TRANSCRIPT

STANDING COMMITTEE ON THE ENVIRONMENT AND PLANNING

Inquiry into the Environment Protection Amendment (Banning Plastic Bags, Packaging and Microbeads) Bill 2016

Melbourne — 20 April 2017

Members

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Mr Richard Dalla-Riva Mr Daniel Young

Participating Members

Mr Greg BarberMr James PurcellMr Jeff BourmanMr Simon RamsayMs Colleen HartlandMs Jaclyn Symes

Witness

Ms Kath Rowley (affirmed), Executive Director, Climate Change Division, Department of Environment, Land, Water and Planning.

The ACTING CHAIR (Mr Melhem) — I declare open the Standing Committee on the Environment and Planning public hearing and extend a welcome to members of the public and the media who are present. Today's hearing will be undertaken by a subcommittee. This is done to enable the committee to manage several inquiries we are undertaking concurrently. All matters heard today will, however, be considered by the full committee. The committee is hearing evidence today in relation to the inquiry into the Environment Protection Amendment (Banning Plastic Bags, Packaging and Microbeads) Bill 2016, and the evidence is being recorded.

I welcome our first witness today, Kath Rowley, from the Department of Environment, Land, Water and Planning. Thank you for making yourself available today.

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 comments repeated outside this hearing may not be protected. All evidence is being recorded, and you will be provided with a proof version of the transcript in the next couple of days. I invite you to make any opening comments and make any presentation that you wish to make prior to the committee asking questions. Please take a few minutes to make your opening remarks or give your presentation.

Ms ROWLEY — Absolutely. Thank you for the invitation to attend today's hearing. I have got a short presentation. We have just provided the slides, so I will not use the screen; I will just speak to the presentation. The presentation is a brief outline that provides some context and discusses the general implications of the bill. Obviously then I will be very happy to take questions.

Turning to slide 2, I will start with some context on plastics in the environment. Approximately three-quarters of the rubbish found on the Australian coastline is plastic. It is an important part of the litter and waste stream. Plastic and microplastic litter in particular are amongst Victoria's top five litter issues as identified through Victoria's Litter Report Card.

Plastic bags are highly mobile and easily dispersed in the environment. They consume large amounts of raw material to manufacture. They contaminate recycling streams and pose significant environmental risks when they are littered, particularly risks to marine life. They are certainly an important part of the waste and litter stream, and that is their particular environmental impact.

Microbeads, as distinct from plastic bags, particularly pose harm to marine environments and obviously, given their size and dispersion, are very difficult to recover once they are released into the environment.

In terms of considerations for government action to address plastics and plastic bags, government intervention may be justified to reduce consumption and disposal of plastics. Billions of plastic bags are consumed in Australia every year. To the extent that we can reduce our reliance on plastics, that has environmental benefits, including reducing some of those risks that I just mentioned. It could also reduce costs particularly to government for cleaning up and minimising environmental harm. Those costs fall mostly on government rather than producers or consumers.

Government intervention can, however, introduce distortions to the market and be costly, and so we need to think about the costs and benefits of any particular proposal before proceeding. If we consider, for example, the issue of banning plastic shopping bags, you may see some economic benefits to retailers because they no longer provide bags free to customers and they might also be able to make some revenue from selling alternative bags. On the other hand there is likely to be increased cost to consumers because they are now buying those alternate bags rather than receiving something for free. There are obviously the broader environmental impacts as well, as I have mentioned.

In terms of government intervention, it is important to ensure that it is likely to produce net benefits to society. Whilst billions of bags are used in Australia every year, only a small proportion of those end up as litter, and in our most recent statistics from last financial year about half of 1 per cent of Victoria's litter count was those thin lightweight plastic bags. When we think about restricting or banning products, we need to think about both the upstream impacts — so the resources and environmental impacts associated with manufacture — as well as those downstream impacts of what ends up in the litter stream and what impact that has on the environment.

