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TRANSCRIPT OF PROCEEDINGS

PRODUCTIVITY COMMISSION

DRAFT REPORT ON WASTE GENERATION AND RESOURCE EFFICIENCY

MR P. WEICKHARDT, Presiding Commissioner

TRANSCRIPT OF PROCEEDINGS

AT SYDNEY ON TUESDAY, 25 JULY 2006, AT 9.05 AM

Continued from 17/7/06 in Perth

MR WEICKHARDT: Good morning and welcome to the public hearings for the Productivity Commission inquiry into waste generation and resource efficiency. My name is Philip Weickhardt and I'm the presiding commissioner on this inquiry. The inquiry started with a reference from the Australian Government on 20 October 2005. The inquiry will examine ways in which waste management policies can be improved to achieve better economic, environmental and social outcomes. The inquiry covers solid waste and more specifically, the issues associated with municipal, commercial, industrial and construction and demolition wastes.

We're grateful to the many organisations and individuals who have already participated in the inquiry. The purpose of these hearings is to provide an opportunity for interested parties to discuss their submissions and their views on the public record. We released the draft report on 23 May 2006 and have received a number of submissions on the draft report. We have already held hearings in Perth and by the end of next week hearings will also have been held in Brisbane, Canberra and Melbourne.

After considering all the evidence presented at the hearings and in submissions as well as other relevant information, the final report will be forwarded to the government in October 2006. Participants in the inquiry will automatically receive a copy of the final report. We like to conduct all hearings in a reasonably informal manner, but I remind participants that a full transcript is being taken. For this reason comments from the floor cannot be taken, but at the end of the proceedings for the day I will provide an opportunity for anyone wishing to do so to make a brief presentation.

Participants are not required to take an oath, but are required under the Productive Commission Act to be truthful in their remarks. Participants are welcome to comment on the issues raised in other submissions or by other speakers here today. The transcript will be made available to participants and will be available from the commission's web site following the hearings. Copies may also be purchased using an order form available from staff here today. Submissions are also available on the web site or by order form.

To comply with requirements of the Commonwealth occupational health and safety legislation, I'd like to draw your attention to the fire exits, evacuation procedures and assembly points. The most convenient fire exit is just outside this door to the right and down the stairs and out on the street, and there is an assembly point out there. You can also obviously go out through the foyer, but do not try to go out through this side balcony: there's no exit from that. Can I also ask the audience to please turn off their mobile phones or to turn them to be silent.

I'd now like to welcome our first participant John Lawson from the Australian Council of Recyclers and for the record and transcript, John, could you just give your

name, position and the capacity in which you are appearing, please.

MR LAWSON: My name is John Lawson. I'm president of the Australian Council of Recyclers.

MR WEICKHARDT: Thank you very much indeed for your submission and thank you for coming along to the hearings. You should assume that I have read your submission, but obviously if you want to make some overall points then please do so.

MR LAWSON: Thanks. We're glad of the opportunity to be able to respond. Your report has obviously created a significant amount of debate in the recycling industry and the waste industry and the debate is helping people come to grips with what the issues are. We had in ACOR great hopes that this inquiry would, given the terms of reference, really get to grips with the triple bottom line issues which are sustainable consumption and resource recovery and given the terms of reference had a focus on (1) economic, environmental and social benefits and cost of optimal approaches for resource recovery and efficiency and waste management. It was to deal with issues like institutional and regulatory other factors which impede optimal resource efficiency and recover and it was to develop strategies that could be adopted by government and industry to encourage optimal resource efficiency and recovery.

The focus was on resources clearly and we felt a bit like you do at Christmas time expecting a nice shiny red scooter and we got socks instead, and the socks are somewhat like they've already been overused themselves, we think. There's a focus here on economics primarily and economics not of the resource efficiency type. We believe that there's a task given to the commission that it's fallen short of in this draft report and the report needs to be widened in its final scope to deal with those resources.

In effect it appears it's too hard to deal with those resource efficiency issues and you've produced a report that's entitled Waste Management rather than Waste Generation and Resource Efficiency. So we just identified in our response to the draft report two fundamental areas of concern that waste policy must be integrated with resource policy and that, secondly, sustainable resource management requires that we get right the price for the services of nature that we find ways of valuing economically what's currently not valued; things like the global warming impacts of greenhouse gas omissions; things like resource conservation.

Of course you can see from our response that we've got a fundamental disagreement with your reports dismissal of resource conservation as being of any value. So that's it in a nutshell; two main issues that we believe ought to be addressed in the final report.

MR WEICKHARDT: Thank you, John, and thank you despite the fact that we have some significant differences in the way we've approached this. Hopefully this debate will improve the quality of our final report. Can I just say that one thing I wanted to comment on before I get into some questions I have is that at the bottom of page 5 you made some comments about our analysis of some of the work, that in fact I think you have tabled in your other capacity and that is the Nolan-ITU work but since you refer to it in this report I'd like to comment on it and you criticise our treatment of potential costs versus expected costs.

MR LAWSON: Yes.

MR WEICKHARDT: You make an analogy about cars and airbags. I think that quite frankly trivialises the point we were trying to make and misses the point we were trying to make. Indeed, if I use the car analogy I think it would be more accurate to say that the approach that ITU-Nolan or Hyder took to us was more akin to saying that, because sometimes occupants in passenger vehicles get killed, that if you were trying to assess the costs of fatalities in cars you should ignore all the mechanisms that regulations have put in place such as keep to the left, obey stop signs, the precautions that have been taken in terms of road designs and putting traffic barriers that separate traffic going in opposite directions, to ignore the fact that people wear seat belts, to ignore the fact that there are airbags in cars; all those things go about reducing the risk of actual fatalities, people driving in cars.

What we were trying to say was it is one thing to look at the potential for exposure but there's another thing to look at the actual risk of exposure. We think that's an important point and really does need to be addressed. As you were aware after the first round we actually sought to try to understand in more detail some of the Hyder and Nolan work that you had quoted, and indeed, did get a supplementary response from Hyder which was partially helpful but did not fully answer the questions that we had.

We have had a submission from Hyder to this inquiry after the draft report which is very critical of the work that we have done but very critical in a general sense and again unfortunately does not help us progress our understanding or analysis of important issues here. As a consequence of receiving that we have written to Hyder and have asked them if they would clarify the specific concerns that they have with our analysis and we're very hopeful that they will do that. Indeed, if you have contact with Hyder I would ask you if you could encourage them to do that because this is an important aspect of the work of this inquiry.

Understanding some of these issues is critical to really trying to understand whether or not some of the actions that are recommended are in the interests of the community or not and so I really do want to put on record that we don't think your treatment and dismissal of this actual versus potential is really getting to the point

that we were trying to get to and that is it's a serious and critical issue in terms of understanding the potential - the actual risk that people are exposed to from particular forms of disposable waste.

MR LAWSON: Be that as it may there are two issues there. One thing is you have started with the car airbag illustration which is obviously just an illustration in itself. It's not directly saying, "The potential and actual impacts in automobiles are like the potential and actual impacts in landfills," but it's helpful to understand why you might value a potential impact from a landfill is higher than an expected impact. If you're trying to get right the price for the services of nature which is where ACOR's position started from, then a system that prices every single landfill separately is just impossible and nobody else does the same thing with global warming potential, for example, which is how we extended our illustration here.

You don't say, "Well, global warming would be disastrous for the Australian snow fields but great for dry areas in Australia; therefore we'll focus on expected impacts on the snow field but not expected impacts in some of the dry area that might get wet." You just cannot take this field of economics that way and what's missing is a way of dealing economically with the well-known tragedy of the commons. We're using up resources. We're using up the climate capacity of the world and we need to be able to get right the value, but even if you - say we could agree on how Nolan's work should be done so that the externalities were properly assessed, ACOR has a fundamental concern with your splitting waste policy from resource policy. You know, this is a much more significant issue of how you price those things because it's pointless having a pricing mechanism that only works on downstream if the greatest benefit of the recycling activity is on upstream production.

MR WEICKHARDT: Okay. Well, let's turn to the issue of resource efficiency, and it's clear from your submission and from others that there remains a large degree of concern about the way we've dealt with that issue, although we had, we thought, made a reasonable attempt in our draft report to explain our point of view, but let me try and both, I guess, summarise that concern and point of view and also try and flesh out yours. The concern that we expressed about resource efficiency was that to measure the efficiency of conserving an individual resource ignores the fact that other resources may well be consumed in that pursuit, and so taking a singular measure of the fact that we've improved the efficiency with which you recycle some inorganic substance doesn't seem to actually address the point that that might not have been in the interests of the community if you consume vast quantities of fossil fuels and energy and add to global warming effects in that process.

MR LAWSON: We're clearly against that sort of half-baked analysis which is why we've recommended life cycle assessment, and there's an international standard for that, and if you properly assess the life cycle impacts of particular resources or

particular recycling systems, if you properly assess them you take those things into account.

MR WEICKHARDT: Okay. So when you've done that and taken all the inputs and outputs into account, presumably to try to assess them you've got to monetise them in some way.

MR LAWSON: Some way, yes.

MR WEICKHARDT: Okay. Well, I think we're on a common ground there.

MR LAWSON: Sure.

MR WEICKHARDT: So the question is, when you've done that, how is the net result of that different from the ultimate measure of economic efficiency?

MR LAWSON: Two things, first of all your upstream and downstream split effectively abrogates life cycle assessment because it's taken the cycle out of the life cycle. So you can't get a sensible assessment the way you've proposed it, and we've just illustrated that by dealing with the lead acid battery problem that you raised. You just can't justify in the way that you've recommended this split, why you should treat one material as a resource and why you should treat another as a waste. So the split between upstream and downstream destroys the life cycle assessment approach, but fundamentally, you were asked to look at resource efficiency and provide an economic approach to the assessment.

As we just said, we agree that that's a good thing to do, but you dealt with resource efficiency by converting it into economic efficiency and then proceeding to ignore the resources. You know, it's a classic engineer, scientist and economist wrecked on a desert island joke, where they're starving and find a can of baked beans and the engineer has his solution and the scientist proposes his solution and the economist says, "Let's assume we have a can opener." You know, you've assumed you can convert resources into dollars. The thing is, no matter how you describe them in dollar terms, you've still got the resource to deal with, and that's why people recycle. They're not just interested in purely economic terms, they see all this flow of materials through society and they say, "We don't want to be a wasteful society. We want to be able to recycle this stuff," and they're willing to pay for it.

MR WEICKHARDT: All right. I think we address those issues, first of all let me stress that our imperative in analysing this whole area has not just been an economic one, if you mean by that simply to look at financial costs. We have endeavoured to look at environmental costs, social costs and financial costs. That's the imperative that we were charged with and that's indeed what we have endeavoured to do. I think there is, however, a difference in terms of analysing the issues and costs over the

total life cycle and then the policy approaches that you take, whether or not you address those directly or indirectly.

Let me just turn to this issue of resource conservation. Apart from the area of waste management, and I'll use that in the fullest term that you would like to see it used in, apart from that, given your concerns about resource conservation, what other policies do you think the Australian government ought to place around resource conservation, or is the only way you feel that should be tackled through waste management policy?

MR LAWSON: Our focuses obviously tend to be on recycling policy rather than waste management policy purely, but our members are dealing with what are characterised as waste commonly, so obviously that's where our interest is. I don't think we're in a great position to recommend how upstream resource policies should be developed in the widest sense. I don't think we've got an expertise in that, but we do take the position that some of the resource policy issues should be integrated with waste policy issues.

That's all we've said, not control all your resource policy from the tail end, which is the fear, I think, of the business round table for sustainable development approach, that if they're not careful this burgeoning emphasis on resource recovery is going to drive extended producer responsibility so that miners of lead are responsible for lead pollution ultimately. That's not the sort of world we see developing. We want to see extended producer responsibility through a product stewardship model where each participant in the value chain does their part. So in terms of your upstream approach, I don't know that I can answer that question. Our focus is on what part can recycling play in sustainable resource management, what part it plays.

MR WEICKHARDT: Okay. Well, that's a partially helpful clarification. The concern that the commission has had about trying to address resource conservation through waste management policy is that it's an extraordinarily indirect method of tackling that issue. In fact, one of my colleagues said in a rather simplistic analogy that it's like trying to tackle an obesity problem by putting a tax on toilet paper. If we've got a problem with excessive consumption, then that surely ought to be tackled separately from concerns about how we dispose of products.

Now, we would have no debate or difference with you that if disposing products or recycling products can be made more efficient by taking into account those needs at the time of designing a product, manufacturing a product, that's very, very straightforward and sensible, but the issue and concern about resource depletion really doesn't seem to be something that you could tackle very effectively or efficiently through waste policies at all, particularly in Australia given the fact that probably something like 90 per cent of our resources are exported. How do you suggest that that issue really ought to be tackled?

MR LAWSON: Are you saying that we're suggesting you should be tackling resource depletion by recycling alone?

MR WEICKHARDT: Well, the implication is that that's what you're proposing.

MR LAWSON: I don't think that's an implication of our position at all. Several of our members produce materials through virgin resources, and in our response you'll see that we've talked about increasing the pool of resources in a way that makes Australia more cost effective and we only see that there - we recognise this, there are opportunities to recycle things because people make stuff from virgin resources. We're not claiming recycling is a silver bullet for resource management policy but when you say you don't see enough of how you can address resource depletion by recycling policy, I cannot understand how you can take that position. It's exactly why people are recycling stuff. They know what resources are used in recycling aluminium cans, well understood number, 95 per cent. So they want to recycle that aluminium can so you don't have to go through all this red mud generation and all the other things that are necessary parts in mining aluminium. You recognise that in your report, so I don't understand how you would think that it isn't quite legitimate to address resource depletion through recycling.

MR WEICKHARDT: I think we clearly recognise that some recycling is good. What we have pushed back against is that all recycling in all circumstances is always good. Now, I don't know whether you believe that that is the case. Your comment about, you know, the economist, the scientist and the engineer on the desert island, fortunately I'm not in the economist camp and I'm condemned by an engineering and chemistry background and understanding the second law of thermodynamics, and it says that when you've got disorder and entropy it actually takes energy to sort that disorder out. My concern is that the approach being advocated by some in your industry, and I'm not sure whether it's by you, is that we should just continue to apply all this energy to sort out all this waste that we've got regardless of the cost, regardless of how much energy we apply, and that all recycling under all circumstances is always good. Is that your position?

MR LAWSON: I assume you've read out submission.

MR WEICKHARDT: I have.

MR LAWSON: We actually say we recommend getting right the price for the services of nature. We recommend life cycle assessment. I've already said that again this morning. We can't be more clear than that.

MR WEICKHARDT: Okay.

MR LAWSON: If you demonstrate that a recycling operation consumes more resources than it delivers, it's clearly inferior in a life cycle assessment. Now, you know, I shouldn't have to repeat it, it's clear.

MR WEICKHARDT: All right. Well, in that case, the critical issue is understanding what that life cycle analysis is telling you, and coming back to the point I started with, understanding this issue of potential risk versus actual risk, and we've attempted in our analysis to show that some of the analysis that has been done that advocates recycling and large amounts of recycling, in fact, over estimates the benefits of that recycling. Have you got comments on that?

