

SPARK AND CANNON

Telephone:

Adelaide (08) 8110 8999 Hobart (03) 6220 3000 Melbourne (03) 9248 5678 Perth (08) 6210 9999 Sydney (02) 9217 0999

PRODUCTIVITY COMMISSION

DRAFT REPORT ON WASTE GENERATION AND RESOURCE EFFICIENCY

MR P. WEICKHARDT, Presiding Commissioner

TRANSCRIPT OF PROCEEDINGS

AT SYDNEY ON WEDNESDAY, 26 JULY 2006, AT 8.30 AM

Continued from 25/7/06 in Sydney

MR WEICKHARDT: Good morning, ladies and gentlemen, and welcome to the public hearing for the Productivity Commission inquiry into waste generation and resource efficiency. My name is Philip Weickhardt, I am 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, construction and demolition waste.

We are grateful to the many organisations and individuals who have already participated in this 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 a 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 the week hearings will have also been held in Brisbane, Canberra and Melbourne and we had hearings here in Sydney yesterday.

After considering all the evidence presented at the hearings and in submissions as well as other relevant information a final report will be forwarded to the government in October 2006; participants in this 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'll 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 Productivity 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 the staff here today. Submissions are also available on the web site or by order form.

To comply with the requirements in the Commonwealth Occupational Health and Safety legislation I draw your attention to the fire exits, evacuation procedures and assembly points. The nearest fire exit it out this door and immediately to the right and there are some stairs leading down to the street and a sign about the assembly point down there. Can I also ask the audience to please turn off their mobile phones or to turn them to silent.

I would now like to welcome our first participant this morning, Mr Mike Ritchie from SITA Environmental Solutions. Mike, if you could just for the record give your name and position and the capacity in which you are appearing today.

MR RITCHIE: Thank you, Philip. Mike Ritchie, national general manager, marketing and communications for SITA Environmental Solutions.

MR WEICKHARDT: Thank you mike and thank you for your submission and thank you for appearing. Assume we've read your submission and have a number of questions about it but if you would like to make some sort of introductory remarks, that's fine.

MR RITCHIE: First of all on behalf of my CEO and SITA we welcome the commissions report, the draft report, we agree with a significant number of the recommendations in the report in specific areas. We have some concerns about the broad scope and meeting of some of what we interpreted were the terms of reference of the report - of the initial terms of reference from the treasurer, particularly in relation to the term "economic efficiency" and "resource efficiency".

We refer in our submission to a similar report that was conducted in 2001 by the UK Cabinet Office which looked at resource productivity, slightly different from the word used in your terms of reference which was "resource efficiency" but the reading of both terms of references, they're very similar. It's around the scope of your study that we would draw most attention, we believe what you have done in terms of dealing with the end-of-pipe waste management you've made a number of consistent recommendations, we would have agreement with many, disagreement with some but we would also seek in the final report for the commission to broaden and go back to the terms of reference to look more closely at the issues of resource efficiency and particularly how resources pass through the economy and are utilised in the economy and depleted in terms of materials extraction.

Those were the issues considered by the UK report, we would say, more fully than perhaps the draft report has done at this stage and we would seek that the final report considers that in a little more detail. The kinds of conclusions that the UK commission report found showed that greater resource productivity could offer significant benefits not only to the environment but also to business and argues that methods that make use of fuel resources and minimise waste point the way to a more sustainable economy and a more sustainable future.

The UK submission report went on to make specific recommendations about reporting waste management targets, market based instruments, environmental taxation and the waste hierarchy, all of which have been measures that the draft report has so far criticised and rejected as drivers of public policy. So it's surprising and I think it comes back to the terms of reference and the interpretation of the terms of reference that the two studies have arrived at very different and quite contradictory

places both with terms of reference looking at productivity/resource efficiency. So we would certainly draw your attention to that report and perhaps seek some broader exposé of some of those issues. Some of the other issues that were dealt with in that report by the UK Cabinet Office:

If recycling and composting can provide alternatives to landfill as a means of waste disposal, they will not only cut down on the adverse environmental impacts associated with landfill sites, but will also mean that secondary materials are used instead of finite primary materials.

Depletion is an area that you touch on but you leave fairly quickly and say that if there are issues of resource depletion they'll be reflected in price and therefore there's no issues of scarcity; the UK Cabinet Office came to a different conclusion and we would draw your attention to that. They also supported producer responsibilities, statutory recycling targets for local authorities, tradeable permits, landfill taxation and, again, these are instruments that we in SITA have supported and believe the removal of the current instruments in our society would have fairly dramatic effects.

If the Productivity Commission draft report was adopted nationally then it would have significant repercussions for the recycling and waste management sector, about 9000 people we estimate are employed in this sector and we would certainly hope that the final report looked at and dealt with in a fairly serious manner the potential impacts on the current sector and do a full cost benefit analysis to the extent that it's possible within your current terms of reference on the likely impacts of the implementation of the draft report on the current recycling and waste management sector.