I will now turn to the details of the bill. I am not aware of any detailed specific assessment of the impacts, costs or benefits of the bill, so I cannot speak to the detailed specific implications, but I can provide a general assessment. There are three main points that I would like to cover. Firstly, the bill proposes an approach which is inconsistent with the bans that we observe in some other Australian jurisdictions, and in our discussions with retailers consistency has been one of the issues that they have highlighted as particularly important for them. The proposed process and time line would impose significant burdens on government. Then, thirdly, the bill would impose significant administrative burdens on the EPA and industry and would require additional resourcing for compliance activities and reporting.

On that first point and just how the proposals in the bill compare with other jurisdictions, a number of other states — South Australia, the ACT, the Northern Territory and Tasmania — currently have plastic bag bans in place, and Queensland has proposed a plastic bag ban. I am sure you have heard that from other witnesses, so it will be no surprise. Those bans relate to lightweight, supermarket-style carry bags only, and so it is a narrower scope than what is proposed in this bill. This bill is considerably broader in scope than what we see in other states. Other states have regulated exemptions for things like bin liners, barrier bags and department-store-style heavier bags, which because they are heavier are less likely to blow away and end up in litter. Things like garbage bags are also exempted, and they do allow those heavier bags — those department-store-style bags — for things like takeaway and such like.

Turning to the other elements of the bill, in terms of products containing microbeads the environment ministers in all jurisdictions — so states and the commonwealth — have agreed to a national approach for a voluntary phase-out of personal care, cosmetic and cleaning products containing microbeads by the middle of next year, so 1 July 2018. The federal government has clearly indicated that if by the middle of this year we are not on track to achieving an effective ban, then they would take action to implement a ban in law on those products containing microbeads. That action has been agreed at the meeting of environment ministers, and there will be an update provided at their next meeting; I think that is in June or July. The bill also relates to plastic packaging for fruit and vegetables, and we are not aware of any comparable bans in other jurisdictions, and nothing has been discussed at the national level on that either. So the first concern is it is not consistent with the approach taken in other jurisdictions.

To my second point on time lines, the bill would impose restrictions from 1 September 2017. This establishes a relatively short implementation time line and creates risks of stranded stock of bags, products and packaging which is subject of the ban. This is probably most likely for those personal care, cosmetic and other products containing microbeads, which have a shelf life rather longer than to September of this year. One of the things that we would be concerned about in terms of the time line is the importance of getting clear information out to industry in terms of their obligations. We would need to provide information to retailers, suppliers and consumers regarding the scope of the ban, what products can and cannot be provided from when and what alternatives would be available or allowed. Retailers will need to be able to manage their existing contracts and move to new stock ordering processes, and interstate and overseas suppliers would need to be aware of what they can provide into the Victorian market. And so because of those different strands of implementation before you move into a compliance space, we are just a little concerned that those time lines are rather tight.

I move to my third point on the reporting and compliance burden for EPA, government and industry. The bill specifies annual investigation and reporting requirements for the EPA in some detail, as well as obligations to review the effects of the bill over time. There are a number of specific requirements set out in the bill, and the EPA would certainly require additional resources to meet those new obligations as well as to support any compliance and enforcement activities.

In terms of what it would require of the government, the requirements would include formalising amendments to the Environment Protection Act and any other necessary legislation. The department would be providing support to the government in gazetting exempt plastic bags and exempt persons or classes of persons under the exemption provisions set out in the bill. There would also be the work involved in doing the regulatory impact statements where those exemptions would impose a significant burden.

There is the issue of developing and implementing the information and education campaigns for consumers, for manufacturers and providers of the banned materials and for retailers as well, and of undertaking compliance and enforcement programs and, as necessary, prosecutions. To the extent that there are any challenges to the legality of the regulated provisions — for example, anyone challenging what is a reasonable excuse for using

those prohibited bags — we would be providing legal advice or support to any of those challenges. There would also need to be work done to establish the procedures and systems for the data collection and reporting regimes that are proposed under the bill, so there is a not inconsiderable reporting burden on government.

Finally, turning to what it would imply for industry, to allow accurate review and reporting EPA will need to seek from retailers and suppliers the number and type of exempt plastic bags provided, the amount of exempt restricted plastic packaging provided, products sold containing prohibited microbeads and any other information that the EPA or minister considers necessary. So there is a significant reporting burden on EPA, government and industry imposed by the bill.