MR LAWSON: For a start I'd imagine then, one of your most significant and strongly made conclusions should be there needs to be developed understanding for life cycle assessment around materials flows, that should be a major finding. Secondly though, from our perspective, even if that great improvement in life cycle assessment understanding is made in response to your recommendation, if your recommendation of splitting downstream and upstream costing is followed, then it won't matter how good the life cycle assessment is. You're recommending that once you put stuff in a truck and dump it in a hole, you ignore the resource value of it.

MR WEICKHARDT: No, I don't think that's the case at all, John. What we are saying is that if there is an upstream concern, that upstream concern, if at all possible, ought to be tackled directly. That ought to value, using your term, the service of nature and then the value of that resource in terms of its ability to be recycled and recovered ought to be fully taken into consideration.

MR LAWSON: That's clearly not the case because you assess the externalised cost of landfilling at about $5 per tonne. You don't allow any of the resource depletion value in it. In fact you dismiss that by saying, "We don't know what resources future generations need so we won't value it." And you don't value the embodied energy that's in those materials put into landfill so - - -

MR WEICKHARDT: Sorry, the value of that energy is actually there for people to behold and make a decision around, and so surely the recovered energy as an option, just as in the aluminium can situation, people make a decision and it's a no-brainer with a case of an aluminium can that it's worthwhile extracting that aluminium can. But surely, coming back to your point, somebody makes the analysis of a brick, that the brick may not be worthwhile in a certain circumstance grinding up, that its externality cost in being disposed of in a landfill is low.

MR LAWSON: And it's better off as landfill, yes.

MR WEICKHARDT: Right.

MR LAWSON: Correct.

MR WEICKHARDT: What we're arguing about is how you actually make those judgments, and what we're saying or trying to say is that if there is an upstream issue that means that aluminium can is not paying the full cost of production and any environmental damage that's being done, then that aluminium can ought to be priced more highly than it is now, which would make it even more desirable to recycle it.

MR LAWSON: It still wouldn't fix the problem because you're assuming a resource efficiency outcome will follow from an economic efficiency outcome when you've just properly priced the thing. The fact is those materials exist not as entries in a register or an account book; they are real items there in the economy and they flow through in quite well structured logistical systems to people's homes for final consumption, and then they end up - all those things that were in society with a very low degree of entropy in them, they end up with the highest degree of entropy of any system you'll find around in a humble garbage bin and we've then organised ourselves for this massive consumption of stuff, put it in a form where it's no longer accessible. Now, it's only when you start to make - - -

MR WEICKHARDT: In the garbage bin, surely is accessible.

MR LAWSON: That's right, yes, because it's put in a form where it costs you more to get that aluminium can out than it's worth to get the can out.

MR WEICKHARDT: I hadn't understood that.

MR LAWSON: All you need to do is see what councils pay for their recycling systems. They've got to change the system at the household. They've got to put another bin in. They've got to arrange another truck. They've got to have a facility to take that stuff to that can decrease the entropy through sorting those materials and then you've got to have a market at the end of that materials recycling facility that can take that aluminium can again. You've got to be organised so those materials flow. Just putting a price on it won't fix it because there are so many streams to be dealt with. That's why we've supported your recommendation about the reorganisation of council services so that there's structure and governance that will lead to the sort of infrastructure that will unwind those tangled up resources into useable resources.

We don't support the removal of council's responsibility for collection, for example, which is quite economical as it's being done now, in my personal view anyway, but we do recommend that there needs to be resource recovery authorities, for example, that can face these streams of very tangled up materials and say, "Well, what's the most environmentally, socially and economically efficient way to handle those materials flow." That's all. Not that we think that will cure the problems of the

world. It will just make an area of urban consumption more effective in a triple bottom-line sense.

MR WEICKHARDT: Yes. I don't think we're on a different page insofar as the way you've expressed that - - -

MR LAWSON: Except that you wouldn't see an economic system that actually values those recycling efforts even to the extent of being able to get carbon credits for recycling operations.

MR WEICKHARDT: Well, we tried to make a point which again you have taken issue with about greenhouse policy, not that we dismissed it at all, but simply that it's important to society that greenhouse gas abatement is tackled in the most efficient way, and the most efficient way that has so far been thought of is some form of trading scheme that means the least cost of abatement are actually followed. Now, it may well be, and indeed I venture to say it probably is the case, that some of the steps being taken in waste management such as clearing or energy recovery from landfill gases, that might be a very low cost of abatement.

All we've said, however, is that greenhouse gas policy ought to be tackled on a national basis holistically and it's important that it's to be done and the Productivity Commission is on record as saying several times that it should be done, but we don't think that tackling greenhouse gas policy either territory by territory or industry by industry is a particularly sensible way of approaching it, and it's likely not to give the lowest cost form of abatement to the Australian community. That's our position on greenhouse, not that you should ignore it.

MR LAWSON: You've certainly recommended it should be ignored from the perspective of waste management and happily councils and state governments aren't ignoring it for the purpose of waste management. They're putting a value on it.

MR WEICKHARDT: We haven't said that, John. We've said the government should tackle it in an overall sense and it then will be taken into account - should be taken into account. Can I go back to the issue of your concerns about the upstream issues. You've mentioned resource depletion. How do you believe resource depletion should be valued? Who is going to make a decision on how you value it?

MR LAWSON: There are life cycle assessment approaches to valuation. ACOR hasn't taken a position on the valuation method even, let alone how valuable individual materials are. In our first submission we supported the approach that was taken in a classic article, I think, in the Economist magazine where it says you need to be able to get valuation systems for eco services or environmental services in place, and need to be able to trade in those. I think if we gave a direct answer to that, we'd be assuming a position that hasn't been developed. That's what needs to be

developed.

I don't personally know how much it's worth to save a tonne of copper now. I don't know how much it's personally worth to save, you know, a tonne of plastic bottles, but I can see local communities making decisions to pay more for recycling services than for waste disposal services. So it would be fair to assess what additional value communities are demonstrated to pay for recycling those things and say that's at least a starting point, you know Australians are willing to pay for that preservation, and then the question is, where do you charge that to so that there are messages given upstream.

MR WEICKHARDT: All right. This is an important point and it's an issue that you've raised and several other people have raised, that we may not have properly characterised the issue of consumer or the community attitude to the value of recycling. The issue I would be interested in your view on is, if you said very clearly to consumers, "This recycling process is going to cost more money. It's actually going to consume more resources; whether they're people resources or energy resources than we're going to recover." How much do you think consumers are prepared to pay because they like the feeling of recycling?

MR LAWSON: I don't think ultimately consumers are going to tolerate a system that consumes more resources than it generates but I don't know who it is that's pushing this particular point. I think most people think there isn't enough recycling done at the moment and your associates or friend's position who said that taking downstream action to avoid upstream impacts is like expecting you can cure obesity with a tax on toilet paper. I mean, that position is ignoring how human society has functioned for most of its period of operation.

Even as late as the late 19th century there was a huge trade in recycled goods. Every shop had a way of reverse logistics associated with it because the paper industry, for example, was driven off textile recycling and it wasn't until we could make cheap paper by the application of huge energy consuming devices to wood fibre, for example, that that system fell to pieces, so mostly we have run on reverse logistics systems so there was value in those reverse logistics associated with the forward logistics if you like. Now you cannot get a value assigned to the actual act of recycling like you can get a value assigned in Europe, for example, to the act or carbon emission reduction.

That's what ACOR wants to see; where you actually identify how much value you're placing on these material streams, and there are not too many material streams that you can't characterise in broad terms. You could have a recycled value for plastics, for aluminium, steel, bricks if you like, and assess the cost of those recycling streams and recognise what value is put on those in economic terms.

MR WEICKHARDT: Who is going to assess that value, John?

MR LAWSON: Well, I think that's something that could be sensibly done at a federal level. The Department of Environment and Heritage, for example, could well have a role in feeding that information in the community and in dealing with individual state regulators. That would only be dealing with a value issue though. The how you deliver the materials flows that are shown to be value is yet another issue altogether.

MR WEICKHARDT: But if you were suddenly the secretary of the Department of Environment and Heritage and somebody said to you, "I want you to value this waste stream," how would you go about it?

MR LAWSON: There's an international standard for life cycle assessment, for example, and the Nolan-ITU Hyder Ecodollar Assessment System is just one of those means of assessing and you have got to be able to come to grips with this debate over potential and expected impacts, for example.

MR WEICKHARDT: All right. That's the approach you're recommending and we're trying to come to grips with it. I say to you again that getting Nolan and/or Hyder to address some of our specific queries in that area would be helpful because I don't think at the moment there is good understanding at all about the black box in which some of these ecodollars have been synthesised. Indeed, a number of submissions are put to us that they completely reject or, you know, sort of mistrust the ecodollars that have been used to justify particular policies and recycling approaches. So getting to the bottom of this is very important.

MR LAWSON: Well, let's see some funds put into it then, because Hyder has developed that system off several projects, government and privately funded, that have allowed the model to develop over time. They don't have the resources of a productivity commission to come to grips with this sort of system, and it really justifies putting resources into the development of those models, I think.

MR WEICKHARDT: They've done some work which has been quoted. All we're seeking to do is understand how they've done that work. There shouldn't be any more work required. All we'd like them to do is open their books so that their methodology is displayed, then we could sort of say, yes, either we agree with it or, no, we've got a particular issue with it. We're getting to a point where we're going to run out of time. Apart from the issue of resource depletion which you've expressed a concern about, although we're sort of, I think, still left uncertain as to how you value that, and greenhouse gas, are there any other upstream issues that you're particularly concerned about that you want to see waste management or, you know, the totality of waste management and recycling policy address?

MR LAWSON: You could, for example, besides embodied energy, you could address embodied water in recycled products. Water is a major issue in Australia at the moment, as it is in many parts of the world, and recycling can have significant impacts in reducing water demand, both upstream and downstream. Significant opportunities in compost that's not allowed for, for example, adequately as a water saving measure, so there are - - -

MR WEICKHARDT: Again, John, can you clarify to me because I'm sort of still struggling with understanding, if the price for water were correct, and this is a point of major policy debate at the moment of getting the price, for example, of rural water correct, but if the price of water was correct and compost actually saves water usage for a farmer, why wouldn't they actually value that?

MR LAWSON: They would value it, and one of the problems with compost and rural applications is there hasn't been a huge amount of work done to demonstrate value. I can deal with that in our GRD response in a minute, but it's very early days for compost, that's as a downstream water saver. As an upstream water saving issue, recycling would sometimes be saving the value on materials that are made in other countries, the water value, the materials made in other countries, and it's hard to see how you would assign that locally.

It's almost an international trading issue there but, you know, as many streams as there are, have as many environmental aspects as there are, and properly developed life cycle assessments will value those emissions, you know, they're standard approaches, it's not just about resource depletion. There's a number of standard categories like human toxicity, aquatic toxicity, the local amenity issues that are taken into account in life cycle assessment, they're all standard categories and now I've just mentioned a couple of them like saving water or reducing carbon emissions, well, you know, there's a suite of them. They could all be valued.

MR WEICKHARDT: John, finally if I may, I think our position in the draft report was that if you do get upstream policies right and have, you know, sort of direct intervention to address issues of externalities, greenhouse gas and, you know, leave resource depletion to one side for a moment, but if you get all those issues right so that the materials are priced correctly and you get waste disposal and recycling policies correct so that all those externalities, positive and negative, are taken into account, that the optimum level of recycling will be revealed by the market. Now, you, I think, have a view that there is an optimum level of recycling.

MR LAWSON: Yes.

MR WEICKHARDT: But how do you want that optimum level of recycling determined?

MR LAWSON: In the manner that you've just described, except you did say that you were valuing the upstream and the downstream impacts of recycling, and that's what we want to see valued. We want to see that there's a system, either through some form of extended producer responsibility or other economic instruments that might be related to charges like landfill levies, whatever the system is, it needs to pay for the value that's delivered in recycling. At the moment steel recyclers and aluminium recyclers generate huge carbon credit value that they can't access in Australia. If they could access that carbon credit value there would be more steel and aluminium recycling done, for example.

MR WEICKHARDT: Okay. All right, thank you for that. That's been very helpful. We'll just pause for a moment and then we'll ask you to - - -

MR LAWSON: Shift hats.

MR WEICKHARDT: - - - shift hats if you don't mind.

MR LAWSON: Okay.

MR WEICKHARDT: Now, our next participant is GRD and if I could get you both just to give your name and capacity in which you're appearing, please.

MR LAWSON: John Lawson, I'm New South Wales business development manager for Global Renewables, a subsidiary of GRD.

MR ROGERS: I'm Brad Rogers, I'm the manager of business development for Australasia for Global Renewables, which as John said, is a wholly owned subsidiary of GRD Ltd.

MR WEICKHARDT: Okay, thank you again for appearing and thank you for your submission. Again, I have read your submission, but you did say you'd be making a detailed response to the draft report at a forthcoming hearing, so are you presenting something in addition to this?

MR LAWSON: No. We don't wish to. We'll present a short verbal presentation to you. I'll cover some of the waste policy issues and Brad will talk about some of the industry development issues. We took some liberty with your key points as a summary response which you may forgive the latitude we've taken with it. But some of those issues we see as a fair position to start from on the triple bottom-line approach to dealing with waste management but, of course, that second dot point in our second page is the guts of our concern, as it is with other ACOR members, that we believe waste management policy should be integrated with sustainable resource policy to focus equally on economic issues and all environmental and social externalities associated with the life cycle of materials rather than mere waste disposal, similar argument that we've just presented on ACOR's behalf.

In the fifth dot point we believe that to have a level playing field with landfills, landfilling should be assessed not only on the emissions - greenhouse gas emissions or leach out, for example, but in the destruction of value that's associated with those and embodied energy resource conservation or resource depletion and other values of materials wasted in the landfill. We think that's the idea that is encapsulated in state landfill taxes and to that extent we support it. Of course, we support the very significant greenhouse gas externality reduction you can get not only through minimising methane escape from landfill, but keeping stuff out that you can recycle again another way.

MR WEICKHARDT: Just on that issue, you say that greenhouse gas externalities from landfill are a significant source of Australia's global warning risk. Do you have a quantitative number on that?

MR LAWSON: Off the top of my head, as I recall it, it's something like 9 per cent of the methane emitted in Australia and is it something like 2-odd per cent - 2 to 3 per cent of the carbon emissions - of CO_2 equivalent emissions. That's the

sort of number that's in my head.

MR WEICKHARDT: Yes. Okay, thank you. We quoted a figure that I think came from the Australian Greenhouse office in our draft report of 1.5 per cent of carbon, sort of dioxide equivalent. I think that's been recently revised to a figure of between 2 or 3 per cent, but I mean when you use the word "significant", it's more than, you know, sort of 1 per cent but it's not by any means the largest source of CO_2 equivalents, is it?

MR LAWSON: No, but you need to go looking for all those sources of reduction to be able to get to 60 per cent. The government, I think, has accepted that we need 60 per cent in CO_2 emissions and if you look at the low emissions technology development funding grant process the federal government has been running, where it's offering $500 million worth of grants for technology development that will address global warming, you've got to be able to deal with 2 per cent reduction in greenhouse gas emissions, and when we looked at that program we found that you can't actually get consideration under that program for emission - for avoided emissions in landfills, so for operating a UR-3R facility for us, that program doesn't assess the value of landfill emissions of methane, but it will accept the value of embodied energy and embodied carbon emissions for recycling in a facility like ours. So when you talk about 2 to 3 per cent as the impact from landfilling of greenhouse gas emissions escape, you can double that for the embodied emissions in the recyclables that are dumped in landfills as well.