Some other issues we would pick up in the submission. The issue of externalities has been considered and dealt with by the draft report; given that it is a fundamental underpinning for many of your decisions around public policy instruments we would see that that needs to be a fuller review of externalities, particularly in reference to international studies. I know that in drafting the report you had asked for a number of information externalities because it is a poorly studied area but given that it is such a significant underpinning of your recommendations and conclusions we believe that needs significantly more work.

One of the assumptions in there is about the capacity to capture greenhouse gasses and out own experts would raise serious questions about some of those assumptions around - you use a capture rate and then you have an offsetting level which brings your up, from memory, to 90 per cent capture rate. The experts at SITA would have some concerns about that and certainly the international evidence would suggest the same.

In relation to landfills we would strongly support your recommendation around the enforcement of landfills, we would agree that well run landfills of modern standards are relatively benign. The one issue in there that we think needs to be picked up in your final report is traffic externalities and the relationship in terms of geography of well-run land fills and that then moves into the planning considerations, that's an area that we think needs a little more exposure to the light. But in relation to enforcement, you know, the estimates are that more than 80 per cent of landfills in Australia do not meet minimum environmental standards as specified both in your draft commission and later the Waste Management Association puts forward what they believe are six minimum criteria for landfill operations.

The latest audits of landfills would suggest that more than 80 per cent by number of landfills don't meet those minimum standards so we would certainly look for strong recommendations in your final report and that's already there in the draft report but really encouraging governments to increase the regulatory interface with landfill operators. It is manifestly unfair that well performing landfills have to compete with poor performing landfills on a gate price basis when one performs to a different set of environmental standards to another.

We would agree with your comment that greenhouse gas should be dealt with via a national policy, in the absence however of a national standard for greenhouse or public policy direction we would not agree that greenhouse gases and landfill omissions can be ignored in this draft report and we would look forward to some more detailed consideration of how landfill gasses should be regulated in the operation of landfills and particularly what should the threshold be for the introduction of landfill gas capture technology, particularly in relation to those estimated at 80 per cent of landfills that currently don't have those technologies in place.

There needs to be some consideration of what should the threshold limits be in terms of tonnages and type of waste and that would be a very useful contribution to the discussion if we could get that in the draft report. It certainly hasn't been to my knowledge reported on or have any studies been done on those thresholds. I'm sure the EPAs have looked at it but I'm not sure that there's anything on the public record that says, you know, "A landfill of x tonnage with y material types should have gas extraction and loads below those thresholds should not," but that would certainly be a significant contribution to the discussion.

I've mentioned the desire for improved regulation and the regulatory regime should not be restricted just to landfills but to all waste related activities, whether they're open window composting or mushroom composting activities, whatever the material stream is all operators should be performing and meeting the same minimum environmental standards and they clearly are not in the current regulatory

frameworks of most state governments.

One of the other issues in relation to minimum landfill standards which again you touch on which we would like to see more detail on is provision for post closure mediation of landfills. Again, there are few statutory requirements for post closure mediation, making provisions for those in current accounts and reflecting that through the gate prices that are payable. So you find some landfill operators offer cheaper gate prices because they don't make such provisions and as a consequence they're able to compete with those companies that do make such provisions, and that is clearly a bias in the market. Victoria, I believe, from memory requires a 25-year post closure remediation provision but as far as I know no other state government does.

You mentioned your minimum standards for landfill operation. The BDA report of 2003 did the study of metro landfills and found that one-third of landfills were lined, only half had landfill gas capture and only two-thirds had leachate management systems, and they were the metropolitan councils so if you got to regional and rural Australia you'll find those numbers drop off very significantly. SITA has strongly supported the introduction of market-based instruments such as the UK cap and trade scheme and landfill levies in order to create a balance in the market between landfill disposal and alternative waste treatment and resource recovery.

The commission draft report heads in a different direction. If the final report is to continue with a view that market based instruments and levies are inappropriate, we would seek the final report to consider the downstream implications for specific material streams and industry sectors in relation to removal of levies. We've seen some significant increases in some levies, for example, New South Wales is going to \$58 by 2010. That is already driving infrastructure implementation by the private sector. It is already seen in price signals to the market. So if that was removed the question becomes, what signals would the market then interpret. I think I've covered the major points in our submission. I'm clearly happy to take questions from you, commissioner, thank you.

MR WEICKHARDT: Okay, thank you very much indeed, Mike. I suspect that there is considerable overlap between the points that you raised and those that will be in the next submission from the Waste Management Association branch that you have also agreed to represent, so I - - -

MR RITCHIE: I would hazard that there is some overlap, but not a complete overlap - - -

MR WEICKHARDT: No, sure.

MR RITCHIE: --- particularly given that the Waste Management Association, as they say, is a broad church so it has a different set of interests.