If I could finish, I would like to briefly outline some of the government's key activities to reduce litter in Victoria. With respect to plastic bags we have been consulting with other states and the commonwealth to identify the most effective and appropriate approaches to reducing plastic bag impacts in Victoria, and as I mentioned, with microbeads we support the national voluntary approach to phase-out, noting that the commonwealth has indicated that it will move to a legal ban in the event that that is not looking like it is going to deliver an effective ban. In terms of the things we are doing here in Victoria there is the Victorian Litter Innovation Fund — that is, a \$700 000 fund providing grants to the Victorian community to develop new and innovative approaches to reduce litter impacts. I mentioned earlier Victoria's Litter Report Card. This is collecting and analysing data to understand what are our top-ticket items in terms of litter in Victoria — both litter and illegal dumping — and using that to inform what are the priorities for these grants and other programs.

We have got a specific package of \$200 000 to trial interventions to address those issues identified in the litter report card. That includes things like microplastics as well as coastal litter. We have got the Litter Hotspots program, which is implemented by the Metropolitan Waste and Resource Recovery Group, identifying important littered areas and working with local government to find ways to reduce litter in those areas, and there are some trials happening in flexible plastics — this includes plastic bags — taking those materials which have traditionally not been able to be recycled in Victoria, but we have got some councils now trialling the recycling of flexible plastics as part of kerbside collection services.

Just on the final slide I have provided a couple of web links to some sites and reports that we have found particularly useful. The litter programs that I just outlined are largely administered by Sustainability Victoria, so more information on those is available on their website. The National Litter Index is an annual survey of litter information, and it provides a really useful time series of how we are going on litter in terms of reducing litter load in the environment, and that is on the Keep Australia Beautiful website. Finally, there is a link there to the New South Wales EPA website. They recently, last year, produced a report on plastic microbeads in products in the environment, which we have found useful as well.

The ACTING CHAIR — Thank you very much. It is an excellent presentation, and thanks for taking us through the analysis of the bill. Just to follow on from that, can you take me through what you see as the weaknesses and the strengths of the bill? And I know you have made some points about the dates — for example, implementation dates — and so forth, so are you able to make some brief comments as to what are the strengths and weaknesses of the bill?

Ms ROWLEY — Sure. To the extent that plastic is an important part of the waste and litter streams, then action to reduce plastic load in the environment is welcome, and to the extent that the bill will encourage a shift from single-use plastic bags and materials and plastic packaging materials into other ideally more sustainable products, then that is an advantage. It does not actually impose any requirements with respect to those alternatives, so you have to make assumptions about what would be used instead, but the ban is quite broad so you would expect it to be non-plastic materials. So to the extent that it did deliver a reduction in the plastic litter load in the environment, that would be beneficial, on both an environmental impact and marine and coastal impact, and also the amenity benefits of having less visible litter in the environment.

In terms of the weaknesses there are those three key points that I identified. Where you are talking about relatively generic products, then consistent approaches across states and ideally across the country as a whole tend to be more useful than banning different things in different places, both for consumers who might live, work or at least travel across state jurisdictions and certainly for industry and retailers who operate across state jurisdictions. Having essentially the same rules governing their activities in different states reduces compliance costs and increases compliance levels. Our particular concern is that the bill has a much broader scope than the bans that apply in those four other states and territories which I mentioned and is certainly considerably broader

than the ban that Queensland is considering. It is also considerably broader than the proposals that we have seen from stakeholders. For example, a number of environmental groups have proposed bans on plastic bags, but those typically focus on those single-use, lightweight supermarket-style plastic bags rather than all bags, including bin liners and everything else.

The ACTING CHAIR — Just on that, if we focus on these plastic bags from the supermarket — your typical lightweight bags — is this a common approach in the other jurisdictions you talked about earlier? Have they got bans on these bags?