MR WEICKHARDT: Just help me understand that.

MR LAWSON: So the aluminium can that went into the landfill at a rate of about half a per cent, it took a lot of carbon to make that aluminium can.

MR WEICKHARDT: Right, okay.

MR ROGERS: The final point that we wanted to emphasise is the draft recommendation relating to elevating responsibility for waste management and resource recovery which we obviously agree with, but it's one that's particularly important to us and I just wanted to touch on a few points. We think that the draft report encapsulates all of those points and there's movement starting to happen already with respect to planning and procurement of waste delivery at a level higher than individual local governments. As you pointed out there's agglomerations of councils in local regional areas that are getting together and in Melbourne there's a mooted metro waste body that will be a state government authority and will have responsibility for the planning for infrastructure in particular, and a sort of governmental advisory capacity as we understand it, and we support that.

We think from the side of the table as a private entity that is seeking to provide

these services, those sorts of initiatives only go part of the way, and your draft report points out the element of counterparty risk that still exists in these sorts of models, and that's a real impediment to us if you accept that there is a market for these services and companies like ours are out there trying to provide it. We look at the Australian market and we see that particular issue as still providing an impediment to us being willing to provide the services here rather than look to the UK and other markets where they're further along in those sorts of models. So we'd like to say, yes, we support for the sorts of reasons that you've said, scale and coordination of planning, sort of centres of excellence of planning and procurement capabilities, those are all good things and those are moves in the right direction, but those will only get your project so far.

When it comes down to a private infrastructure or a private financing initiative we will look to the regional authority as with any other contractor and look at their counterparty or their ability to stand behind the undertaking that they're making for a fairly long period of time so the Metro Waste Board, I think, the Melbourne authority that's proposed to be enacted, our understanding is that they won't have contracting capabilities so while that will be an improvement on planning and communication of infrastructure strategy in Melbourne, will still, as we understand it in Melbourne, be looking at dealing with a counterparty risk at the regional authority or at the local government, when those sorts of things could either be resolved by that authority having contracting capacity itself or by a sort of collaborative approach which is being pursued in the UK whereby there is still responsibility for waste management at the local government level but those local governments need to go to, in that case, a federal authority and propose their project, at that time have it vetted before it actually goes to tender, and then at the last instance they need to have it vetted again and at that time they're provided funding as support and that therefore circumvents a lot of that counterparty risk that we're talking about so it doesn't necessarily need to be a state government authority. That's one way of getting around it.

We accept that in collection services, for example, that there's a role to be played by local government. We think that there is a pronounced need for some sort of change with respect to delivery of infrastructure-based services, recycling and disposal in particular.

MR WEICKHARDT: Thank you. So is the UK model your preferred alternative, do you think?

MR LAWSON: It has got elements of what would be a preferred alternative as Brad has indicated. We need the counterparty risk to be dealt with as any developer of any major waste infrastructure is going to - and it has systems in it like annual targets that are substantial and real and that there are reward mechanisms in there and penalty mechanisms. I think in your report you say it's a very efficient way of delivering the outcomes that it targets whether or not you agree with the outcomes

that are developed so, yes, the deal concerned with these waste infrastructure developments is that they need to have the counterparty risk dealt with.

MR WEICKHARDT: Right. Now, in Western Australia at the hearings we had the Eastern Region Metropolitan Council, I think they call themselves, appear and they said, "Look, our system is fine. It's those guys in the east that have got it all wrong, east of Australia, the eastern region in Perth," and they said that the Eastern Regional Council was actually under the Local Government Act that counsel in its own right with effective membership of shareholding - I don't know quite what the constitution is - of eight other councils and they, as a regional council, actually own the landfill themselves and operate the landfill. Does that model actually work in terms of counterparty risk if you are contracting with that regional council?

MR BRAD: There are a few issues there for us from our particular perspective and I think landfills are a slightly different issue; mainly because one of the issues for us in looking at an Eastern Regional Metropolitan Council like that is scale and that's something we would require for our particular infrastructure and most AWT providers, I think it would be fair to say, would look at the EMRC and require a bit more scale than they have in terms of - - -

MR WEICKHARDT: What, the eight councils don't represent big enough scale?

MR ROGERS: No.

MR WEICKHARDT: All right.

MR ROGERS: But also there's a capability issue there. The EMRC, if they entered into an AWT procurement process, would be doing that once every 25 years so in their own right they might bring in consultants as Mindarie Regional Council did but ultimately the principals who are running the process don't retain that knowledge because they don't need to; they're doing one of these fairly infrequently. So we think that they would benefit from the sort of model that's being proposed in Melbourne whereby you have got a central body of excellence in technical matters but also procurement in contracting and that incidentally is the model in the UK as well where you have got a federal body that seconds professionals on to planning and procurement and tendering and valuation terms to buttress the capabilities within those councils.

The other one is frankly we would look at EMRC and we would prefer it to have dedicated stage government funding or for it to be a state government authority itself. From a credit quality risk we would prefer that to be elevated so we take the point and it's better when they do band together and you're not dealing with a single council. We can sometimes scale down and if they brought and AWT to the table we would have a hard look at it because there's not much deal for it in Australia but

those sorts of things would still be in our minds as things to consider as to whether we would like to go for it.

MR LAWSON: As Brad is saying, our particular infrastructure solution has targeted larger scale than that. It is not that you couldn't bring a simple composting operation to that but we believe that it was sensible to make an investment in a high degree of resource recovery and even if you went to a thermal solution, an incinerator-type waste-to-energy approach to that as you seem to indicate, you seem to indicate some sort of port for in the report, the cost of that would demand significant scale and probably be cost prohibitive anyway. Those sorts of systems are being built in the multi hundreds of thousands of tonnes scale in Europe.

MR WEICKHARDT: Yes. Let me just say we endeavoured to say in our draft report that we didn't have a particular like bias or favourite in terms of any form of disposal. We simply made the comment that those energy-for-waste units in Europe seemed to be running with very low environmental externalities and issues but I take your point, they are very capital intensive and therefore people proposing those would have exactly the same counterparty concerns as you do.

MR LAWSON: I think there's a lack of understanding in councils of the impact on project bankability being able to opt in and opt out as if you could - there was a classic case in a New South Wales council that expressed surprise that they had to abandon their expressions of interest for AWT facilities because they expected that the contractors would not require a guarantee of supply and all the contractors said, "Well, if we're going to build a facility that lasts 20 years we want to be sure that your council will continue to use it for 20 years."

MR WEICKHARDT: Yes.

MR ROGERS: Yes. I suppose that's a good point that John makes apart from the other points which we have touched on and you have already highlighted in your draft report. I think because there isn't that need for those capabilities in councils or even regional authorities there's not the cognisance of fairly straightforward PPP-type principles in waste as there is in other types of infrastructure so the sort of thing that John mentioned, councils wanting to be able to opt in and opt out if some better technology comes along, and that's obviously something we're not keen on if we're essentially dedicating a base load capacity for 25 years on an exclusive basis to a particular customer then we would expect that commitment in return.

MR WEICKHARDT: Yes.

MR ROGERS: That's a fairly basic sort of understanding that doesn't exist in a lot of cases. A lot of councils that we talk to and we think that that would be - there's an education role to be played there by the sort of metro waste authorities so that would

be another positive, plus then what has already been mooted in certain places.

MR WEICKHARDT: So can I clarify. Are you suggesting that the Melbourne model actually will solve all your concerns? It addresses the expertise issue but what about the contracting risk?

MR ROGERS: We think the issues are scale firstly.

MR WEICKHARDT: Yes.

MR ROGERS: It addresses that. Before that it would be very helpful to have a city-wide infrastructure planning model so that we can see the deal flow that's coming up. We can prepare for it. We can develop our technology if necessary in preparation for that, and these are long lead-time items and that's something that can be done fairly simply and that's going to be within their ambit and that's positive and communication of that citing as well as part of that is one issue that you have mentioned and we understand that will be within their ambit as well; capabilities as well, and then capabilities in planning procurement and contracting, we understand that they will have lawyers and they will have people with technical expertise and they will have people with procurement expertise and that's good.

Our understanding is they're not going to go to the next step and actually act as a counterparty in their own right.

MR WEICKHARDT: So who would the counterparty be?

MR ROGERS: The councils.

MR WEICKHARDT: Each individual council?

MR ROGERS: That seems to be something that they're still resolving but in the briefing session that they held a few weeks ago they said that they would not be a contracting party in their own right and so I think as I said that sort of model gets you a part of the way and we welcome all of that but at the last step we would still be getting to the point where we're having to deal with either contracting with a number of councils and all of the technical problems and costs that that imports into the process or dealing with a regional representative which doesn't have the capability in its own right and then has to be guaranteed in any case by the councils itself.

MR LAWSON: Which is more the WA model.

MR ROGERS: Yes.

MR WEICKHARDT: So the WA model is the EMRC effectively guaranteed,

underwritten, by each of the individual councils?

MR ROGERS: I think it would be requested by contractors on individual projects. I don't know what their particular situation is but I think someone coming to a project with a significant infrastructure and long-term investment would be seeking that type of guarantee from the councils themselves at any rate.

MR LAWSON: And whether the councils have got the ability under law to guarantee the EMRC model is a question.

MR WEICKHARDT: Yes.

MR LAWSON: They probably can't in New South Wales or WA, I don't think.

MR ROGERS: There's an issue as to whether they're actually able to guarantee joint and severally, effectively guarantee the undertaking of other councils in the region authority.

MR WEICKHARDT: All right. That's a Local Government Act sort of problem, is it?

MR LAWSON: I think so.

MR WEICKHARDT: All right. Somebody, I think at the first hearing, suggested there was also a problem with local government writing long-term contracts; that there was some limitation. I don't know whether that was again simply custom or practice or whether it was part of their act - - -

MR LAWSON: There's nothing stopping them writing long-term contracts except in, for example, the case of the South West Sydney Councils have made an ACCC application for an exemption for their - or an authorisation for their contract. They were told that 15 years was the appropriate term so at 15 years, and it's arguably not long enough if you have got infrastructure that will last 20 or 25 years, you wouldn't limit a contract to 15 years because you would increase the cost to the councils for exclusive infrastructure we're talking about.

MR WEICKHARDT: How do you suggest that be overcome?

MR LAWSON: By education of the ACCC probably.

MR ROGERS: It just, as John says, becomes a pricing decision. We can build a 10-year plant if they want to but it's obvious we're going to be seeking to recover our investment in a commensurately short period of time.

MR WEICKHARDT: Yes.

MR LAWSON: And the opposite side of that coin is if you build the facility to have a 10-year time arising you waste the (indistinct) for the 10 years potentially.

MR WEICKHARDT: Yes. Thank you for that clarification. It's useful. I'm just looking at my notes on other points that you raised.

MR LAWSON: Yes.

MR WEICKHARDT: Your last point we raised recommendation; I sort of understood until I got to the final bit of it which seemed to be a bit circuitous. Waste management policy need to take account of whole of government policies." Can you just clarify what you were trying to get at there?

MR LAWSON: The intention is that if there is an upstream resource policy that you also include in waste management policy a reflection of the reality of that policy. Say there is a focus, as you've recommended, on resource management or resource efficiency upstream of waste disposal that any waste policy needs to take account of the value of waste treatment and resource recovery in assisting with that upstream impact. Say the government policy is, "We're going to reduce carbon emission from power stations," then we would advocate that waste policy, reflect that desire for reduction of power station emissions by valuing the recovery of the embodied energy in those materials you recycled from the waste stream.

MR WEICKHARDT: I guess the issue I'm still trying to grapple with, John, is you mentioned that, you know, going back a long, long time people have been recycling in certain things. Steptoe and Son have, you know, sort of worked for a long while, industries reused various products, abattoirs have probably reused virtually every part of an animal that has possibly existed. They didn't need a policy directive to do that, they did it because it actually made economic, commercial, overall sense.

MR LAWSON: Yes.

MR WEICKHARDT: Now, if in your situation we've got a greenhouse gas policy that almost certainly will escalate the cost of energy and there is embodied energy in some product that's about to be disposed why won't the Steptoes arrive at the door of the landfill and say, "I would like to take that product away because I can actually recovery energy from it and it's worth a lot of money"?

MR LAWSON: Well, they may well do. What we're saying here is that downstream - it's another way of recommending that upstream and downstream policies not be separated, it's taking a whole of government, a lifecycle approach to these matters. The difference between now and Steptoe's age or, you know, the

recycling rags into paper age is largely around the cheap use of energy and therefore the large carbon emissions from that energy and that cheap use of energy producing a cheap flow of materials and community attitudes are that we are a wasteful society, you've recognised that in the report clearly in a couple of places.

What we're saying is that there's a community desire to recognise the wastefulness in terms of carbon emissions or resource depletion that's expressed in recycling systems and so they're concerned about those resources which are all upstream effects largely and waste management policies should be integrated with your approach to those upstream issues so that you get the benefits of waste management in a sustainable consumption model.

MR WEICKHARDT: I'll take that on board and think about it. I'm still not sure I entirely understand why if all that is visible to all the participants and there aren't regulatory impediments in place why the normal operations of commerce won't actually cause that activity to take place.

MR LAWSON: It seems to me utopian given that there's been lots of opportunities for government to take that approach to resource management, we can't sign the - we don't sign the Kyoto Protocol, we've committed federally to a technology driven approach without a trading system for emissions underpinning it still so of course state governments and local governments are going to reflect preferences for recycling under those circumstances and it's going to be a rather bitty approach because of that. But if that - what I see you describing there - and my response to it a utopian situation arises where you properly value these in the materials then of course it encourages additional recycling to happen. So we're not at odds there, we just - as a company we see it's a lot more likely that councils and state governments will choose to do better resource recovery than nationally, we'll fix all these resource stream issues.

MR WEICKHARDT: Well, I think we're not on completely separate pages, we were simply pushing back against there being some grand central planner who is saying, "This is the way each should be done." I think in the model we had envisaged where the full cost of disposal were reflected in disposal costs - and I suspect that would increase the cost of disposal significantly in some cases over what it was - and the full cost of raw materials including greenhouse gas emissions and those things we reflected, that would naturally drive more recycling than is going on at the moment.

MR LAWSON: Yes.

MR WEICKHARDT: But the optimum level will be determined by the marketplace, not by a central planner.

MR LAWSON: But look at what happens with the current systems that are available. In our case we can trade with interested parties under the AGO Greenhouse Friendly Program and that will largely assess the value of the recyclables recovered. That's where most of the embodied energy and embodied emissions are but if we take the approach that's in the report draft as it is those emissions' equivalent, if you like, of the recyclables in the landfill are overlooked.

MR WEICKHARDT: Well, unless there's a national greenhouse policy.

MR LAWSON: Well, yes.

MR WEICKHARDT: All right. Well, thank you very much indeed for appearing and for your contributions, we're going to adjourn now briefly until 10.30.

MR WEICKHARDT: All right, I would now like to resume the hearings and our next participant is Clean Up Australia. If I could get you just for the record to give your name and positions and the capacity in which you are appearing please.

MS WHITELAW: My name is Sally Whitelaw, I am the campaign manager for Towards Zero Waste and I'll be doing an opening statement.

MR WEICKHARDT: Okay.