MR WEICKHARDT: I'll try and avoid - - -

MR RITCHIE: Yes, of course.

MR WEICKHARDT: --- too much repetition between the two. Let me start with the issue that you have raised, and certainly we might have more discussion under WMAA on this issue of resource efficiency. It's been put to us that we have ignored this issue. We certainly didn't ignore the issue. We gave it what we thought was a fairly extensive consideration and we revealed that in the issues paper and also in the draft report. Our concern about resource efficiency which, as you mention, is something that has figured in other reports internationally, particularly in Europe, but our concern about resource efficiency is that even if you can measure it in units that are useful, and you certainly quote in the next submission some methods of measuring it which are all in units of tonnes, and I fail to see that really equating a tonne of bricks to a tonne of platinum doesn't actually help you very much, but when you measured it, actually optimising it in our view doesn't actually tell you very much.

Optimising the recovery of a tonne of bricks, if it costs you, you know, 100,000 barrels of oil in energy to transport the product from a to b doesn't seem to be in the community's net interest, so what we looked for was some method of equating all the resources that we utilised in the pursuit of some action, some recycling action or recovery action, and if you input all the resources and take account of all the externalities, in our view you end up with something that is equivalent to economic efficiency. So can you tell us what's wrong with our logic? What's wrong with the desire that in looking at resource recovery that you should look at all the resources that are employed in that activity?

MR RITCHIE: In fact, our covering letter says exactly that, that SITA's view would be we would support and agree with the commission's view that all of the costs and benefits of resource consumption need to be taken into account. I guess where we would part company or have a different perhaps emphasis, is on how you cost some of those things.

MR WEICKHARDT: Okay.

MR RITCHIE: Particularly in relation to externalities, the costs associated with greenhouse gas emissions and the risk associated with greenhouse gas emissions, the cost of resource depletion, the reality that scarcity has been adequately priced. I mean, certainly the federal Department of Environment and Heritage commented on the subsidies schemes. Now, I'm not in the federal sphere and I'm not an economist,

Waste 26/7/06 833 M. RITCHIE

but the DEH certainly commented that they believed there was significant primary resource subsidies in the market which were distorting the market in favour of primary material extraction as opposed to, you know, secondary materials reuse.

So if you take into account all of the costs and benefits, I don't think you'd have much of a disagreement from the market. I certainly don't think you'd have much disagreement from WMAA in that regard either. The question then becomes, well, are we appropriately pricing all of those other components of that cost and benefit analysis, and there is, as you know, substantial disagreement around that.

MR WEICKHARDT: Okay, all right. That's helpful clarification. So let's move to some of these areas. Resource depletion is something that a number of people have raised as a concern and I understand the concern. What methodology and technique do you recommend should be used to measure resource depletion if it's not the signal that you get from the marketplace in terms of price?

MR RITCHIE: If I had the resources I'd come back to you with a definitive answer, but I don't, I mean, and I'm not in that sphere, but in terms of resource extraction, surely that is part of the brief here is to go and actually really drill into what are the primary materials resource subsidies, what is the material externalities throughout the market, throughout its supply chain impacts, which again has not really been considered in your report. It is considered in the UK cabinet office report, a number of these issues of resource depletion, total life externalities are considered in the UK report.

That would certainly be an area that I would hope, you know, between the draft and the final report we can expose a bit more light to because that is, you know, I think if you boil the draft report down, that is the most significant criticism of it because it then leads you down a particular path in terms of recommendations around particular instruments, and if people were confident about, you know, the starting position then there might be less argument down the path. But certainly issues of primary material subsidy, whole of life externalities would need further development.

MR WEICKHARDT: Okay. I mean it's interesting that a number of people have interpreted what we've said, and therefore we can't have said it really clearly, as ignoring upstream effects. Indeed it was put to us yesterday that in terms of life cycle analysis we broke the cycle because we ignored all the upstream issues. That's not what we were trying to communicate. What we were trying to say was that policy interventions ought to take place as close as possible to where externalities occur, and if that happens appropriately then the prices of materials as they flow through in extraction, manufacturing, use and then final disposal process ought to reflect all those externalities on the way through and then, if all those externalities and full costs are exposed, the level of recycling that takes place will form what we

believe is an optimum as determined by the marketplace.

Now, the resource depletion issue is certainly something that other people have expressed concern about, and we thought we'd explained our position there but will look at that further. The greenhouse gas issue is certainly something that we know people are concerned about and I think we've made our position there clear. We believe that a national abatement scheme of some sort should be put in place because that will allow a least cost abatement process to take place. But apart from those two issues, you've raised the issue of subsidies, we will explore that again with DEH but my memory last time is when we asked DEH for, you know, some more specific identification of those subsidies, they didn't venture any specific areas.