Ms ROWLEY — Yes. It is not exactly the same. Some states, for example, have allowed and others have banned degradable plastic bags, but in general it is the set of single-use, lightweight bags. I think the typical weight is 35 micron plastic — it is that kind of plastic bag rather than the heavier department store-style plastic bags because, as I said, the litter concern from those lightweight bags that tend to blow away is greater and it means that you can have those other heavier bags available where they are needed, I guess. They are not all exactly the same but they are much more similar. The gap between the bans that are currently in place and what is proposed in this bill is much greater than the gap between the bans currently in place.

The ACTING CHAIR — What about food packaging? What is the experience in the other states, whether it is meat or vegies?

Ms ROWLEY — We are not aware of any bans on plastic packaging in other states along the lines of what is being proposed in this bill. The broader scope relates not just to the type of plastic bag being banned but also to those other activities. In addition other states have not banned products containing microbeads. That is something that is being addressed at the national level.

The ACTING CHAIR — The implementation date — you did talk about the problem with the proposed date in the current legislation, which I think is July 2017.

Ms ROWLEY — I think September is the effective date for the bans.

The ACTING CHAIR — September. Sorry, I think you are probably right — September. If the government or the Parliament considered introducing some sort of ban, what would be a realistic time frame in your view?

Ms ROWLEY — With respect to plastic bags the preliminary discussions we have had with retailers suggest that perhaps a 12-month lead time would be desirable. From discussions we have had with some other stakeholders, including environmental groups, they think that perhaps it could be more doable in perhaps six months. Six months, however, seems a relatively short period of time in terms of notice for, as I said, those products containing microbeads. There is a whole range of products that fall within that ambit, and the national process that is underway has set a date of the middle of 2018 for the voluntary ban to come into force. That was announced more than six months ago, and so that is about a two-year lead time, or at least a two-year lead time, that was proposed for that national ban. The commonwealth has said that if it does not see sufficient progress by the middle of this year, then industry is essentially on notice that it would move to a legislated ban, but that is still following on from that kind of long lead time heads-up.

Ms DUNN — Thank you, Ms Rowley, for your presentation this morning. There are a few question that I have. First, I see you are the executive director of the climate change division of the department, but I just wanted to clarify: are you here representing DELWP — the department — or the climate change division?

Ms ROWLEY — I am here representing DELWP, yes.

Ms DUNN — Okay, thank you for that.

Ms ROWLEY — Sorry, I provided my title by way of that being my role in the department. To avoid any confusion, the climate change division includes the environment protection policy branch and the economics, governance and waste branch, both of which have direct relevance to the plastic bags ban.

Ms DUNN — Okay; terrific. Thank you for that. I will pick up where we left off, which was talking a bit about realistic time frames for implementation, and there is that tension between the retailers that are saying

12 months and the environment groups that are pitching six months. But what I really want to understand is: are there any moves afoot to implement a plastic bag ban in Victoria anyway at the moment?

Ms ROWLEY — The Victorian government is still considering options, including in discussion with other jurisdictions. It is an issue that is often discussed at the meeting of environment ministers, and so it has been exploring all options. A ban on plastic bags, not on packaging and not on microplastics, is one of the options that is being considered. As a result, we have been doing things like those stakeholder consultations I referred to. They are just preliminary to understand what the issues and the potential costs and benefits might be.

Ms DUNN — I certainly take the point you have made around consistency for retailers in terms of their operations, but it would seem that there are a whole lot of states doing things now and Victoria might be the inconsistent one in relation to that. In terms of them aligning their operations to what they do in other states, it perhaps might not be as problematic because it already is happening in other states. Is that a fair assessment?

Ms ROWLEY — I think that is one of the reasons why Victoria is looking at what it should be doing about plastic bags. Two states and two territories, so still a minority of Australia's population and market — South Australia, Tasmania, ACT, Northern Territory — have bans on those lightweight plastic bags already in place, and that is one of the things that is leading to this momentum or calls for a national ban. It is nothing new — people have been talking about banning plastic bags for a long time.

Ms DUNN — Absolutely. I might just go progressively through your presentation, if that is okay.

Ms ROWLEY — Absolutely.