MS JOHNSON: I'm Terrie-Ann Johnson, I'm the campaign director for Clean Up Australia and I'm hear to support Sally with some backup materials if necessary.

MR WEICKHARDT: Okay. Well, thank you very much indeed for appearing. Let me say that it is very important to me that Clean Up Australia did appear before the hearings because clearly there was a lot of media comment after the draft report released that suggested that Clean Up Australia disagreed with a number of things that we had said and getting this issue better understood and clarified is important to the commission so I welcome the fact that you have appeared. I have to say for the record just as I am pleased that you have appeared I am disappointed that Jon Dee from Planet Ark who also was quoted on the day our report was released with a lot of critical comments.

Despite the fact that I have written to him and our office has phoned him has so far not responded to requests and the commission unfortunately is only as good as the feedback it gets. We welcome and value the contribution people make to our inquiry process and it's important that they do participate otherwise we don't get the benefit of really understanding what the issues are. So thank you for coming also and assume that we have read your submission but if you want to make some further comments please do so.

MS WHITELAW: Okay. Well, first of all thank you for granting Clean Up Australia and myself the opportunity to address this hearing. It's important at the outset that I acknowledge that whilst the Productivity Commission's draft report on waste management covers a large range of issues Clean Up Australia is here today to address only some of those relating to plastic bag litter. In chapter 11 of the draft about government information provision and procurement practices there's a section on moral suasion that uses the Say NO to Plastic Bags campaign that Clean Up Australia established as an example of a government instrument. It's worth pointing out here that the draft infers that the Say NO to Plastic Bags campaign is a federal government campaign and this is in fact not the case, the Say NO to Plastic Bags campaign was developed by Clean Up Australia and while it received some federal funding this represented less than 5 per cent of the funds raised and expended annually during the campaign that ran from 2002 to 2005.

In the draft report a number of statements have been included in which Clean Up Australia's opinion in our opinion does not accurately reflect the context of the issue. We believe the Productivity Commission is a very influential body and serves an important function in public discourse on a range of issues, as such we are concerned that issues such as plastic bag litter are presented by the commission after consideration of all the relevant factors. In the draft report, specifically the section in Chapter 11 Clean Up Australia believes that the commission has focussed only on economic factors of plastic bags and not adequately taken into account environmental and social concerns which Clean Up Australia believe to be inseparable.

The draft report raises issues about the true cost of plastic bag litter and its contribution to the total litter stream however the true cost is treated in isolation to the inseparable issues of their persistence in the environment and their capacity to injure wildlife. For example, the Productivity Commission's draft report relies on a Nolan-ITU report prepared for Environment Australia and states the following, "Plastic bag contribute only 2 per cent by number to the total litter stream and less than 1 per cent of plastic bags ends up in litter." This was used in the draft report to qualify a statement that campaigns such as the Say NO to Plastic Bags campaign provide no indication of the true cost of plastic bags litter. However, this section of the Nolan-ITU report itself has been selectively and Clean Up Australia believes inaccurately represented, the full paragraph from that Nolan-ITU report is as follows:

> Plastic shopping bags appear to be only 2 per cent of the Australian litter stream although reliable data on the total litter stream is unavailable. The impact of this litter is increased due to the material's persistence in the environment and the capacity to injure wildlife, particularly in marine environments.

As the Nolan-ITU report highlighted you cannot accurately assess the true cost of plastic bags without taking into consideration the environmental and social ramifications. While it appears that plastic bags may contribute only 2 per cent by number the Australian litter stream and less than 1 per cent of plastic bags end up as litter it cannot be refuted that 50 to 80 million plastic bags end up in the environment and that's a major environmental threat. The 50 to 80 million statistic comes directly from the Environment Australia, Plastic Shopping Bags - Analysis of Levies and Environmental Impact prepared by Nolan-ITU in 2002.

To have presented these statistics about plastic bags in this selective manner misrepresents in Clean Up Australia's opinion the true scale of the problems generated by plastic bag litter. The federal government's own Threatened Species Scientific Committee has found that plastic bags and other marine debris are a direct threat to 20 marine species including the loggerhead turtle, southern right whale, blue whale and tristan albatross. That committee included injury and fatality to vertebrate

marine life caused by ingestion of or entanglement in harmful marine debris as a listed key threatening process.

There is a clear impact on the environment, particularly the marine environment with more than half of the tens of thousands of plastic bags collected on Clean Up Australia Day found on beaches, waterfront areas, in rivers and in creeks. Clean Up Australia would like to see the Productivity Commission acknowledge the usefulness of the Say NO to Plastic Bags campaign without marginalising the importance of the issues. Singlet style plastic bag use has decreased 1.22 billion bags since 2002 and as a result of the plastic bag reduction campaigns managed by environmental groups nationally. In the same section of the draft report, chapter 11, there is the following statement:

> There is always a risk that moral suasion instruments that focus on a particularly narrowly defined issue divert government and community resources and attention from broader issues or bigger priorities in waste management.

According to the draft PACIA, the Plastics and Chemicals Industry Association, argue:

> Plastic bags receive icon status well beyond their two per cent contribution to the total litter stream. The result of the considerable diversion of federal, state and local government as well as industry and NGO resources into this campaign style issue has meant that litter and other environmental problems previously being dealt with in order of magnitude and impact have been compromised, work has been slowed and advanced impeded to deal with the issue of the day.

Again, Clean Up Australia asserts this quote has been used selectively, the PACIA quote used in the draft report excludes a sentence in the middle which states:

> PACIA acknowledges the importance of not only eliminating plastic bag litter, as indeed all litter, as well as the value and exposure which icon issues bring in developing broader recognition for the need to improve.

Clean Up Australia agrees with this statement. The emotive and iconic status of the plastic bag only serves as an example of how individual action can bring about large scale environmental change. To diminish the efforts of retailers, shoppers and governments by suggesting that the issue does not deserve such attention is not only unfounded but detrimental to future efforts and advances in waste management. The issues I raise demonstrate in Clean Up Australia's opinion that a number of inaccuracies exist in the draft report and serve to misrepresent the extent of the issues posed by plastic bag litter. Thank you.

MR WEICKHARDT: Okay. Thank you. Did you want to say something now or?

MS JOHNSON: No (indistinct)

MR WEICKHARDT: Well, let me say thank you for pointing out a few of those areas that we will certainly attend to in the final report. It's certainly not been our intention to underestimate community concern which is obviously very considerable about this area or indeed to diminish the importance of the work that's going on to try to attack these issues. Indeed, we thought we were, I guess, trying to draw attention to the positive aspects of the Clean Up Australia campaign to reduce the litter aspect of plastic bags and the reaction to the draft report clearly indicates this is an iconic issue that a lot of people are very concerned about.

I guess the point that we were trying to make about plastic bags was not that it's not an issue of importance but that just as we had said throughout this entire report that governments before they do things ought to be absolutely clear and transparent about why they're doing things and they ought to go through a transparent exercise to display that their proposals are in the interests of the overall community and that's got to take account of community concerns and all those sorts of issues. So we were not trying to, as some of the media portrayed, suggest that we had a position on this ban, we were simply suggesting as we had consistently throughout the entire report about all sorts of government approaches that due process should be gone through in accordance with government policy.

That being said - and clearly there seem to be two issues that most people agree are the key issues of concern around plastic bags, one is I guess the visual amenity loss and concern about litter and the second is the impact on marine animals. A few people have made comment about sustainability issues and concern about resource depletion issues which I must say I struggle to understand and I've not seen that fully quantified but is that third issue of resource depletion or conservation of concern to Clean Up Australia or is it really the first two issues that are mainly your concern?

MS JOHNSON: Our expertise is more on the first two issues, we have dabbled in the third issue. We're not as concerned about the resource depletion particularly from a manufacturing point of view.

MR WEICKHARDT: Right.

MS JOHNSON: We are aware of the resource depletion from a recycling point of view and that there are industries that have been built around using this form of plastic as a potential part of a mixed plastic cycle which then forms their resource for manufacture of things like garden furniture and things like that. We're conscious of that, we have been in discussion with those industries, the level of plastic bags

they're getting back is not sufficient enough to stop them in the future so we don't see it as a major economic concern.

MR WEICKHARDT: Okay. Now, in terms of the issue of litter and indeed impact on marine animals the mooted ban on plastic bags is clearly one potential method of addressing that issue. It doesn't seem to be consistent with the approach that's taken with other wastes, if you like, that are potentially injurious or you know sort of have problems in their disposal. I mean, we haven't said, for example, because people get needle stick injuries from hypodermic syringes that are thrown onto beaches that we should ban hypodermic syringes or broken glass so we should ban bottles. Why is it that you believe that in this case to address the issue of litter and potential damage to marine animals that a ban is the best approach?

MS JOHNSON: The ban is the best approach because of the nature of the plastic bag. It has the propensity to be blown around a lot more than your other litter items.

MR WEICKHARDT: Sorry?

MS JOHNSON: Propensity to be blown around. It becomes a major issue because it's ingested by marine animals. They're not ingesting needles. They're not ingesting glass, but they are ingesting plastic bags, as they are ingesting other plastic items. The plastic bag is also not a necessity of life. If you're a diabetic you do need your needles. What we would encourage is the safe disposal of those needles. It's not practical for us to call for a ban on needles. That's just not a realistic option, but we can actually replace single-use plastic bags. They're not vital for our either lifestyle or for our packaging of grocery items or any other items.

There are other alternatives. There are viable alternatives. There are alternatives that are degradable. There's not an alternative to a needle for a diabetic. In the case of glass, what we would call for there is things like public place recycling so that when people are out and about they can safely dispose of their glass items. They don't have to become litter items, and examples in South Australia where there is a deposit on these sorts of items shows that you can dramatically decrease the number of these that end up in the litter stream by offering the community positive incentive to dispose of them properly.

MR WEICKHARDT: Because as you quote in your statistics, I think, plastic bags represent a component of the plastic litter that's available but certainly not all the plastic litter. So therefore I assume that to eliminate other forms of litter, other techniques have to be applied there.

MS JOHNSON: Yes.

MR WEICKHARDT: You don't think that those other forms of attack on plastic

wrappers and chip packs and stuff like that would necessarily also work for plastic shopping bags?

MS JOHNSON: I don't know what other attacks you're referring on chip bags and things like that.

MR WEICKHARDT: Well, if you're going to remove litter, because you're saying 32 per cent of all items removed during last year's Clean Up Australia were plastic - - -

MS JOHNSON: Yes.

MR WEICKHARDT: - - - and 7 per cent or the plastic items were supermarket bags, so that's 93 per cent of other plastics.

MS JOHNSON: Yes, things like bottles and wrappers and that sort of stuff, yes.

MR WEICKHARDT: So presumably to remove those from the litter stream you need some other tools.

MS JOHNSON: Some other mechanisms, that's correct, yes.

MR WEICKHARDT: Would those other tools potentially work for plastic bags?

MS JOHNSON: We've tried recycling plastic bags. Only 15 per cent of plastic bags are returned for recycling. That's well belong the targets that were agreed by the EPHC in 2002. They haven't come in. That's not a viable way to take plastic bags out of the environment. It hasn't been shown. People are more inclined to store them in their cupboard and use them as bin liners rather than recycle them. So they're not being pulled out of the environment through that mechanism.

MR WEICKHARDT: But if they're used as bin liners and they go properly to waste disposal - - -

MS JOHNSON: But they don't degrade. They aren't with you and me.

MR WEICKHARDT: But that's not a problem from the point of view of the - - -

MS JOHNSON: Yes, it is.

MR WEICKHARDT: - - - litter or marine animal situation.

MS JOHNSON: It's a problem for the landfill environment because what's happening is anything that's stored in those plastic bags remains in those plastic bags.

It's not going to degrade, or it would degrade within that plastic bag. So what we're going to end up with is these wonderful landfills full of plastic. That's not a sustainable solution.

MR WEICKHARDT: Well, I think that's a somewhat different issue than the one you've been referring to about - - -

MS JOHNSON: It is indeed. We have addressed that in our response to the - - -

MR WEICKHARDT: And I think there are people who have a somewhat different view on whether or not they do represent a problem in landfill, but that's also part of your concern, is it?

MS JOHNSON: Yes, absolutely. The amount of materials that are going to landfill is totally unsustainable. So we need to come up - - -

MR WEICKHARDT: So do you want to ban bin liners too?

MS JOHNSON: We want to come up with a bin liner that degrades. We don't want the current form of bin liners and we have been working with manufacturers to bring the appropriate film into Australia to be able to produce those.

MR WEICKHARDT: Are you convinced through a total life-cycle analysis that that's a more sustainable outcome?

MS JOHNSON: Yes, we are.

MR WEICKHARDT: Do you have work that demonstrates that? Because - - -

MS JOHNSON: We have work from other sources. It's not our work. It's work from people like RMIT who have been working on the sorts of film that is available to be brought into the country.

MR WEICKHARDT: And have done a total life-cycle analysis on the - - -

MS JOHNSON: Yes, they have.

MR WEICKHARDT: - - - costs and environmental issues in terms of their manufacture and disposal?

MS JOHNSON: My understanding is yes, they have.

MR WEICKHARDT: Could you possibly send us references for that?

MS JOHNSON: Yes.

MR WEICKHARDT: Because that's an issue that has been raised with us, that some of these alternatives actually do have themselves some adverse potential consequences.

MS JOHNSON: Yes, more than happy to do that.

MS WHITELAW: It might be worth mentioning here that with the biodegradable and degradability standards that are only in draft form and currently being drafted, at the moment Clean Up Australia's position is that until those standards are in place we can't actually support any claims on degradability. So when you talk about there are some bin liners out there that claim to be degradable, at the moment we can't actually offer that as a viable option.

MS JOHNSON: Mainly because they still leave polymers. They don't biodegrade. Biodegrade means no residue. Degradability leaves a residue. The polymer residue does not break down.

MR WEICKHARDT: I think anything that degrades leaves some sort of residue, but anyway, let's leave that to one side for a moment. You did say in your submission that you seemed to be challenging this issue that we quoted wasn't our number, that 2 per cent of the litter stream was made up by plastic bags, and you requoted that and said that 32 per cent of items removed were plastic and that 7 per cent of those were plastic supermarket bags. My arithmetic would say 7 per cent of 32 per cent is 2 per cent. So the numbers are the same. Can I just understand - - -

MS JOHNSON: No, sorry, we weren't disputing the number. We were disputing the way the quote had been used.

MR WEICKHARDT: I see. Okay.

MS JOHNSON: The quote that had been used had left out one significant sentence.

MR WEICKHARDT: Okay. All right. Thank you.

MS JOHNSON: That's what we were bringing to your attention.

MR WEICKHARDT: All right. Thank you. There are some models I guess overseas where bans have been potentially put in place. Ireland is one country that's cited as a potential model.

MS JOHNSON: No, Ireland bought in a levy, not a ban.

MR WEICKHARDT: Okay.

MS JOHNSON: Yes.

MR WEICKHARDT: But it did result in a significant reduction of bags, I understand.

MS JOHNSON: It's resulted in a short-term significant reduction. However, there's no reports currently available on the long-term sustainability of that.

MR WEICKHARDT: I see. Right. Is there any evidence from Ireland about the impact of the, you know, sort of frequency of plastic bags in the litter stream after that levy was put in place?