Clearly most industries look at others and jealousy say, you know, "They get a tax break here or they get cheap electricity there," of course they don't acknowledge either that they pay costs and I think the raw material extraction industry would say, "We pay royalties too," which is a sort of reverse subsidy, but if you are aware of any specific externalities other than the resource depletion issue and the greenhouse gas issue in any of those upstream areas, then we'd love to hear about them because we hear that general concern and assertion but we are struggling to get our hands around where those big issues are, and it's difficult therefore to recommend to government that they should take policy action about these upstream externalities if we're not sure what we're trying to finger.

MR RITCHIE: Okay. My comment on that would be - I mean, that's not an area that I work in, or SITA specifically works in, but I draw your attention to a couple of sources, and certainly DEH, as you say, raised issues of subsidies, hidden subsidies, resource extraction subsidies. Secondly, the UK productivity commission report or cabinet office report dealt with some of those issues as well and decided that there were issues around resource extraction and depletion that needed to be considered.

Turning to greenhouse gas, you'll notice in the SITA submission that we do recommend or suggest to you that you do actually recommend the introduction of a carbon price in Australia, because that would be the best way to embed the externalities of greenhouse into the commodity value and then let the market decide the resource value of that material. We would agree with that. The question then becomes when will we get a carbon price and what level would it be set at, and we would certainly encourage the commission to make some inquiries about what a carbon tax should be set at or a carbon price should be set at.

MR WEICKHARDT: I think that's well beyond our terms of reference.

MR RITCHIE: I'm not sure that it is, and I guess that's one of the questions is if you're going to suggest the dismantling of the current policy settings, the thing that has concerned most people is if one was to take the report, you know, in chunks,

you'd say dismantle all these instruments, and that's what the media has certainly picked up on, but you're saying that we'll replace those instruments with another set of policy instruments but they're not defined in your draft report, and you've seen the SITA submission many times, probably half a dozen times we say, "It would be good if the final report made specific recommendations on this policy area and what the policy instruments should be." Now, in relation to greenhouse, that's carbon price but in relation to - - -

MR WEICKHARDT: It may be.

MR RITCHIE: It may be but, you know, that's your purview is to come back and say, "Well, this is what the policy instrument should be that replaces that suite of policy instruments." That's certainly been many of the EPA's comments is that, yes, they are dealing end of pipe with waste because of an absence of policy instruments further upstream, and I think most people would agree with you in principle that attach the policy as immediately close as you can to where the externality occurs or the public policy issue occurs - would agree with that, but to make the report a complete report we would seek that that be clarified in terms of what policies, what targets, what objectives and how would they be implemented. The SITA report kind of flags I think about half a dozen of those that we would say, "Please, you know, it would be useful in terms of the debate if we could see what the alternative policy statement would target."

MR WEICKHARDT: Okay. Let me say in a general sense I understand and empathise with people who have made investments and commitments in a certain policy environment to say, "I don't want to see that policy environment dismantled until it's clear what the new policy environment might be." Now, you ask us to model what the effect might be on the downstream industries that have made those investments and I think first of all, I'm not sure that that's going to be particularly useful in that all the signals that we're talking about, whether they are from appropriately regulating landfill, appropriately pricing all the raw materials, will give rise to a level of recycling which is probably at this stage hard to predict, and I take your point, therefore, how do those in the industry react to that.

But secondly, if a level of activity is either consuming resources inefficiently or being supported by some sort of regulation that's consuming more resources than are justified, then I don't think you need a model to suggest the economy overall is better off if you remove those aberrations to the most efficient resource allocation. It would be manifestly unfair to the players in the industry if that were done suddenly and I think governments have recognised that as they've, for example, removed industry assistance through tariff adjustment and things of that sort. So I certainly accept that point and perhaps that's something we should explicitly mention in our report.

MR RITCHIE: I would agree with the large part of your commentary there. Where I would part company would be if you were to, as you have done, recommend the dismantling of that policy suite, and yes, that needs to be phased and we'd agree with that. You really need to produce a balanced position so that industry, the community, you know, the state government and local government understand the direction is to specify what the replacing policy suite is, what augments or supplements the things you're dismantling.

In the absence of a carbon tax, for example, or a carbon price or some carbon greenhouse gas signal, you are going to see a large number of commodities cease to be recycled. Now, they shouldn't cease to be recycled for net social cost benefit. The only reason they'd cease to be recycled is the appropriate pricing has not been reflected in their commodity value such that a company like SITA can go into the market and extract it. So dismantling those suite would send a price signal to SITA that says - or a signal, whether it's regulatory or price to say, for example, PET plastics are no longer worth recovering because there's no EPR schemes, there's no landfill levy, there's no other drivers.

Okay, so SITA makes the decision, right, we're not going to recycle PET, we're not going to build that commercial and industrial sorting facility, whereas if there was a carbon price attached to PET and it's offsetting value, I mean, it saves 70 per cent greenhouse gas emissions by reusing that PET as a recycle product, if that 70 per cent greenhouse gas value was embedded in that commodity, then we'll make an optimal decision as to whether to go into the market and extract it or not. You can't have one without the other. You're sending a distorted price signal, a distorted message.