Ms DUNN — Chair, please butt in if you need to at any time, because you know I am very fond of asking a question.

The ACTING CHAIR — You have got 25 minutes; we will not cut that short.

Ms DUNN — Thank you. In terms of the data, does the department have any data in relation to food packaging or the prevalence of microbeads in the waste stream or in the environment at all?

Ms ROWLEY — We have not done any specific research ourselves. As I said, the New South Wales EPA published a report on microbeads in the environment, and the link to their website at the end would help you find that report. We found it quite useful. In terms of plastic packaging, again we have not done any research ourselves, and so we have no specific data on use in Victoria. The national packaging covenant, which is a national initiative — a government-industry partnership that has been in place for more than 10 years now — is a collaborative effort to both reduce packaging waste and also push upstream to ensure that packaging is designed to reduce environmental impacts including by increasingly designing for recycling, and so it has been an important part of the growth of kerbside recycling and materials recovery in Australia over the past more than a decade. And they publish statistics on resource recovery rates including things like plastic packaging recycling rates which might be useful.

Ms DUNN — It is my understanding that covenant is a voluntary scheme at the moment; it is not mandatory, the national packaging covenant.

Ms ROWLEY — No, it is kind of a co-regulatory arrangement. It has certainly been reviewed recently, with redefined roles, to make sure that everyone is focusing on the bit that is properly within their control, but it is not purely voluntary.

Ms DUNN — Terrific. Thank you for that. Just let me go through these notes here. You talked about government action in relation to litter, and you talked about costs for cleaning up which are often met by government and not producers or consumers. I am just wondering: did you have any data in relation to what those costs are in a Victorian context?

Ms ROWLEY — I do not have them to hand. I could certainly take on notice whether we could gather such information. I am not sure if any agencies, whether that is land managers or waterway managers, would produce that sort of data in terms of their expenditure on litter clean-up. National park managers, for example, might have some information on that. I do not have anything to hand.

Ms DUNN — That would be great.

Ms ROWLEY — The main information I have is with respect to what we are doing to reduce litter, and that is those litter programs at the end of my presentation.

Ms DUNN — Terrific. If you could check to see if that data is available, that would be great.

Ms ROWLEY — It would be important just to keep in mind that that would be clean-up cost for all litter, not just for plastic bag litter or for plastic packaging litter, and that is something to keep in mind particularly where, for example, those thin plastic bags account for half of 1 per cent. So you would want to do that adjustment in thinking, 'How much might we save if we eliminated or at least reduced those particular elements of the litter stream?'.

Ms DUNN — Yes. I guess the other side of that is the implications for marine life, which has further flow-on effects, of course, to human health as well.

Ms ROWLEY — Yes, absolutely.

Ms DUNN — So there is a cost attached to that as well which is, I think, probably even more difficult to quantify. You highlighted three major concerns with the bill, and one of them was around the inconsistent approach to other jurisdictions, but I note that the bill actually has the ability to allow exemptions. So my question is: there is actually the possibility and flexibility within the bill for the minister to exempt various different plastics that would actually bring the bill into consistency with other jurisdictions; would you agree?

Ms ROWLEY — That is correct. So you could do a series of specific exemptions, both to classes of people as well as types of plastic bags, that would bring the plastic bag element of the ban in broad alignment with other jurisdictions. I guess the difference is that other jurisdictions kind of narrow the scope of the ban itself rather than having a very broad ban and then exempting a whole bunch of different products. But, yes, you could use the exemption thing. That kind of then gives rise to that third issue of the administrative burden, because if your intention is to have a narrow ban, then enacting a broad ban and then going through the regulatory effort of doing a whole bunch of exemptions is a relatively inefficient way to achieve that objective. It might be perhaps more efficient to just ban the things that you want to ban in the first place.

Ms DUNN — And I guess we will hear from the bill sponsor in terms of that, but I just wanted to clarify that it is possible to achieve consistency.

Ms ROWLEY — Yes, you could achieve that. It would then just require that additional administrative and regulatory effort. That is just with respect to the plastic bags element; the plastic packaging and the microbeads elements are, as I said, not echoed in other states' bans, and the microbeads are being tackled at that national level.

