever, recycling—

The CHAIR: Are you planning to make coffee cups that can be biodegradable or re-used?

Mr HEADIFEN: No.

The CHAIR: Is there a possibility, or technology, or someone else around the world doing it?

Dr RATNAM: There are some on the market, you are saying. There are biodegradable cups on the market.

Mr HEADIFEN: It would be easy, as Samantha says. There are some available. We came across one the other day that was probably the best one I have seen. It was made of vegetable waste.

The CHAIR: So you can eat it.

Ms HEADIFEN: You could have coffee and lunch, brilliant!

Ms TERPSTRA: Drink your coffee then eat it for lunch, yes, that is it.

Mr HEADIFEN: But you have got to be careful, because there is a German cup made out of sugarcane. What they do not tell you is how they hold the sugarcane together. They put a binder in there that is actually a carcinogen under heat. But they do not want to tell you that.

Ms HEADIFEN: That is no good.

Mr HEADIFEN: Exactly. Just because it is made of sugarcane does not mean that there is nothing else in there that is harmful.

Mr HAYES: You were just saying if you got the compostable cup and you put it into landfill, it really has not made much of a difference. But it does, in a way, because if it does compost in the landfill at least it is not—

Ms HEADIFEN: It will not.

Mr HAYES: It will not?

Mr HEADIFEN: Too cold.

Ms TERPSTRA: You have got to have the microbes, don't you?

Ms HEADIFEN: It would have to go to a compost facility.

Mr HAYES: Unless it was a home-compostable cup.

Mr HEADIFEN: I have not seen a home-compostable cup.

Mr HAYES: No, okay.

Mr HEADIFEN: I have seen commercially compostable.

Ms TERPSTRA: What about worms? Can they chew through that? Sorry, I did not mean to jump in.

Mr HEADIFEN: No.

Ms TERPSTRA: Okay, that is good to know.

The CHAIR: Thank you very much for your time. Keep up the good work.

Mr HEADIFEN: Just briefly, we have been doing a survey on a particular beach in Port Melbourne for coming up on four years. The first two years we pegged off a length of beach and we surveyed it every day, counting every bit of plastic that came in on the high-tide line—that is where most of the plastic is coming from. We broke it down into about 20 different categories: cups, bottles, labels, straws, coffee cups, bits of plastic big, bits of plastic small. We have tabulated that data and then plotted it against time of year, so all through the winter, all through the summer and spring, versus the weather. We recorded the weather every 10 minutes. We recorded how much of an onshore wind we had one day versus an offshore wind. We know that onshore winds blow stuff onshore and offshore winds blow it onto another beach somewhere. All of those results are in here if anybody is curious.

The CHAIR: If you could pass that on to Michael, then we can table that as valuable evidence as well.

Mr HEADIFEN: The worst day we got was—we were surveying 35 metres of this beach. We do not have time anymore. But in that one 35 metres we got 14 000 pieces of plastic off that beach—in 35 metres.

The CHAIR: Over what period of time?

Mr HEADIFEN: Twenty-four hours.

The CHAIR: Twenty-four hours.

Ms HEADIFEN: It took us 5 hours to do it.

Mr HAYES: Onshore breeze?

Mr HEADIFEN: Onshore breeze, after a storm.

Mr HAYES: Is that domestic? And how much is international rubbish in that?

Ms HEADIFEN: In the bay it is almost all us. I was going to say in closing, thank you, guys, for doing this. Some people think we do not have a problem at all. They think it is out in the Pacific. It is here. It is right here, so we really appreciate you taking the time.

Mr HAYES: Likewise.

Ms HEADIFEN: Not just flipping and flopping: ‘Oh, let’s use this instead of this’. We need to really look at what we are doing.

The CHAIR: Thank you. We get paid for what we do. You are volunteers. We want to thank you because you do it on a voluntary basis, and you are the ones who should be thanked. Thank you.

Mr HEADIFEN: If you bring in a container deposit scheme, we might get paid.

Ms HEADIFEN: Thank you so much.

Witnesses withdrew.