MS JOHNSON: No. That's the problem. There isn't anything else coming out from Ireland after the initial short-term burst of the reduction of the number of plastic bags that were being handed out at check outs. There hasn't been anything that we've seen - and please correct me if I'm - come out since then to suggest the long-term viability of that levy.

MR WEICKHARDT: I see.

MS WHITELAW: I did read - and I'll have to find that source of information, but recently I read that - it was from an environmental organisation in the UK that said that the plastic bag litter in the environment in Ireland in fact hadn't changed. So there's still the behavioural issues of people littering, but that dramatic reduction in the first couple of years of introducing that levy. Our thought is that that's creeping back up now as people get used to paying for their plastic bags.

MR WEICKHARDT: So do you have a view on the Victorian government's suggestion that they're going to put a levy on plastic bags here?

MS JOHNSON: Yes, it's interesting what Bracks and Thwaites have called for is a ban in 2009, which is in line with what the EPHC agreed to at their last meeting in July. That's encouraging. What's discouraging is that they have given an exclusion to that for any retailer who charges a minimum of 10 per cent for a bag. Quite frankly if I'm getting 16 bags at the checkout and it's only costing me $1.60, it's not going to make any impact. I'm going to continue to take the bags. So encouraging, yes, that they will push for a ban; discouraging that they've put this exclusion in, because in our eyes that's going to completely ameliorate their call for a ban.

MR WEICKHARDT: So you want an absolute ban?

MS JOHNSON: Yes, yes. We call for a ban on the single-use, singlet style plastic bag.

MR WEICKHARDT: Over the last, is it four or five years since there's been a campaign to reduce plastic bag usage in Australia, and I think the figures are something like 45 per cent reduction.

MS JOHNSON: From the major supermarkets, yes.

MR WEICKHARDT: From the major supermarkets?

MS JOHNSON: Yes.

MR WEICKHARDT: But that in terms of total numbers of bags is quite a significant reduction, is it not?

MS JOHNSON: Yes.

MS WHITELAW: Absolutely.

MR WEICKHARDT: Have you in your Clean Up Australia statistics seen any impact of that in terms of reduced plastic bag frequency in the litter stream?

MS JOHNSON: No.

MR WEICKHARDT: Do you have any views as to why that might be?

MS JOHNSON: There are still too many of them out there. 45 per cent from the major supermarkets is really only - I mean, that's the Coles, the Woolworths, the IAGS. They've put the infrastructure in place to be able to support a reduction in plastic bags. We now find that 55 per cent of the plastic bags that are given away are given away by small retailers. You take away stores, your corner stores, which are quite frankly more likely to end up in the litter streams than the bags from your supermarkets - supermarket bags are more likely to end up as bin liners. Your small retailer stores, lunchtime traffic, and you can have people put their bags in the bin - the propensity is just to pop it into the bin.

On a windy day those things just get blown out. So small retailers is a major concern to us, and they need to actually realise they're part of the problem. A lot of small retailers are yet to actually appreciate they're part of the problem, and that's not a wilful thing by them. They just don't stop to think that the small number that they consider they're handing out is actually contributing to this issue.

MR WEICKHARDT: So does it follow - and I'm not trying to put words in your

mouth - that perhaps saying to Coles and Woolworths, "Forget about your reduction campaign. That's not made any impact on the problem. Let's turn the ban to the small guys"?

MS JOHNSON: No, I wouldn't say they haven't made any impact on the problem. They have made an impact on the problem and they certainly can continue to work on making an impact. That 45 per cent was below the target that was set for them of 50 per cent. Clean Up Australia actually called for a 75 per cent reduction. What's happened with the major supermarkets at the moment is that they have very successfully taken the low-hanging fruit and were encouraged by that. There's still room, though, for taking more plastic bags out of their mix. Similarly - - -

MR WEICKHARDT: But it hasn't made any impact on the problem?

MS JOHNSON: Not measurable impact from our experience on Clean Up Australia Day, no, because as I said, most of the plastic bags that are coming in the litter stream are coming from the small retailers which is where our attention is now focusing. So there's a lot of learnings, though, from the major supermarkets that can be passed on to other retailers, particularly the small and medium retailers.

MR WEICKHARDT: Okay. You've made some useful points to us about where we perhaps misquoted or, you know, selectively quoted, and we will certainly attend to that issue. It wasn't our intention, but our recommendation was that a ban shouldn't go ahead until the government first of all makes it absolutely clear why it wants to ban bags, and I think you're clear as to why you want to ban bags, but as I say, various people have, you know, sort of used different sort of reasons why they want to ban bags, but also we've said it shouldn't go ahead until the government go through its normal process or its agreed process of a full cost benefit analysis. Do you have an issue or a problem with that recommendation?

MS JOHNSON: The only problem we have is that the minister for the EPHC agreed that there would be a ban by 2008. The longer we leave this the more of these bags are going to end up in the environment. We wouldn't like to see a due deliberation process take another four or five years. We'd actually like to see that process expedited, please.

MR WEICKHARDT: If a study were completed in time - I mean, I take it that you're convinced that a study, if it were done, would demonstrate that there was a good reason for banning the bags, but if a study were done in time, would you be happy with that?

MS WHITELAW: It depends. Does that study incorporate environmental factors?

MR WEICKHARDT: It would have to.

MS WHITELAW: Yes.

MS JOHNSON: If it's an holistic study on - yes, on the durability of this particular litter item in the environment as well as, you know, the social amenities - you're talking about the fact that we don't like to see them lying around - that's part of the issue, but also it's durability and the impact that it is having in our waterways and our wildlife. It's not just marine mammals either. There are other - particularly as these bags break down into the polymers, they're more easily digested by non-marine animals as well. Yes, if it is an holistic study we would certainly be interested in the outcomes of that most definitely.

MR WEICKHARDT: Yes.

MS JOHNSON: I can't say whether we would support the outcomes or not until we see them.

MR WEICKHARDT: Well, you either believe in the process of saying, you know - - -

MS JOHNSON: We certainly believe in the process so long as it is an holistic process; it's not just purely based on an economic rationale which completely disregards the impact.

MR WEICKHARDT: No, no. I mean, the point that was made in the government's recent inquiry into red tape was that trying to remove egregious legislation is part of the solution to that. You know, you can look back and sort of see certain things that governments have put in place that they thought were a good idea at the time that have actually turned out to either not resolve the problem or to have cost the community money and so there was partly a resolution by the government after that inquiry to say, "Well, we'll go through a process of trying to sort of strip away some of that legislation," but the second thrust was to say, "We will not put in place new legislation until we have gone through a process to try to make sure with the best of our ability that what we're doing is sensible."

MS JOHNSON: Yes.

MR WEICKHARDT: To us that seems an imminently useful approach by government and it's one, as I say, we were supporting throughout this whole inquiry.

MS JOHNSON: Yes.

MR WEICKHARDT: So our point, which perhaps we expressed clumsily, and perhaps caused a lot of angst, was not that we had a position, whether a ban was

sensible or not sensible, but that due process should be gone through.

MS JOHNSON: We would totally support that - - -

MR WEICKHARDT: You support that?

MS JOHNSON: Yes, absolutely.

MR WEICKHARDT: Good. Thank you. Now, in terms of that process, and clearly we're not going to go through that process ourselves because it's quite a study itself, but you did draw our attention to a number of reports which we have looked at, and particularly the Australian government, I think, people that looked at the potential problems caused by ingestion and entanglement of marine life.

MS JOHNSON: Yes.

MR WEICKHARDT: One of the problems that we found in our quick reading of that is that like many other reports this points to the fact that, you know, there are impacts on marine wildlife by a whole range of plastic debris and, you know, they talk about fishing nets and polystyrene foam and all sorts of other things, strapping tape, that causes problems. They don't specifically analyse the problems that individual disposable plastic bags cause. Do you know of any work that does actually sort of more specifically analyse that issue because we have struggled to find particular references that identify those issues.

MS JOHNSON: The agencies that are more than likely to be able to provide that information for you are WWF and Planet Ark often cites the example of the whale but that's their sources, not ours.

MR WEICKHARDT: Yes. We have gone back to try to find as much material as we can and the problem is that a lot of this work is anecdotal and it sort of cites a reference that in turn cites another reference and when you track back to the original work there's a lot of material that points to a very old study that was done back in Newfoundland in the 1980s.

MS JOHNSON: Okay.

MR WEICKHARDT: So it doesn't appear that there's a lot of quantitative material here which is one of the issues that I guess people will struggle with a little bit when they do do this overall cost benefit analysis. It's clearly a concern, and you see pictures that are horrifying of wildlife that has been affected by plastic bags, but exactly how many are affected seems to be an issue that we don't have a lot of good data on. Let me just check whether I have any other issues that I wanted to cover. One of the submissions that we had did note that in Taiwan there had been a ban on

plastic bags that had been in place for four years that had recently been revoked. Do you have any information on that?

MS JOHNSON: Not specifically on Taiwan. It suggests though that it could mirror the South African experience where they brought in a ban very, very quickly, and the economic impact on associated industries was quite significant. What we have been proposing here is a phased-in ban which gives everybody enough time to gear up for the implications for their various industries.

MR WEICKHARDT: So what happened in those studies? What were the impacts?

MS JOHNSON: The South African experience was that they brought in a ban - I can't recall, sorry, the direct time frame - but it was very, very quick, and of course what happened was that the associated industries, either manufacturing or the industries that were using the plastic bag as part of their sourced stock at the end of the cycle didn't have time to gear up for the impacts of that so what happened was you had mass unemployment et cetera. The learning from that is that you don't bring a ban in overnight. You phase it in over time to give everybody enough time from all sides of the process; either the manufacturer, the retailer, the shopper, the person who is using a plastic bag as part of their mixed plastic stock, to gear up accordingly, so unless you put in place viable alternatives there's no point in just taking these away from people all of a sudden. You need to actually build up the infrastructure to support the ban which is why we have been doing this progressively since 2001.

MR WEICKHARDT: Now, just talking about sort of what people do, you said plastic bags are something we can do without and I guess in some ways that's self-evident because we survived as a human race before plastic bags were invented.

MS JOHNSON: Yes.

MR WEICKHARDT: But they do fulfil a purpose at the moment. What is the consumer behaviour you have sort of observed in places where plastic bags have been banned? What are the substitutes and are you convinced that the substitutes are benign, if you like, in terms of environmental impact and concern?

MS JOHNSON: The most benign substitutes are those which are biodegradable. The green bag, which is the most common and most acceptable substitute at this point in time is recyclable, it is not biodegradable.

MR WEICKHARDT: But of course that only serves one of the purposes plastic bags are put to, doesn't it; the application of the plastic bag to pick up dog pooh or to act as your bin liner or something else.

MS JOHNSON: Exactly, and that's why we have been working on bringing in alternative film to be able to replace those with a form of material that does actually biodegrade and break down. I mean, it is technologically available. They are cornstarch and made of starch materials that do break down. They're just incredibly expensive to bring in and to run the manufacturing process so we have yet to be able to negotiate the deal to be able to bring it into the country but it is available.

MR WEICKHARDT: But before those alternatives are in place you still want to proceed with a ban?

MS JOHNSON: Yes. We want to proceed on the ban on the single-use plastic bag that it has now handed out at checkouts because there are viable alternatives for its main use which is to carry your shopping.

MR WEICKHARDT: Yes.

MS JOHNSON: That's what it was designed to do. There are the dog pooh bags that you - you know, there are options which are better than using a single-use plastic bag from the supermarket.

MR WEICKHARDT: Such as?

MS JOHNSON: There is a group, and I'm not as familiar with them and Sal probably hasn't had a chance to become as familiar with them either. I can send you some information on a group that are claiming a level of degradability on a black version of a dog pooh bag that a lot of councils have adopted. Once again until we know the standards of degradability in Australia we can't really comment on how "degradable" that bag is but we certainly do have some information that we can pass on to you about the manufacture of those.

MR WEICKHARDT: Yes.

MS WHITELAW: I think it's also important to just acknowledge here that the volume of single-use singlet-style plastic bags that go out, you know, every day that is a general - like, a normal household could use up to 60 bags a week but they really might not need anywhere near that to fulfil the needs that you're talking about so it's more - the green bag services are really important in that it can reduce thousands of plastic bags going out into the waste stream.

MR WEICKHARDT: Yes.

MS JOHNSON: The community uptake of this also suggests that the community is willing - in the news polls surveys that we have been running over the life of the campaign from 2003 to 2005 has shown increasing willingness by the community to

adopt viable alternatives. What they're seeking is a range of viable alternatives. And there are other options outside of the green bag. There are the jute bags. There are calico bags. There are all sorts of other options that people can take. I mean, there's a fashion range of bags now. It's becoming almost - when you line up in the supermarkets it's almost elitist to sort of, you know, throw your green bags on the - the green bags have been a really good viable solution for the supermarket shop, and particularly the way they have now been designed with their base and so they are quite a viable alternative and they can be recycled.

MR WEICKHARDT: Yes.

MS JOHNSON: They're not as likely to end up as litter in the litter stream because they don't get blown around so they are a viable alternative but we would encourage the exploration of more viable alternatives over time, particularly those that will biodegrade, that's really important, so if they do end up in the environment they're not going to leave a lasting legacy.

MR WEICKHARDT: Right. Some of the retail associations have made submissions to us suggesting some concern about the heavier duty - the green bags on the basis of the safety and health of the checkout staff in that they tend to inevitably be filled with more product. They're heavier when they lift them. Do you feel that that's an issue or not?

MS JOHNSON: That's a training issue. That can be overcome.

MR WEICKHARDT: How would it be overcome?

MS JOHNSON: The supermarkets already have extensive training in place. I don't see why they can't train their staff to balance the packing of bags. That's not rocket science.

MR WEICKHARDT: What, you dispute that the bags are not being filled with more product?

MS JOHNSON: They can be filled with more product. They don't have to be though.

MR WEICKHARDT: But doesn't the shopper who is carrying a number of green bags in want to have their bags filled with more product?

MS JOHNSON: Yes. I mean, that's my experience but it doesn't mean I can't lift the bags. I mean, if I have got a series of bottles you break it up over a number of bags; you don't put them all in one. I don't see that that's an impediment to the introduction of alternatives to plastic shopping bags. I mean, if you put three bottles

in a plastic shopping bag it's going to cut into your hands. I don't see what the difference is.

MR WEICKHARDT: So you dismiss those concerns as legitimate, do you?

MS JOHNSON: I don't dismiss them as not being legitimate but they can be overcome.

MS WHITELAW: I mean, if there is an OH and S issue with that then I'm sure supermarkets could introduce, like, additional training that says - and maybe they weigh, you know, whatever is required if that's a real issue that needs addressing.

MS JOHNSON: From our understanding of the sorts of training that supermarkets have been putting in they are addressing those issues.

MR WEICKHARDT: Yes. In terms of the 93 per cent of other plastic litter, indeed, the other litter that does cause us all great concern when we walk around the place, what is that Clean Up Australia is proposing that's used to tackle that litter?

MS JOHNSON: There are a number of options. In the case of things like plastic bottles and other plastic containers, we're encouraging either the introduction of CDL or other forms of public place recycling which either puts in the facilities for people to dispose of their litter properly when they're out and about or encourages them to return them for a redemption process through a deposit scheme. In the case of the polystyrene and the other forms of plastic-based materials through the National packaging Covenant as part of the Boomerang Alliance, we have called for specific targets for the reduction of the use of these materials and the manufacturing of packaging.