Ms DUNN — In terms of being tackled at that national level, I know you talked about action being taken if the voluntary approach is not effective. I am just trying to get a sense of what that looks like. Could you unpack that a little bit as to what that action would look like if the voluntary approach does not pan out?

Ms ROWLEY — Absolutely. That was a commitment made by the commonwealth minister, and so I cannot speak to the detail —

Ms DUNN — Fair enough.

Ms ROWLEY — but the indication was that if by the middle of this year retailers and product providers were not looking on track to achieve an effective ban of microbeads in the kinds of products that are proposed in this bill, then the commonwealth would take action to implement a legal ban. So that would be presumably some kind of new law or regulation under an existing law. It would define the scope of the products covered, specify the type of plastic microbeads and identify the timing and the enforcement and other powers and provisions within that.

Ms DUNN — The other things.

Ms ROWLEY — That is what I would expect, but as I say that would be a matter for the commonwealth government. State ministers are very interested in the detail as well, and as I said we are due for an update from the commonwealth at the next meeting of environment ministers. So I expect that that is something that would be discussed there and perhaps addressed in the communiqué from that meeting.

Ms DUNN — So at this stage, just to understand it, at the moment there is a commitment to say, 'If this isn't going to work, then there's another mechanism we can use'. But at this stage that has not been fleshed out in terms of the legal approach, I guess, and that does not have sign-off yet by environment ministers.

Ms ROWLEY — That is right, yes. Environment ministers under the meeting of environment ministers, so state and territory and the commonwealth, have agreed to fit to this voluntary ban, and the commonwealth has indicated that it will move to a legal ban in the event that the voluntary does not deliver the results, and Victoria has expressed support for that. But the actual enactment of the law would then be a matter for the commonwealth Parliament or a relevant regulation maker. It is correct to say that the detail has not yet been set out, so that ban was to be in effect by the middle of 2018 and so it is still more than a year out and we will be getting an update at the next meeting.

Ms DUNN — So they will be looking at the progress made to date on that too, working towards that 2018 — —

Ms ROWLEY — That is right. So how are we are going? What are we seeing? Are we starting to see those products leave the market? What plans have retailers got in place? What plans have producers and manufacturers got in place to be phasing out those plastic microbeads? Then does that give us confidence that they will be gone? If not, that is where the commonwealth has indicated that they would move to a legal ban.

The ACTING CHAIR — Just on that, how would a voluntary ban actually work in reality, because a lot of that stuff is actually imported as well, isn't it?

Ms ROWLEY — That is right.

The ACTING CHAIR — So it has surely got to have some sort of enforceability. How are we going to enforce a voluntary ban? I understand the government's position; the Victorian government needs to ban it. But let us say everyone agreed on a voluntary ban. How do you enforce it? Don't you need some sort of — —

Ms ROWLEY — What it would mean is that retailers no longer buy from their suppliers and offer in their stores products containing microbeads. So they would just change their procurement and change their product offering and move exclusively to those home care, personal care and other products which do not contain microbeads. Retailers can always choose what to offer, and because it is a voluntary ban the enforcement would operate at that level rather than enforcement by government.

The ACTING CHAIR — Yes. So a new retailer could come in tomorrow and say, 'Yes, we're going to import it'.

Ms DUNN — 'Forget about it'.

The ACTING CHAIR — 'Forget about them'.

Ms ROWLEY — That is right, yes.

The ACTING CHAIR — So there is no mechanism to enforce a voluntary ban?

Ms ROWLEY — Which is why they are reviewing progress, and in the event that we do not look on track to achieve an effective ban, then that is where the commonwealth would consider introducing a legal ban.

The ACTING CHAIR — That is my understanding. Minister D'Ambrosio is advocating with the feds to look at some sort of system legal framework —

Ms ROWLEY — Legal ban, yes.

The ACTING CHAIR — which would give effect to a ban on microbeads. Is that a fair representation?

Ms ROWLEY — I think that the minister has expressed support for the commonwealth's commitment and the minister is looking forward to the update at the next meeting to see how things are going and whether we are or are not on track.