MR WEICKHARDT: I understand the point you're making, albeit that I just counsel not to assume that the carbon signal that is likely to be given by an abatement model will necessarily be the answer to a maiden's prayer. If you look at the sort of current cost of energy and international price of oil compared to say the long term predicted average, who knows whether the long term predicted average the oil companies are forecasting is right or not, but I think most would claim that oil is currently trading a long way ahead of their long term predicted average. That's sending a huge carbon signal to the market right now, and I guess we'll see how people react to that over time but - - -

MR RITCHIE: Again I would agree with that point, but what I would say is let's not fix solely on greenhouse or a carbon price. Let's say, all right, what are the price signals, for example, from the regulatory regime that you recommend. What happens when all these low cost poorly performing landfills actually move to minimum standards. That will have a price signal that allows SITA to do certain things, or companies like us, do things in the market. Full life externalities, what is the full life externality of the PET bottle. We don't know that. It's not in any price

signal that's available to us. Currently those externalities, right through the supply chain of that PET bottle, are not embedded in its value.

MR WEICKHARDT: Okay.

MR RITCHIE: The UK commission report says they should be. So it's not just a greenhouse climate carbon price, there's a whole suite of things that you touch on in your report that if we're going to replace that suite of policies we need to see the suite of policies, whether that's carbon price, enforcement, regulatory provisions, whole of life externality pricing et cetera, resource depletion, and we can have a debate about whether there's a real signal there or not, but all of that needs to be priced so that a company like SITA or the industry per se can make appropriate decisions.

MR WEICKHARDT: Okay. Let me turn to the issue you've just raised and you've spoken about in your introduction and in your submission, and that is the lack of enforcement around landfills. Why is it that you think governments have been lax in this area and what is it - I mean, we can, you know, sort of put in block letters in our report that enforcement is important - - -

MR RITCHIE: Yes, please do.

MR WEICKHARDT: --- but we thought we'd made the point already. What's going to change the picture here? What are the obstacles to it being changed now?

MR RITCHIE: There's a number, resources obviously, and money. It's got to be a priority for government, and EPAs tend to have been less significant players in terms of the budgeting process, that's issue number 1. Issue number 2 is there's a lot of politics around enforcement, particularly where some landfills are in the private sector, some landfills are in the public sector, and governments have made some distinctions around some of those issues, and the third, I guess, is scale. EPAs have tended to allocate their resources to the big landfill operators and tend to ignore the small operators. There is some logic to that. Most putrescible waste tonnes go into big metropolitan landfills, that's a fair position, but to then say, well, any landfill, for example, in New South Wales, less than 30,000 tonnes falls under a different regulatory environment to me is false logic.

If that landfill is going to have an environmental impact, whether that's local or regional, it should be subject to the same regulatory standards. It should not leach into the local water course, it should have litter controls, it should have a weighbridge so that we collect data on resource recovery and recycling and waste disposal. It should know what wastes are going into that landfill, you know, whether it's two barrels of DDT or 200 barrels of DDT, you know, that's the scale issue that's been considered by EPAs. So they would be the three summary issues I would think.

MR WEICKHARDT: You're suggesting that in terms of the regulations there are sort of issues around scale, but you also mention that apart from Victoria nobody else has post-closure provisions in their - - -

MR RITCHIE: That's my belief. In the discussions I've had through my role in the association, we've started exploring some of these issues, in large part facilitated by some of your commentary, so useful in that regard. There is a landfill audit under way at the moment, being done by the National Landfill Division and I'm sure you'll get some presentations from them, and that is starting to show the kind of levels of performance or operating standards of the different landfills. But in terms of the regulatory regime, just to answer that question, as far as I know it's only Victoria. Having said that, some councils and some private companies do it anyway because it's good practice.

MR WEICKHARDT: Okay. It would be very useful if we get data from whatever source on that area, so if you have any influence on that, if that can be fed to us before we get to the sort of stage of putting our pens down that would be very helpful.

MR RITCHIE: I'll certainly talk to the National Landfill Division and see what they've got now.

MR WEICKHARDT: Okay, thank you very much indeed. Now, the other issue you mention was about greenhouse gas capture. You raise the question about the 90 per cent level we quoted. I'm pretty sure from memory that that 90 per cent figure doesn't assume you capture 90 per cent of the gases - - -

MR RITCHIE: No, it doesn't.

MR WEICKHARDT: I assume something like 55 per cent capture - - -

MR RITCHIE: That's right.

MR WEICKHARDT: --- which we were told was best practice, but it takes into account the CO₂ equivalent level and also the offset of capturing that energy and utilising that rather than burning a fossil fuel, so we're not certainly imagining you can capture 90 per cent of gases.

MR RITCHIE: No, understood.