MR WEICKHARDT: Yes. But presumably we're still going to have some of these products in the litter stream. Are you going to have sort of different techniques that tackle - - -

MS JOHNSON: Yes.

MR WEICKHARDT: I think by account cigarette butts are the thing that you keep on reporting are the greatest by frequency in the litter stream.

MS JOHNSON: They are indeed, yes.

MR WEICKHARDT: I would be delighted if you were recommending a ban on cigarettes. From a personal point of view it would suit me fine but - - -

MS JOHNSON: We would prefer to work with the manufacturers than coming up

with a better solution on the make-up of the butt and taking its toxicity out rather than - I mean, we're not going to get smoking banned so, yes, we have to be realistic about what can actually be achieved.

MR WEICKHARDT: Yes.

MS JOHNSON: We're not going to pick up smoking as anything except a litter issue and we have had several attempts to negotiate with manufacturers about the toxic issues to do with the butts and the form of the disposal and we have, on numerous occasions given some suggested solutions to them, but we won't work with them until they are prepared to look at it as a toxicity issue as much as a litter issue.

MR WEICKHARDT: Okay. The whole issue of sort of moral persuasion in a community education which we were trying to, perhaps unsuccessfully, advocate and say this is an important thing the government does need to do and put together with, I guess, regulation and better regulation and better enforcement of litter, I assume you support that as an approach.

MS JOHNSON: We certainly support improved education, but it needs to be supported by direct action that people can take, and also in our experience people need to feel rewarded and recognised for what they have done as well. If you bring in a purely punitive policy, what will happen is that people will become incredibly creative in finding ways to get around it rather than actually participating in it. I mean, water restrictions is a classic example. People will go to extreme lengths now to wash their cars in closed garages using a hose so that they can't be seen. They'll just become more and more creative in finding ways around the issue, versus if you can give people positive reinforcement and some form of incentive to participate and give them the recognition for doing so, they're more inclined to continue the behaviour.

MR WEICKHARDT: Well, I sort of understand that, albeit that a complete ban on anything seems reasonably punitive and indeed - - -

MS JOHNSON: It's a phased-in ban. I mean, it's not as though we've brought it in tomorrow and made it a punitive and, you know, our news poll service has suggested that the community will support a ban providing there are viable alternatives to replace it. That's what we're advocating here, that this is a more holistic approach that may well need some time to put in place, but our end is to get these things out of the litter stream.

MR WEICKHARDT: The viable sustainable alternatives is a critical part of all that, isn't it?

MS JOHNSON: Yes, absolutely.

MR WEICKHARDT: Okay. Well, the work you refer to and the studies that you've got about that, we'd really value if you could send us copies of that.

MS JOHNSON: Certainly, yes.

MR WEICKHARDT: That would be very helpful.

MS JOHNSON: I'm more than happy to.

MR WEICKHARDT: All right. Look, thank you very much indeed for appearing.

MS JOHNSON: Thank you.

MR WEICKHARDT: I hope that in the final report you'll see us do a better job of trying to represent some of the points of view you've put forward.

MS JOHNSON: Thank you for the opportunity.

MS WHITELAW: Thank you.

MR WEICKHARDT: We're going to adjourn now and, in fact, I think our next participant is not scheduled until 2 o'clock this afternoon. Thank you very much indeed.

(Luncheon adjournment)

MR WEICKHARDT: Okay. I'd like to resume hearings now, and our next participant, the Australian National Retailers Association. Could you for the record give your name and the capacity in which you're appearing, please.

MR MOORE: Yes, thank you, commissioner. My name is Stan Moore and I'm a consultant working for the Australian National Retailers Association, a newly formed association of the major retailers here in Australia. They represent large national retailers of which includes a major national hardware retailer and the major supermarkets.

MR WEICKHARDT: Okay. Thank you for your submission which you should assume we've read but if you'd like to make some points elaborating on any points that would be useful.

MR MOORE: Very happy to. I thought by way of opening statement I would touch on some of the key points. Particularly our focus in putting this submission to your, commissioner, is particularly around the issue of lightweight plastic carry bags and our submission has concentrated solely on that issue. We are looking at focusing on both the efficient and cost effective approaches to address the issue of lightweight plastic carry bag litter, the waste generation and the resource efficiency and the alternative options that are currently being considered by some such as extended producer responsibility by way of levies, consumer or retail taxes, pre-disposal taxes and bans. I think the commission's draft recommendation 8.1 suggests that there should be some rigorous analysis prior to heading down that path.

However, before we get there the background to the plastic bag issue which I would like to effectively put on record for the commission, and maybe you'll take this into account in the redraft of your report, in October 2003 the Environment Protection and Heritage Council working with the Australian Retailers Association adopted or gave support to a code of practice for the management of lightweight plastic carry bags and it contained a number of targets and recycling targets. Importantly, however, in giving that approval in October 2003, the Environment Protection and Heritage Council in the communique said they have asked officials to commence discussions on the phase out of single use lightweight carry bags carrying HDPE within five years. That was the first we as retailers knew of that. At the time I was the chief executive officer of the Australian Retailers Association and that particular requirement of environment ministers was news to us prior to the release of that communique.

Retailers have done what the government had requested, and that is entered into discussions with government officials to consider a phase-out on the use of lightweight plastic bags. At this stage I was not involved with the Australian Retailers Association, but was involved in the plastic bag working group that was considering a phase-out by the end of 2008 in line with the minister's request by the

EPHC. I am aware there was not universal support from retailers but I am also aware that there was universal support from retailers saying that any support for such a process would be on the basis that a rigorously conducted regulatory impact assessment would be undertaken. So effectively I think many of the retailers around the table said, "If this is the way to go, put it to the test and if it comes down that way, we'll work with government to implement it." I don't believe that assessment has yet been made.

The other point which came out of discussions in looking at a proposed phase-out was the issue of exemptions, and clearly our view from a major retailer's point of view is that exemptions will not ensure competitive neutrality and, in fact, there is a threshold limit already in some of the packaging regulation allowing smaller businesses who are direct competitors in this area to not be subject to regulatory requirements, and I think that threshold is around about $5 million per annum turnover.

But putting that aside, major retailers now account for what we estimate to be less than 50 per cent of all lightweight plastic carry bags that are issued to customers. So if there was an exemption beyond or other than for the major retailers and providing such exemptions to the smaller retailers and food service businesses, the majority of whatever the problem is would not be addressed as it would be exempt if we continue down that path.

We're also concerned recently that the Environment Protection and Heritage Council has a resolution on its books to phase out or ban effectively, that's what phase out means, lightweight single use plastic bags which are not - they have this still on their books, and again our view is that we require that a proper assessment of that proposal be done, both assessing the environmental and the commercial impacts. Retailers find it difficult to operate in such an environment and also to provide choices to consumers when there are inconsistencies and anomalies in the management of that lightweight plastic bag issue by governments. The Productivity Commission's recommendation at draft 8.1, our view is, should be brought to the attention of ministers who make up the EPHC.

Good management, good governments and good government would clearly identify the problem to be solved. However, the problem has been identified, we believe, by governments, industry and environment groups, and that is the incidence of litter which is resulted from littering associated with lightweight plastic carry bags and the potential damage they may do in the environment; however, our concern is that despite what we even hear recently, the focus seems to have shifted away from the problem of litter and is focusing solely on the reduction in the issuance of lightweight plastic carry bags. We've provided more information about bag litter in our submission and I don't propose to go into the details in this presentation.

Bag issuance reduction by major retailers and the costs incurred are also listed in our submission. The Australian National Retailers Association supports the examination of uniform national measures for options to curb the incidence of single lightweight plastic carry bags in the environment. We are working with government at the moment to develop a viable alternative. In fact, it's an industry led group looking at a direct replacement for the current lightweight bag to address the issue of lightweight plastic bags should they end up in the environment and that either they degrade or break down, and this is something a task force that we are heading is currently considering.

We support your recommendation 8.1. Our only suggestion is that you remove "retailers" and it would read that, "Government should not proceed with their foreshadowed plan to eliminate plastic shopping bags by the end of 2008", et cetera. However, in the current debate around lightweight plastic bags our observation is that there are some advocates who are using the facts like a drunk would use a lamp post, more for support than illumination and, no doubt, they will dismiss the commission's rigorous work. Very happy to answer any questions you might have, Mr commissioner.

MR WEICKHARDT: Thank you very much indeed for your submission and your comments. You mention on page 10 of your submission that the larger supermarket chains have spent over $50 million on initiatives to reduce plastic bags. Can you elaborate on the composition of that and what have been the most significant costs associated with it.

MR MOORE: I can, and thanks for the opportunity. This was a total package that was initiated under the Australian Retailers Association's then code of practice for the management of plastic carry bags which was approved in October 2003 and which also expired in December 2005. A large part of that expense was in running public awareness campaigns and funding bodies like Clean Up Australia to work with us to take the message to consumers. It was part of a consumer attitudinal change program to address their usage of lightweight plastic carry bags. Part of the process was to basically say no to plastic bags, and what it led to was there have been significant changes by a number of consumers in their behaviour to the use of bags. I don't see that as a bad thing in that I think there has been more efficient use of bags.

The other cost area, of course, is in what was required to be done say in a supermarket environment, because these were the main retailers that were targeted and that was by way of promotion in store and information to consumers. They also ran a number of trials of different alternative products and identifying and sourcing what is commonly called the green bag which is a polypropylene bag. Those are the sorts of costs that go into the 50 million along with staff training and those sorts of issues were taken into account. Staff training at the checkout level, a program was put in place for all staff in their induction to be trained in a number of areas, but

basically to pack maximum items per bag that was sensible, and also to a program of checkout operators asking the customers whether they required a bag with their purchase, and all of that goes into the $50 million cost, Mr commissioner.

MR WEICKHARDT: Okay, thank you. You mention in your submission and we've heard other people make comment about the fact that there are potential costs that I guess eventually the consumer will bear, if they're real, which would result from a ban on plastic bags, extra chewing time in checkouts, OH and S problems, theft. Can you elaborate at all on whether those costs are ones that your members are concerned about and whether or not they have any views on the relative significance of those different costs and any research that sort of backs up your views on those issues?

MR MOORE: Yes, happy to, and if I leave any you might remind me the ones that I haven't picked up on. There is an issue in the occupational health and safety area both for checkout operators and for consumers. In some of the alternate bags they may use, a significant number of products are able to be put into those bags and therefore there is the issue of heavy lifting from a health and safety point of view. Retailers progressively in the supermarket area have changed their operational platform and have made changes to their checkout operation by lowering shelves so that there is no lifting required should large alternate bags be used, but that still doesn't necessarily overcome the issue of the consumer lifting that bag then off a platform into a trolley when it may be too heavy so there are some of those issues.

The other OH and S issue which we have and it's more around a - well, I suppose it is OH and S and it also is a food safety issue, our concern is with some of the alternate bags that are coming back into what is effectively a food store those bags themselves may be contaminated. So staff handling those bags run the risk of picking up some contamination from dirty bags, also the consumers themselves may run the risk of cross contamination through the use of dirty bags.

The issue of theft, if we follow the situation in Ireland which we studied closely, in Ireland we noted that the theft of trolleys and carry baskets increased when they introduced a levy on plastic bags in Ireland. Whilst we haven't seen a significant increase in trolley thefts, talking with store operators there has been a slight increase in the theft of carry baskets as consumers still feel as though they require baskets to take products away in and don't wish to accept plastic bags. Our concern is that if lightweight plastic bag alternatives were not available that those sort of incidents of theft may increase.

One area that we had to be very cognisant of when we introduced into major supermarkets the two or three items or less no bag is offered approach to reducing bag use there was an issue of consumers effectively walking out of store with product in their hands and no signal to security staff that this product had actually

been purchased because the bag acted as a check item for security to say, "Yes, it's in a bag and therefore it's likely to be paid for." So that is a risk of not having plastic - or, should I say, carry bags full stop. There was one other issue I think - theft - - -

MR WEICKHARDT: Queuing times in checkouts.

MR MOORE: Queuing times, yes. Interestingly it is the area where supermarkets get the largest area of customer complaints is queuing. Work done by the major supermarkets in their in house studies of assessment of filling alternative bags compared to the current light weight bag process was that it actually increased the transaction time at the checkout and by doing that effectively either you have to have more checkouts open and so that increases the cost of having more checkouts open or customers have to queue longer and of course that's a negative influence.

On that point, Australia has one of the most deficient by world standards checkout operating system, it has a scan and pack system. Effectively one operator can take a product off the conveyer belt, scan it and place it into a lightweight plastic carry bag and pull that bag off its frame and make it available to the customer so it's a scan and pack system on the way through. There are basically two other alternatives. One is what you see here by the German operator in Australia and it's a process adopted from Europe where basically they will scan and put back onto a conveyer belt and the customer has to deal with the packaging of those and that works in a low service environment.

In order to get however the same service levels for consumers of the Australian scan and pack system in Europe and the UK they have two operators, they have one person scanning and the other person packing into alternate bags, that is in order to try and keep the throughput through the checkout moving however it does add additional costs for the retailer and of course as you and I know those costs are passed back eventually through to the consumer. So they're the sorts of things that our view is that needs to be taken into account when assessing the benefits of the current lightweight bag compared to alternatives.

MR WEICKHARDT: Were the cost benefit analysis that would be associated with a rigorous regulatory impact statement to take place are your members in a position to be able to quantify the impacts of those various factors?

MR MOORE: In fact our members would welcome the opportunity to share with any study that is done the information and the data they have.

MR WEICKHARDT: Okay. But that's not publicly available.

MR MOORE: But it's not public, it is commercial in confidence data. You know, it's a competitive sector, particularly the supermarket sector and productivity issues

are quite significant in that sector.

MR WEICKHARDT: Now, you said at the start, I think, that you represented one major hardware chain.

MR MOORE: Yes.

MR WEICKHARDT: Could I ask whether that's the hardware chain that has introduced a 10-cent levy on plastic bags?

MR MOORE: That is the hardware chain and effectively it doesn't provide any bags unless the customer wishes to purchase one or carry it in another way. If I may just add there, it's interesting that they are held up as an example of charging for plastic bags and the impact because I think they claim they have reduced lightweight plastic bag use by about 99 per cent.

The retail environment of hardware is very, very different to the retail environment for supermarkets in terms of volume and the size of the articles that have to be dealt with and so that seems - and perhaps it's an issue for us as retailers, we should be trying to explain more what the differences are but you have to get quite technical to do that. But you only have to observe the differences in the throughputs and the type of items coming through hardware checkouts compared to supermarket checkouts, plus you put on top of that the food safety issues going through supermarkets, it's a much more complex environment than a hardware environment.

MR WEICKHARDT: It's my personal experience - I don't know whether this is generally the case - that at that store if you do not want a plastic bag they offer you a cardboard carton that you can use which I guess diverts that cardboard carton from a dedicated recycling facility that might otherwise have taken place. Now, I guess a number of those cardboard cartons then find their way through domestic recycling bins - - -

MR MOORE: Absolutely, but I think the issue that tends to be overlooked in those situations is that you've got a collection source at retail for outer packaging such as cardboard boxes and you can put all the corrugated cardboard together as one line item, so it's uncontaminated paper in that it's all cardboard. Yes, it is still recycled if it is taken back and put into kerb side recycling if that's available to the consumer but it immediately goes into a mixed paper stream and so the value of that cardboard is less than if it was collected at one site back at retail. So they're some of the trade offs and recognitions that have to be taken into account if you propose such a system.