Ms DUNN — Is it a fair comment to make in relation to managing waste that there is generally a weighing up of a voluntary approach versus a mandatory approach and that generally you get far better results with a mandatory approach? Would you agree with that?

Ms ROWLEY — If I go back to empirical analysis, I do not recall any studies in the waste space that compare the effectiveness of voluntary and mandatory approaches. I know there is a substantial regulatory architecture around waste generation, resource recovery — both planning, management and disposal — in Victoria, and we, as a result, achieve pretty good results. If we compare Victoria to other states, we have relatively low levels of litter. So in the national litter index that I referred to earlier, which has been tracking year by year litter counts across the landscape, we have achieved reductions in litter load in the Victorian environment year on year. We achieved roughly a one-quarter reduction in the last year-on-year result.

We have programs in place — things like regulations banning illegal dumping and littering; they are not allowed — and also voluntary programs, working with local councils, working with community groups to figure out what is going to reduce litter and illegal waste disposal in their environments. Sometimes that is about education; sometimes that is about public information campaigns.

If you cast your mind way back, the 'Do the right thing' program I think probably had a very significant impact on public behaviours many years ago, and they are kind of at the voluntary end of the spectrum. At the other end you have got the EPA's 'Dob in a litter bug'. I think an effective program to reduce waste, increase resource recovery and reduce the litter load in the environment requires a little bit of everything. If you just took regulatory approaches, then you would miss some of those frontrunner, leading ways that might actually shift the culture or shift behaviour altogether. It might also miss some opportunities for things like market development, because one of the ways that we reduce waste load in the environment is by finding better ways to use that resource. Organisations like Sustainability Victoria play an important role there. Again, that is more at the voluntary end of the spectrum than the regulatory one. That said, it is important to have regulation to deal with the bad and the environmentally harmful behaviours.

Ms DUNN — I was probably thinking of it less in regard to community action and more in regard to the supply chain, in that mandatory schemes are often more effective in the supply chain than voluntary ones, in terms of industry responding.

Ms ROWLEY — Yes. The national packaging covenant is that kind of co-regulatory arrangement where it is sort of a partnership between government and industry.

Ms DUNN — Is it mandatory, though, in that it is in a sense?

Ms ROWLEY — There is regulation underpinning it, yes. But one of the challenges there is how to regulate for innovation and change, like one of the ways of reducing packaging litter and improving packaging is to use new and different materials to kind of build up those recycling chains, those sorts of things. Sometimes you can absolutely ban materials and products that are known to be harmful in the environment, and we do that across chemicals and across other materials all the time. But in other cases there are pros and cons, I guess.

A typical policymaker has to think about it on the one hand and on the other. There is not just the convenience but there are the benefits in terms of, say, reduced spoilage of the product itself that comes about by sensible packaging that can deliver environmental benefits which, if you took that packaging away, might mean that there are greater levels of spoilage, and all the environmental impacts associated with producing that product in the first place are then wasted and the product itself becomes waste. So those things need to be considered in deciding whether or not even packaging materials ought to regulated or banned.

The ACTING CHAIR — Just following on from that, can you tell us what issues other jurisdictions have run into when implementing bans within their jurisdiction? Are you aware of what sorts of practical problems or challenges they faced when they implemented various bans? You can take that on notice if you are not prepared for that.

Ms ROWLEY — In terms of the scope of this bill, there is no equivalent that we are aware of in terms of the ban on the packaging material.

The ACTING CHAIR — Let us take some elements of the bill.

Ms ROWLEY — That is with respect to the packaging material. With respect to the implementation of the plastic bag ban, I understand that it has been relatively straightforward. The thing that we have heard from retailers is, 'We will comply with whatever laws are in place', and what is most helpful is where there is broad consistency across jurisdictions in terms of what is prohibited.

The ACTING CHAIR — So you are saying retailers coped reasonably well with it. What about customers? Have we got any feedback, consumer reaction, in any other state in relation to these bans?