MR WEICKHARDT: But you sort of talked about the fact that we should make some recommendations about capture from landfills. Now, we made that general comment about a national greenhouse policy and not a waste specific policy because we feel that's the way you get lowest cost abatement nationally, but we're told that

some gas capture systems are installed for reasons other than necessarily greenhouse gas, for odour abatement, for safety and issues of that sort. Do you have any comment in those area?

MR RITCHIE: I'm certainly not an expert on landfill operations and hopefully you'll get some people or I can certainly send you further advice on it but, yes, I mean, all of SITA's landfills have gas extraction systems. I guess one of the comments about the 90 per cent, and I agree with you, you know, your report says 55 per cent then plus an offset value when that gas is used for energy generation. The point we would make is that most landfills in Australia don't generate electricity from their gas. A lot of it is flared, certainly in the smaller things, so counting that as an energy offset is over optimistic. Again, the landfill audit will start to give you some numbers around that, about how many landfills actually do have gas capture and then subsequently how many of those are using those for energy generation and offsets.

But certainly gas is extracted from landfills for occupational health and safety. It's extracted because of odour so, yes, we would agree with those points. The real question is how much of that gas is then turned into energy offsets and I think you'll find the number is actually quite small. When I say that, small in terms of landfills. I don't know what percentage it is of total waste tonnes or putrescible tonnes, and that's the really interesting question.

MR WEICKHARDT: Okay, thank you. You make some comments on page 17 about the federal department responsible for waste and measures refused permission for weight-based charging for waste disposal and, in fact, we've got the City of Ryde presenting later this morning, and they in their submission talk about the fact they've fitted chips to their bins which will allow a weight-based charging mechanism, but you seem to be suggesting there is actually a legislative or regulation sort of impediment to moving to weight-based charging.

MR RITCHIE: That's right. Yes, certain councils have moved towards getting chips in their bins. Certainly the technology exists for the arms of both side-lift trucks, but also all front-lift trucks, for example SITA's front-lift fleet has weight-based scales on our front-lift fleet and a number of other major companies also have that capacity. The question then becomes, yes, we can measure the weight, but can we price and charge on that weight, and at the moment the answer is no.

MR WEICKHARDT: What is the regulatory impediment?

MR RITCHIE: I don't know the detail. My anecdotal understanding is that it's about the accuracy of the scales and the ability to get within torrs to price.

MR WEICKHARDT: This is a federal ---

MR RITCHIE: As far as I understand it, yes. Now, we obviously use weights to optimise our customer service, so it's a useful thing to do in terms of improving the efficiency of our vehicle fleet and our customer service, but at the moment we don't price on it. Pricing is all around volume, as I'm sure you're aware, and your draft report talks about volume-based charging for municipal, moving to smaller bins and having a range of pricing scales, that's a direct reflection of the fact that there is no price signal for weight.

MR WEICKHARDT: You talk about the fact that you in the current regulatory regime favour levies because they support recycling, and I think you make the point that, you know, there is a community desire and support for recycling. I guess we have a view that certainly community desire should be taken into account. It's self-evident, but that it should be informed consent and, that is, it should be quite clear to the community what they're paying for and why, and then they are able to make a choice. So I guess we don't have a problem with the community saying, we want to do more recycling, provided it's quite clear to them what the costs and the benefits of that are. Is that, from your point of view, a reasonable proposition?

MR RITCHIE: Yes. We would agree that the community needs to know where it's allocating its resources and it's spending its money. Our view would be that the community has understood that for 15 years, that it understands broadly that recycling costs money. It understands broadly that what it pays for the cost of waste disposal. Each person and each household receives their rates notice and on most rate notices now days it has a general waste charge for their domestic waste.

Our view would be that the community is reasonably well informed. More information can always assist but we would argue that the community has spoken loud and long that it supports recycling; that even if you could take \$10 a week or \$10 a year off a rates notice residents probably would not vote for that and the community has voted year in, year out to support governments and parties that have said, "Yes, we will introduce, first of all kerbside recycling, then at kerb drop-off, and then more recently green waste recycling and now alternative waste treatment technologies," and communities have spoken long and loud about that.

The recent survey that we provided to you in the Taverner report again went out and surveyed willingness to pay for alternative waste treatment technologies and again that supported a long history of willingness to pay. The difficulty they have is that they can't go and buy, you know, \$3 worth of recycling activity. There is no commodity that they can go and purchase and then demonstrate their willingness to pay for inquiries such as your own.

MR WEICKHARDT: No, I understand that difficulty, and I understand the difficulty of making some of the costs and the benefit transparent to the community.

It's hard enough for people who invest a fair bit of time to unravel what all the costs and all the benefits are. You go through these total life cycle analyses and then to make them clear to the community, but there is a concern that we have, there's a certain circularity of argument here, that governments sort of say, "Recycling is good for you. That's why we're supporting it." And then they say, "And the community love recycling and they want us to do more of it."