In the past smaller chain retailers used to provide options for customers to go and pick boxes and fill the boxes, that was largely before recycling took off and now

a cardboard box is a valuable item from a recycle point of view if you can get it as all cardboard boxes in a one line item.

MR WEICKHARDT: So there's actually a motivation for the retailer to put that into a recycling facility, is there - - -

MR MOORE: Absolutely.

MR WEICKHARDT: --- rather than provide it to the customer?

MR MOORE: Well, it is although, you know, there is a small cost both ways whether you provide a box or you provide a lightweight plastic carry bag, there is a cost and that's embedded into the overall price of goods. But the issue at supermarket level again is the volume of throughput at the checkout, of do you wait for the customer to go and get the box or whatever and how you fill it, it's the inconsistency where the scan and pack system in the Australian supermarket system is a very, very efficient system.

MR WEICKHARDT: Now, you mentioned the differences between Europe and Australia in terms of the scanning operation. In Europe and certainly in some countries they do offer you the option of plastic bags but they'll charge for them and you're no doubt aware of the Victorian Government's announcement of their proposal to charge a levy on plastic bags in 2009. So far as you're concerned what are the advantages and disadvantages of a levy as opposed to an outright ban?

MR MOORE: Well, not that I've got clear direction in this area but the ability for a consumer to get access to a carrying device is much better than having no option or having few options and whilst I'm not advocating that we should be moving down the path of a levy or being required to charge for lightweight plastic bags my personal view is that that would be a preferable option than to move to an outright ban given that the consumer needs a carrying device, the lightweight plastic bag by all accounts is a very good device for what it does, it's primary purpose, but put that aside, we also have clearly food safety issues in a supermarket environment.

MR WEICKHARDT: Okay - - -

MR MOORE: Whilst on those - and it just reminded me - on lightweight plastic bags one of the things that we feel that probably should be taken into account in any assessment is the lightweight plastic carry bag's primary use is to carry goods from point of sale to where the consumer consumes those goods. In a supermarket environment that tends to be from the checkout to the home and in those situations survey results of major retailers have indicated that around 68 per cent of those lightweight plastic carry bags are put to another use in the home. A majority of those probably end up as kitchen tidies to throw out rubbish but there is a primary use

which is to carry goods away but there is a very, very high secondary use and that is by the consumer around the home. If you add that and then the current recycling rate - that is clean lightweight bags that are brought back into the supermarket environments - that's running at about 14 per cent of bags issued at the moment.

So from a resource use point of view and if you believe or not - but if you do, even if you followed the resource use hierarchy you've got your primary use, they're being put to secondary uses, then there's a big recycling issue and then, you know, there's some left over which clearly we need to do something about.

MR WEICKHARDT: Now, there are some areas in Australia that have already banned plastic bags in fairly localised areas and I guess this experience in places like Ireland where levies have been introduced and levis have reduced - have you any direct evidence of the behaviour of consumers when those reductions take place as to what they do to supplement the secondary uses that they might have been using these bags for?

MR MOORE: There is some evidence there based on sales out of retailers in Ireland - I haven't got the up to date information with me but my memory serves that sales of plastic bags for bin liners specifically made as bin liners increased of the order of 300 per cent; that's from memory but it's of that order. It was a significant increase. In a particular use lightweight bags were put to in Ireland, the consumer said, "I still need a bag," and they were buying bin liners. So again I think we need to take into account from a resource use point of view, do we use a bag in its secondary use as a bin liner or do we go and buy a virgin product and put that in our bin as a bin liner. So the comparison and the weight and all the whole resource use issues need to be considered in the use of those bags.

I understand there are a number of local government areas now requiring particularly putrescible waste to be contained and lightweight plastic bags in the secondary use serve that purpose as well.

MR WEICKHARDT: We had this morning Clean Up Australia here and they were saying that despite the moves by major retailers to significantly reduce the number of plastic bags issued that they'd noticed no quantitative effect on plastic bags in the litter stream. Is that something that surprises you?

MR MOORE: Mr Commissioner, it doesn't surprise me from a number of point of views. I think (1) we have to look at what litter data is being collected and how it's being collected, but we'll put those processes aside. It does not surprise me, given that supermarket bags tend to go from point of sale of checkout to the home where they are either re-used for a secondary purpose, recycled in the scheme of overall plastic bags. According to government's own consultant's reports, the area where they feel that there is leakage of bags into the litter stream is in two key areas: one is

away from home consumption, and the other is from local government waste facilities. I understand they have put in place or are putting in place plans to address those two areas.

So the Clean Up Australia's numbers of, I think, around about 2 per cent have remained pretty static for plastic bags for the last five or six years and it doesn't surprise us, despite pouring in $50 million, despite reducing issuance of bags by 45 per cent over two years amongst the major retailers, that there is no evidence to show that we've had an impact on litter and it's because our view is that the source of litter is not primarily coming from bags that have been sourced from a supermarket.

MR WEICKHARDT: Taking those two leakage points you mentioned, the away from home consumption - I can understand that perhaps major retailers wouldn't have had any impact in that area, but the leakage from the waste sort of collection disposal, landfill facilities, if the total number of bags had been reduced by 45 per cent and that were a major component of leakage you would have expected to see some impact there surely.

MR MOORE: One would have hoped so, but the numbers - it may be where the sites were they're conducting their litter surveys, one would have thought so and particularly with an increase in the recycling component; so bags at home not being just discarded and put into the waste, you know, bags that have got waste in them that are used as bin tidies are likely to be contained because of the material that's in them. The balance of bags may go into waste streams in the loose fashion. Now, over the two years the recycling has moved from - I think it was around about 3 and a half per cent of bags were recycled back in October 2003, to 14 per cent of bags that were issued by major supermarkets are recycled at December 2005. So the loose bags are going into the waste stream, so one would have thought there would have been a bigger impact. Yes, I've got no answers.

MR WEICKHARDT: Clearly our comments in the draft report elicited a great deal of media attention which tended to dwarf any other aspect of the report and I guess amply demonstrated that there are a lot of emotions about plastic bags and they have an iconic sort of status in the industry. Do you understand why it is that plastic bags have got this sort of level of interest and attention and why in this area a ban is proposed whereas in other areas where waste is incorrectly disposed of and can cause damage and loss of amenity we're not talking about bans?

MR MOORE: I think if you, Mr Commissioner, go back and read, I think it was the Nolan ITU report to the Department of Environment and Heritage in 2002, they highlighted on their assessment that the plastic bag issue had effectively two main streams: one was dealing with the issues around the facts and the litter impact; the other was more of a political perception point of view about using this resource which is a petroleum-based resource and it's a symbol of a wasteful consuming

society, and it has achieved that iconic statement as a symbol of what is not good or what is bad about us as consumer being able to take this little bit of plastic and effectively discarding it.

It was highlighted back in their report then and one would think by the actions of ministers and governments since that this issue is not just about the facts; there are political perceptions and what reinforces that no doubt are some of the graphic pictures of some of the damage that is being done particularly to marine wildlife. However, one would suggest that if you're realistic about assessing the facts and I think you in your draft report considered the information that came from Newfoundland in order to assess the impact on marine wildlife, there's no more recent data than the 1980s' data. Also are we talking about the lightweight shopping carry bag or is it other plastic bags? All of that data is very, very hazy in those sort of reports.

We recognise that there may be through inappropriate disposal by consumers that some bags may leak into the environment as litter and some of those may also end up in waterways and in turn create the environmental damage that we see, the pictures of turtles and cranes with plastic bags. They are very, very powerful images and have a big influence on consumers. We might be able to pull out all the statistics about, "Well, you know, out of a flock of a million cranes there was one who unfortunately got tangled in a plastic bag." We don't have that data and I don't think anybody else does, but that is why I think this issue is so politically charged.

The other thing of course, and dare I say it also comes from supermarkets, each consumer has a view on two things in retail: one of those is shopping trolleys. They know what is good and bad about shopping trolleys. The other thing is they all have a view on lightweight carry bags.

MR WEICKHARDT: Probably, thirdly, on checkout queues.

MR MOORE: Well, yes.

MR WEICKHARDT: Okay. Now, you mentioned in your submission that Taiwan listed a four and a half ban on plastic bags in March because you say the policy did not work. Can you elaborate on the circumstance that led to the Taiwanese ban being lifted?

MR MOORE: I have a little bit of data and it's probably an area that some more work needs to be pursued, but Taiwan did introduce a ban but it also had a number of significant exemptions, particularly it had some small business exemptions. On our reading of it as well, the Taiwanese government ran into enormous difficulty in implementing and policing such a ban. Users of lightweight carry bags were able to circumvent the regulation quite easily and therefore when they assessed what the

impact was, they said, "Well, effectively it has had no impact so why do you continue to have such a regulation?"

MR WEICKHARDT: Do you understand what their objective was? Was it a similar objective and concern about litter and impact on wildlife?

MR MOORE: I'm not sure about wildlife, but litter in some countries has been a major issue and lightweight carry bags have been those items that have been identified as a major litter source. You've got Mumbai in India - was one area and again I think there's a ban and I think that's still operative. Ireland: it is claimed, that the initiatives in Ireland were introduced because of litter in Ireland. But it's also important to note that Ireland does not or then did not have the ability to recycle plastic bags, so those that aren't re-used there was no mechanism of getting them back out of the waste stream.

MR WEICKHARDT: Do you have any evidence from your members of other countries who may have tackled this differently, that is, the problem of litter or impacts on wildlife? You know, my suspicion is - I have no evidence about this - that some regimes like that in Singapore probably don't have too much litter around the place, not that I'm necessarily suggesting we emulate all their techniques, but is there any international evidence of people addressing the issue, which is clearly and understandably of concern to the community of litter and impact on wildlife? Has that been effectively addressed anywhere else by mechanisms other than a ban?

MR MOORE: The evidence is always scant in that it seems to be that governments tend to want to take the bold and drastic measures to address issues of plastic bags and their propensity to litter and I think there have been examples in other parts of the world such as South Africa where they've tried various different approaches. Our view remains, however, that if this is clearly identified as a litter problem, and in fact you mention the Victorian government just recently, in fact last Thursday, introduced amendments to their Environment Protection Bill and on reducing plastic bags waste. In the second reading speech it said, "Plastic bag litter continues to be a prominent community issue." So it's plastic bag litter is what we're dealing with.

Our view therefore is why are we not tackling the issue of dealing with litter and retailers are very happy to work with governments and consumers and other stakeholders to address the issue of litter. However, as mentioned in our submission this is what we see, this is what we hear, but we also see and hear different actions from governments as to how they will go about addressing that issue of litter. Commonly it is, "Let's thump the retailer by way of requiring them to put on a levy or a tax or we'll ban them," and I think these whilst they are seen as being bold initiatives may not necessarily have the outcomes of addressing litter.

That ties back into the sort of work that you saw and noted with Clean Up

Australia's survey stuff in showing even with a 45 per cent reduction from the major supermarkets which accounted for at one stage more than half the bags issued there has been no impact on litter. So if litter is the problem we're seeking to address we really should be concentrating on those initiatives that are likely to reduce the incidence of litter.

MR WEICKHARDT: Yes. It's the singlet HDPE bag that's being here. I mean, the sort of clear bags that you pick up in the greengrocer, the section in the supermarket as I understand it are not specifically under threat of this ban?

MR MOORE: We're not sure because plastic bags tend to be generic. However, our view and discussion with most parties is that it is the lightweight plastic carry bag that's used for carrying goods away from point of sale or from retail. The bag that you get in the greengrocer or in the grocery section is a produce bag and that is not the bag that is being targeted.

MR WEICKHARDT: Right.

MR MOORE: However, there is at times - plastic bags are considered in a more holistic basis and the heavier gauge bags that you may see coming from fashion retailers are made out of a different type of plastic and we believe those are not targets for the litter stream given that it would appear that the lightweight plastic carry bag which is made currently out of HDPE, because of its lightweight nature, has a propensity to become windblown and therefore become litter whereas some of those other bags don't have that same propensity to litter.

MR WEICKHARDT: Yes. I can understand that those heavier duty bigger bags perhaps are not so prone to being blown around but the clear produce bag that you refer to in the greengrocer, are there any statistics about how many of those end up in the litter stream?

MR MOORE: I don't think the statistics that I have seen are clear enough to distinguish between plastic bags, plastic lightweight shopping bags, LDPE or the fashion retailer bags or even bait bags that are used by fishermen. I don't think the collection of the data is so segmented.

MR WEICKHARDT: Yes.

MR MOORE: Can I just make a comment on the issue around HDPE plastic. That's a particular type of plastic that is used for these lightweight bags that are currently used. As I also touched on, we are working with an industry-led group on seeking to find an alternative to replace that HDPE bag or to address the issue of the HDP content of that bag and whether it is able to be made to break down in an environment should it become litter. There are a number of discussions around that

are going on around degradable bags, biodegradable bags, compostable bags. There is an Australian standard that is currently being developed - it's not quite there - on degradability and we will be pursuing that. Those guidelines will be very useful for retailers.

What we're pursuing is in order to address what is a small percentage of the problem that we think may be coming from supermarkets it to find an alternative to the material that the lightweight bag is made out of so that if it goes into the environment that it actually ceases to be a threat to animals in the environment and breaks down.

MR WEICKHARDT: Yes. Thank you for that. We were promised by Clean Up Australia some information on that issue because I have seen other statements that, if you look at the total life cycle of producing, using and disposing of those degradable bags, that they also have some deficiencies and other negative impact so we want to be careful in this whole exercise we don't jump out of the fat into the fire.

MR MOORE: Absolutely. The task force that we're heading up is using the environmental code of practice for packaging as a guideline and effectively it says to us, "Consider all of those alternatives, all the impacts," and it seeks to avoid of jumping out of the frypan into the fire.

MR WEICKHARDT: Good. All right. Thank you very much indeed for your submission and for your attendance at these hearings. It has been very useful.

MR MOORE: My pleasure.

MR WEICKHARDT: All right. We're going to take a short break and then we have got Environment Business Australia as our next participant. Thank you.

MR WEICKHARDT: Our next participant is Environment Business Australia. If I can just get you to introduce yourself for the record and note the capacity in which you're appearing before the hearing please.

MS WAIN: Fiona Wain. I'm the CEO of Environment Business Australia.

MR WEICKHARDT: Thank you very much indeed. Thank you for coming along and for your submission - - -

MS WAIN: Thank you for having me.

MR WEICKHARDT: - - - which you should assume that I have read and I have a number of questions about it but if you would like to make some points to elaborate any of the key issues please do so.

MS WAIN: First of all I would like to give the really big picture. The issue that we have with any really in-depth draft report when you're looking at 400 pages or more, is that there are always things that are going to anger some people and appease others. The comments that we have heard back from our membership are that the draft report seems to be focused on waste management and waste disposal as opposed to the waste generation and the entire waste stream. I was wondering where that had come from. I knew I had seen it somewhere and I was just reading through the Business Round Table and Sustainable Development Report where, on page 8, they say:

> It is the view of the BRSD that waste management policies should be directed at waste disposal externalities rather than resource conservation or other upstream objectives.