Ms ROWLEY — If you think about the national campaign, including to ban plastic bags, it is drawing on the experience in those existing jurisdictions. Speaking from the perspective of Victoria, we get a lot of letters — or the minister receives a lot of letters — about plastic bags. There are certainly more letters about the adverse impacts of plastic bags on the environment. There are certainly some letters, just fewer, saying, 'Please don't ban them, because they're really handy and I use them for a whole bunch of useful things'. So there are mixed views, I think, in the community in terms of the merits of a ban, but certainly if you took just number of letters as some kind of indicator, then there seems to be certainly more concern with the environmental impacts of plastic bag litter than there is with safeguarding plastic bags.

Hearing suspended.

The ACTING CHAIR — We will resume the hearing. Ms Rowley, I think Ms Dunn has got one or two more questions.

Ms DUNN — It may turn into two. We will see how we go. There is nothing like a bit of an emergency alarm to clear the air. You talked about plastic bags being half a per cent, I think, of the litter stream.

Ms ROWLEY — In the 2015–16 litter count, under that national litter index that I referred to, thin plastic bags comprised half of 1 per cent of the litter count.

Ms DUNN — Can you tell me where that data comes from?

Ms ROWLEY — Keep Australia Beautiful has been doing a national litter index for a number of years. They publish the results, and the reports are available on the website. I have put the link on my final slide.

Ms DUNN — Yes, I did see that.

Ms ROWLEY — So every year they do a survey of sites around the country and count litter items. That is the basis for that. They look at all the different things in the litter stream, and they publish the results.

Ms DUNN — So I guess it is a bit like a sampling across the country of various sites. I assume that is broken down state by state as well.

Ms ROWLEY — That is right, yes.

Ms DUNN — Do you know if that background data is available?

Ms ROWLEY — The report is published and it is on their website, so you can get that, yes.

Ms DUNN — Does that just have summary data or the detailed analysis on that site-by-site basis?

Ms ROWLEY — I do not think that it has detail on every site that they sample, but it certainly presents results state by state. It is the cumulative result for each state, and then they track that over time.

Ms DUNN — No problem. The only other thing I was interested in — and this is my last question — falls in the area of climate change. You would be aware that petroleum is used in the production of plastic and therefore there are some direct emissions involved in relation to plastic production. I am just wondering: has the

department at all quantified the use of fuels in plastic production as a contributor to climate change? Has any work been done in relation to looking at the issue from that side of things?

Ms ROWLEY — We have not done any specific studies of the use of petroleum fuels in plastic manufacture; however, there is extensive information with respect to Australia's greenhouse gas emissions, including all sources and sinks, published each year by the Commonwealth department of environment. It is the national greenhouse gas inventory, and it is published in accordance with international greenhouse gas accounting rules. That has a very extensive detailed breakdown by sector and by different applications, as well as by end use.

The majority of Victoria's emissions and a significant chunk of national emissions come from electricity generation. If you took a life cycle approach, you could look at the emissions associated with that in plastics manufacture, but as you change the composition of energy generation — and in Victoria the government's renewable energy targets are doing just that — then you start to reduce the greenhouse gas intensity of energy, and that reduces the greenhouse gas intensity of anything that uses energy in its manufacture as well. That data is available on an annual basis. There is lots of detail in the national greenhouse gas inventory.

Ms DUNN — I have not had a good plough through that for a while. Would that go to looking quite specifically at plastics production or maybe not to that degree?

Ms ROWLEY — They do a breakdown by industry. I do not have all those details, but it does have quite a granular breakdown — categories, subcategories and subcategories — so I would not be surprised if it provided that level of detail.

Ms DUNN — That is terrific. That is me done, Acting Chair.

The ACTING CHAIR — Thank you very much. Thank you, Ms Rowley. Thank you for your time. A copy of the transcript will be sent to you in the next few days for you to have a look at and see if it needs any correction. Also the secretariat may be in touch with you for any follow-up. Again, thank you very much for your contribution. It was excellent.

Ms ROWLEY — My pleasure, Chair. Thank you very much for the opportunity, and thank you, Ms Dunn.

Ms DUNN — Thank you.

Witness withdrew.