MR RITCHIE: Yes.

MR WEICKHARDT: I'm sure if you polled most of the community at the moment they would say, "We like recycling because we think it is actually adding to sustainability and it's good for environmental reasons." The issue we have is that there's some evidence saying that some of that recycling is and some of it may not be. It's really trying to make it more, I guess, transparent to the community and hopefully to the industry itself.

MR RITCHIE: I totally agree with that. If we can make all of the costs and benefits of recycling transparent we should, and certainly the state EPAs and the federal government would have presented to you saying that they did a cost benefit analyses on recycling and on their whole waste strategies prior to developing their current policy positions but certainly SITA would agree with your broad recommendation that all of the costs and benefits should be on the table. I wouldn't have a disagreement with that at all. Where we would see more work being done is that conversation we had earlier about, "Well, are we looking at all the costs and benefits," and when you make an assumption that some recycling is good and some recycling perhaps is not, that's predicated on some of the assumptions that we have previously talked about, about, "Are all the full costs being reflected in the value, risk and benefit of that recycling activity," and we're not sure that they are.

MR WEICKHARDT: Can I just clarify a specific sentence in your submission. On the top of page 9, if you have got it with you, the second paragraph there, you say:

SITA supports the introduction of broad targets such as New South Wales targets which reflect more optimal levels of recycling.

MR RITCHIE: Yes.

MR WEICKHARDT: Now, I guess I'm not sure how you determine that they are more optimal or not but leave that point aside it's the next sentence that I want to really get to:

If true costs of resource depletion, environmental externalities and social will - - -

MR RITCHIE: Yes.

MR WEICKHARDT: What is the social will?

MR RITCHIE: Willingness to pay.

MR WEICKHARDT: All right.

MR RITCHIE: Social desire. Demand. Unreflected demand that has no price

signal.

MR WEICKHARDT: A community sort of willingness to pay.

MR RITCHIE: Yes.

MR WEICKHARDT: All right.

MR RITCHIE: An uncaptured willingness to pay and a demand that has no price.

MR WEICKHARDT: All right.

MR RITCHIE: I guess the other point, just to go back to your question about, "What is the optimum levels or recycling?" That's a reflection on the sentence that goes before it where SITA says that:

SITA agrees zero waste targets are currently unachievable and will potentially distort the market as laws of diminishing returns pushes up costs.

We would say that 100 per cent resource diversion is suboptimal. I mean, it's self-evident given our current technologies and therefore, for example, the New South Wales targets which are around the 64 and 65 per cent are by definition more optimal than 100 per cent which is clearly suboptimal.

MR WEICKHARDT: Yes.

MR RITCHIE: And given that we are somewhere around 40 to 60 per cent for most commodity streams a 64 to 65 per cent target is a smaller stretch and one that doesn't stretch the bounds of technology and price as a zero waste target would clearly do given our current technologies, so we see those zero waste targets as being aspirational, useful in that regard, but aspirational clearly in terms of policy decision-making.

MR WEICKHARDT: On page 13 you make a case for the retention of waste

Waste 26/7/06 843 M. RITCHIE

levies because they provide a source of funding for EPAs to strengthen their enforcement capability.

MR RITCHIE: Yes.

MR WEICKHARDT: I mean, do any of the levies actually get used that way to your knowledge?

MR RITCHIE: Yes. In fact the New South Wales levy contribution through the city and country fund, the recent announced program that is totally funded by the waste levy has doubled the amount of enforcement contribution to the EPA and we see that as a direct benefit of having waste levies; is that governments now have another source of funds. We would argue that it should be 100 per cent hypothecated back to delivery of their waste strategies. Governments obviously have other priorities but we at SITA support complete hypothecation. While there isn't complete hypothecation at the moment in New South Wales and in every state -sorry, WA, as I understand it, is 100 per cent hypothecated. Certainly in New South Wales there has been a flow back of much of the new moneys towards environment programs, one of which has been an increased enforcement provision.

MR WEICKHARDT: But enforcement theoretically could be provided from consolidated revenue.

MR RITCHIE: Absolutely. That's a question of government priority which was the first point that I made when we discussed it earlier.

MR WEICKHARDT: You make a comment below that on page 13:

SITA would refer the PC to the USA Waste Management Association to examine what the waste sector in the USA has done in relation to managing its CO₂ emissions.

MR RITCHIE: Yes.

MR WEICKHARDT: Can you just elaborate a little bit?

MR RITCHIE: Yes. The Waste Management Association in the US has put together a policy statement on its contribution to US greenhouse gas emissions. From memory it represents about 6 to 8 per cent of total CO₂ emissions in the US and has then put in place a whole policy statement around how it will reduce its CO₂ contributions, particularly in relation to methane gas extraction, location of landfills, the operation of landfills et cetera, so it's a statement of policy and principle by the Waste Management Association. It's quite instructive for the Australian branch and we certainly discussed it recently at some of our executive meetings that we as an

association need to develop a more proactive stance on our contribution to CO_2 emissions. We would like to do that in the context of a national policy but we will do it anyway just to inform our members.