We fundamentally disagree with that because the externalities are much broader in scope than just at the waste disposal end and we have to take into account not only the negative externalities but also the positive externalities and the lost opportunity costs. So having said that I would just like to give a little bit of background on Environment Business Australia. We're the peak organisation for the environment and sustainability industry and our role is really to raise awareness about the foreseeability scale and relevance of environmental challenges and then to put forward solutions to those challenges.

We think that the waste issue is way bigger than recycling or landfilling. It's the entire generation material signs, material stewardship, and the sheer volume of what is loosely given the name of waste is only going to grow as populations grow. Australia's issue with waste management is one of the scale and relevance of the marketplace and the volume of waste going through and the amount of really capital that can be captured and reused either in terms of raw materials or financial capital,

but having said that that scale and scope of the Australian marketplace is small we are sitting on the doorstep of the most rapidly growing area of the world and that means a huge market opportunity so getting new technologies, new systems, new operating services into play, full-scale demonstration sites in Australia, is an economic opportunity for Australia in these new markets.

Some of the other issues that we're very concerned about is the lack of value adding and this is a very broad issue not just related to waste but Australia for decades has been very good at digging things up, extracting them, farming. Even if we sort of look at things like resource extraction from farming; wool, leather, we do very, very little in terms of high-end value adding which doesn't necessarily mean high-end at high cost but, you know, why do we export to Italy very, very fine wools and we import at a huge cost very, very fine suits. Why don't we have the capacity to do something more with our raw materials in this country?

The underlying issue I think that we have with waste and the description of waste is when we're talking about externalities we need to be talking about the value of ecosystem services and the viability of those ecosystem services. We have just heard about plastic bags and drawing down to very small detail the impact that they can have on marine life but looking at the bigger picture we have waste such as greenhouse gas emissions that are now contributing to one of the biggest environmental, social, quality of life, health issues of all time.

The other thing that EBA is working on is the need for a framework for innovation; and innovation, whether it be in recycling, waste disposal, waste energy, whatever. The private sector is very good at innovation. It's very good at coming up with solutions to any challenge that is put in front of it as long as that challenge is real and as long as that challenge can be addressed by the board in a fundamental way which means regulation basically. However, what the private sector is missing is some timely and meaningful signals into the marketplace, and at the moment, whether it's in waste or whether it's in energy, the marketplace is bereft of proper signals to be able to make a decision.

I'm sort of opting out of waste here and looking at the energy cycle for a second but the classic case at the moment is that we have coal being seen as cheap energy, nuclear fuel being seen as expensive energy, and renewable energy being seen as expensive energy. There are two other inquiries going on in Australia at the moment. One is relating to nuclear fuel and the whole cycle of nuclear fuel leasing and the other is carbon and geosequestration of carbon from coal-fired power plants. That has put a price signal on the table very firmly for carbon that will now allow the three main areas of energy, coal, nuclear and renewables, to be seen in a fully comparative basis. All of a sudden renewable energy is not expensive. It will come at absolutely line ball with the other two.

Nuclear waste is very much included in the pricing of nuclear fuel. That price includes as externalities coal. It does not include pricing of its negative externalities or its waste and that's something that really needs to be done and it's something that, as BRSD report, has said, "Don't you worry about that. Let's just flick that to one side and deal with landfill," and I think that is where - - -

MR WEICKHARDT: Sorry, I didn't follow that last bit.

MS WAIN: What the BRSD report has done is to say to focus on waste disposal and the externalities of that so basically landfill as opposed to the entire waste stream and the innovation that can be built in at any stage or multiple stages of that productivity waste consumption, whatever point you want to take on it. That innovation gets kicked aside.

MR WEICKHARDT: I won't speak for the BRSD but that's certainly not what we suggested in our report.

MS WAIN: But it is what people are coming back and reading out of that report.

MR WEICKHARDT: Let me sort of try to address a few things that you have alluded to in your submission, one of which you criticise us for, and a number of - you're in good company in that other people have criticised us for this too, is a view that we have ignored in terms of reference by not addressing the issue of resource efficiency. Now, this was not something that we did without considerable thought but the issue that we tried to address, both in the issues paper and also in the draft report was that to our mind measuring the efficiency with which one particular resource or a class of resources indeed is recycled or recovered, and ignoring the resources that are used to recover that resource is really (a) fairly myopic and (b) fairly useless. The example of picking up one bottle of glass in Woomera and transporting it all the way to Sydney and proclaiming with great enthusiasm that you've managed to recycle that piece of glass - silicone dioxide is probably the most plentiful product in the universe - and ignoring the fact that you consumed a huge amount of energy in the process just doesn't seem to be of any value at all.

MS WAIN: I would very much agree with that, but by focusing on the very end as opposed to the whole value chain, the report doesn't provide an opportunity to look at an enabling framework whereby new technologies are woven in, either because of environmental demand or public health demand or economic demand, and old technologies to be woven out as they reach their sell-by date. Now, we all know that there are very well run, very efficient landfills.

A couple of weeks ago I was in a car going over that bridge over the Glebe, I can't remember what it's called, an open-back truck with just waste spilling out all over the place, and a very tidy piece of hessian covering the numberplate so he

couldn't be reported. Now, that's the level of difference that we have operating in this country, because - and as I say in our submission, it is really quite surprising that so many waste companies have managed to do so many very innovative things and good work and good operational management, but the marketplace is stifling new technologies coming into the marketplace.

MR WEICKHARDT: We have no problem with new technologies coming into the marketplace and we certainly aren't condoning or supporting any form of waste collection or disposal that causes the sort of problems that you alluded to, but I think you may have and others may have misunderstood the point that we were trying to communicate about the upstream issues, and we clearly need to try and do a better job of this in the final report, but the point we were trying to get to was not that there are not upstream issues, there clearly are upstream issues, and our point was that those, where at all possible, should be addressed directly.

That is, if there is a problem of a mine site that's causing dust or pollution, or a mine site that's not been properly remediated, or transport costs that have not been properly accounted for or greenhouse gas emissions that have not been properly accounted for, those issues ought to be accounted for, and in doing so the price of those raw materials ought to reflect all those externalities. If the price of those raw materials reflect all those externalities and you get the costs of any form of waste disposal, whether it's landfill, whether it's an AWT, whether it's an incinerator, right, and you get those costs to reflect all the externalities, then innovative people operating in the marketplace will find over time the right balance between recycling and disposal, incineration, landfill, AWTs or whatever. At this point - - -

MS WAIN: Wouldn't disagree with that.

MR WEICKHARDT: You wouldn't disagree with that?

MS WAIN: I wouldn't - but I would add a corollary that by dealing with waste disposal as the core element in the chain, the chain has now been fractured and whereas we've got the private sector trying to be innovative, what we haven't got are governments of all levels providing an enabling framework and using the big powerful tools that only they have at their disposal across the entire chain, and I'm thinking of things like taxation regulation, government procurement, investment and market-based instruments as the four key ones. It's very difficult to take a really big framework that can have immensely powerful outcomes and then to drill down and sort of say, "Well, here's how you focus in on this." I mean, at some stage the whole big picture has to be looked at in a very big picture way, and then drilled down to. My concern with this is that it's drilled down too quickly.

MR WEICKHARDT: I guess having spent most of my life in the private sector I may be biased, but I'd say that innovation occurs in most marketplaces when

governments set clear rules, get the infrastructure right, and then get out of the way. I don't think you have typically found really efficient operations of marketplaces when governments are clambering all over them.

MS WAIN: You don't want governments clambering all over it, but you do want governments to be able to move with the time and set a framework that moves with the time. I mean, as - - -

MR WEICKHARDT: What framework do you want the governments to set here? Can you be specific about the waste area. If you were in the lodge tomorrow, what is it that you would do?

MS WAIN: Set a taxation framework that rewards the outcomes that you want to see and penalises the ones that you don't want to see.

MR WEICKHARDT: That sounds suspiciously like a subsidy to me.

MS WAIN: We have decades and decades and decades of subsidies and they have helped some sectors of industry and I've never heard any sector of industry who is being helped by a subsidy say, "Government get out of the way."

MR WEICKHARDT: No, that's completely true.

MS WAIN: What we want is to get rid of the perverse subsidies.

MR WEICKHARDT: And what are they?

MS WAIN: Well, as a classic example, maybe not specifically waste, but in this city - - -

MR WEICKHARDT: Can I ask you to please focus on waste because that's our term of reference.

MS WAIN: All right. It's the waste pollution issue. Sydney harbour ferries burning very dirty diesel, not tuning up their engines, the waste pollution going into the air is visible and you certainly smell it and you choke on it every time you go across the harbour in a ferry.

MR WEICKHARDT: Okay, all right.

MS WAIN: Now, as a tax issue - - -

MR WEICKHARDT: I'm sorry to be boring but the terms of reference that I'm wrestling with reflects solid waste. So can you give me some examples of the

diverse subsidies that exist that we would all like to try to understand better that governments ought to do something about around solid waste.

MS WAIN: All right. If you take any waste transfer, anything from mines, from food production, if it is not being used to optimum benefit, if you're not extracting all the layers of value from that commodity then a waste is being created at a point where a waste does not need to be. It's almost like a - what's the word I'm looking for - a sort of a dispersion of a raw material before it has reached what one could define as a waste stage.

MR WEICKHARDT: But you're suggesting that governments are facilitating or in some way encouraging that sort of behaviour.

MS WAIN: There is a system that has been built up over decades, and the government frameworks that we have find it much easier to encourage existing systems to continue rather than new technologies and new systems to come into play. For example, the amount of food refuse that could be turned back into a soil enhancer as opposed to just being treated as waste, or it could become a bio-fuel as opposed to becoming a waste. The number of waste items that could be generated as fuel, and I'm not sitting here suggesting that we should be incinerating everything but at some point we are going to reach a peak oil moment. At what point is the market going to be sufficiently well advised that it can start to look at waste as the next resource stream, and that is where I think the government framework that we currently have across all three levels of government is letting us down.

MR WEICKHARDT: Just let's talk about those things specifically, food refuse to compost or to bio-fuel ought to be used in some energy from waste facility. What are governments doing that are inhibiting that happening now?

MS WAIN: At the moment you've got sugar by-products going into ethanol, but does it make sense to have sugar production going towards ethanol, or should you have a broader suite of agricultural refuse or waste going into that ethanol. That's an issue not only of waste, it's an issue of the quality or the lack of quality of Australian soils for what we demand of them.

MR WEICKHARDT: Again, I'm struggling a little bit to try and understand what it is that you want governments in that respect to either do or not do that's, you know, sort of around this area of waste and its management and waste disposal.

MS WAIN: If we had a better aggregation across state governments, local authorities to put in place waste collection, waste treatment - I mean, as you rightly say, if you take one bottle, you know, from the outback and bring it somewhere and recycle it, then you don't have any type of efficiency. We've been on record as saying container deposit legislation in this country probably is not economically

efficient, again because of the scope and the scale of the marketplace, but if up and down the eastern seaboard we had an aggregation of collection, of waste treatment, of different processes, of different technologies being trialed, that would put Australia back in a leadership position as opposed to sort of saying, "Well, shall we go shopping to China for the next waste solution?"

Australia has been looked at in the past as a good shopping market for a lot of countries overseas for waste technology, for water technology, even for clean air technology to a certain extent. We are losing that competitive advantage. Now, some people might not think it's a huge competitive advantage compared to shipping out tanker loads of coal, but the environment industry is probably, second only to IT, the fastest growing industry worldwide.

PEMSEC has evaluated that just the marketplace for emissions reduction and technologies to tackle climate change is a $750 billion a year marketplace. Now, internationally the overall water waste market is about $750 billion a year at the moment. That's a USA Department of Commerce figure and also comes out of the Globe Foundation in Canada. But it's probably on the low side because neither of those take into account the amount of business that is done at the local government level, the provincial state government level. If at that level of government there is a reticence to take on board new technologies and new processes, if at that level of government there is a prescription of existing process and technology over a demand for a high level of outcome, then you have a government perverse outcome - input.

MR WEICKHARDT: Okay. Can I ask you a few questions about your comments around discounted future values.

MS WAIN: Yes.

MR WEICKHARDT: You made a comment, "Resilience and value need to be built in to every stage of productivity and throughout the life cycle of products and services." I'm not quite sure what that actually means but fundamentally I'm not sure what you're driving at in terms of your criticism of what we have or haven't done in terms of trying to look at, I guess, future values or future costs, and trying to bring those into some sort of currency. You suggested that the approach we have followed has been deficient but I don't understand what it is you're recommending.

MS WAIN: If we look at today's cost of treating wastes in any particular way of doing it, and the future impacts of treating them in a way that reuses those resources to the nth degree or just leaves them as waste, there's a value in the future to taking maximum advantage of every stage of that resource as opposed to just conking it. I think we're losing out on that value, that value creation, not only in terms of a lost opportunity cost to get new technologies into the marketplace and into the export market, but as we do see resources being extracted, used, at a very cursory value

level and then rejected as waste, there's so much more that we could be doing with things and at some point we're going to run out of productive soil.

MR WEICKHARDT: But how do you decide - I think you accepted my extreme example that sometimes trying to recycle and recover to the nth degree actually might end up using more resources than it saves so I think you're accepting that there is an optimum point. We all agree that some recycling is a no-brainer and some isn't.

MS WAIN: No, and some isn't. I have no problem with that at all.

MR WEICKHARDT: What is it that you're recommending that government policy should do to encourage or facilitate this optimal level of recycling?

MS WAIN: I suppose the third one is - well, there are two that we're working on most of all. One is the productivity of soil and how much food we can extract from it and the other is the amount of waste that is being generated in terms of greenhouse gas emissions. Now, looking at both as being cumulative problems, one because you're depleting a commodity in terms of the soil and the other because one is building up an excess volume of an anti-commodity, at what point, and there is always a point, can there be an interjection of a new process, a new technology, to reduce the anti-commodity and to extract maximum value from the commodity. That was what I understood the original terms of reference of this inquiry to be.

MR WEICKHARDT: I think the purpose of the government sending the terms of reference to them were to recommend policies that were to the advantage of the Australian community. I'm still struggling to understand what it is you're recommending the government should do that will contribute to this community welfare-enhancing policy in this area.

MS WAIN: Just as resources from much longer period in the life cycle of any product as opposed to, "There's a resource and the rest of it is waste."

MR WEICKHARDT: What is it the government policy would be then? The government can stand up and say, "We believe that people shouldn't be wasteful," but what policy do they put in place?

MS WAIN: To put in place a policy that can extract value; value either in environmental terms or economic terms or health or quality of life terms. At the moment we're creating a waste for the most part and waste disposal has become, to my reading of this report, the focus of the report as opposed to what is the broader resource and how do we capture that as a broad resource and what a specific policy recommendation might be on that having worked further into that, but I don't have an answer for you today.

MR WEICKHARDT: Yes. Thank you very much indeed for your submission and thank you for coming along. We will continue to wrestle with these issues as we go forward.

MS WAIN: Thank you.

MR WEICKHARDT: That now concludes the hearings for today. For the record I need to ask whether anyone in the audience would like to appear before these hearings. We have hearings again tomorrow. Nobody? In that case I adjourn these hearings and we will resume tomorrow morning at 8.30. Thank you.

AT 3.21 PM THE INQUIRY WAS ADJOURNED UNTIL
WEDNESDAY, 26 JULY 2006

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