MR WEICKHARDT: Right. In the USA this is sort of a voluntary code of conduct, is it?

MR RITCHIE: To my understanding, yes.

MR WEICKHARDT: Right.

MR RITCHIE: By the peak bodies so, you know, there are obviously always some issues around the level of traction that has with individual members but as a statement of public policy they're saying they're going to deal with their CO₂ emissions.

MR WEICKHARDT: Thank you. This may not be the highest order of importance in your submission but you ask that we recommend about standard bin colours in the Australian Standards Board Draft Proposal. What is the big issue here? Is it aesthetic or - - -

MR RITCHIE: No. It's commonality. It's user friendliness. It's the old issue about people in different suburbs move to different locations; different bin, different colour, different system. The Australian Standards Board has tried to pull together a common standard for colours for bins so that no matter what business you're in or where you are they, a commingled container bin is green with a yellow lid so everybody knows what it is. Paper is blue et cetera.

MR WEICKHARDT: All right. You make a comment about the Basel Convention and you say that:

SITA could recycle batteries and electronics more easily if it did not have to comply with the administrative burden of Basel.

Can you just outline what the administrative burden or time delays is because it has been put to us by the federal government departments that they think that this is working reasonably smoothly now.

MR RITCHIE: Yes. Look, that sentence that you read, if you could refer me to the page, is prefaced by a sentence before it.

MR WEICKHARDT: Page 22.

MR RITCHIE: It says, "Yes, but only from an administration cost point of view."

Waste 26/7/06 845 M. RITCHIE

It's not a significant impediment. It just means you have another set of hurdles. When you come to look at a proposal for battery recycle or electronics exporting you then say, "Right. We now have to work out the business case but then also there is the risk of whether we can or cannot get Basel approval." Now, to date we have always done that through a subcontracting company that already has Basel authorisation.

MR WEICKHARDT: Right.

MR RITCHIE: So in a sense it has not been a significant burden to us because we have gone into the marketplace and found someone who has that authorisation. For SITA to do it itself we would need to then go through the administrative hurdles of seeking Basel approval. It's not a significant issue in the scheme of things.

MR WEICKHARDT: All right. Thank you very much indeed. I think that has got to the end of my questions. If you're happy to change hats we'll adjourn very briefly and then we'll resume with the WMAA New South Wales branch.

MR RITCHIE: Thank you very much.

MR WEICKHARDT: Our next participant is the WMAA New South Wales branch. If you could please give your name and your capacity in which you appear.

MR RITCHIE: My name is Mike Ritchie. I'm the New South Wales president of the Waste Management Association. I'm here today representing the New South Wales branch of the Waste Management Association and I'm joined by Matthew Warnken who is a member of the association. Matthew, you might want to - - -

MR WARNKEN: I'm Matthew Warnken. I'm a consultant with Warnken Industrial and Social Ecology but here obviously helping out with the New South Wales branch - their submission.

MR RITCHIE: Matthew was engaged by the New South Wales committee, the executive committee, to draft a paper which then went through significant consultation with our members and is then put through the New South Wales executive.

MR WEICKHARDT: Thank you. We again assume I have read this but, please, if you would like to make some introductory comments.

MR RITCHIE: Yes. Thank you again. The process that I briefly outlined for the New South Wales Waste Management Association as - to use the loose term a broad church - has gone through a fairly extensive process. It is not always easy to get a consensus position through an organisation that reflects such a wide membership base. Having said that, this is a consensus view that has been put to all of our committee members and is an agreed statement so therefore it has been useful in its own right in terms of consolidating the thought processes of our membership and providing the stepping stone for further policy development by our own association, so in that regard the Productivity Commission has stimulated some very useful discussions.

In relation to some specific commentary on the draft report, I guess without repeating some of the comments I made as a representative of SITA, the Waste Management Association would seek further forecasting and modelling in consideration of the draft impacts of the draft commission report. This paper attempts to scope out some of those potential impacts upon the current resource recovery, recycling and landfill industry across Australia. It does that by looking at four of the recommendations in the draft report and addressing what the potential commercial impacts of those might be.

To summarise those, and we can have further discussion about it later, the draft summary assuming some reduction in recycling of some commodities by 90 per cent and other commodities by 30 per cent depending on whether they are robust in terms

of their price and depending on whether the price signals are robust and depending on whether they are supported more or less by the current regulatory and policy regimes, removing those policies will have an impact upon their recyclability.

Some we have assumed have a 30 per cent reduction in recyclability, some we have assumed 90 per cent and then we have cast that through our very preliminary model and come up with some what we believe are scoping impacts, they're not by any means definitive, and in summary they are the loss of about 7.6 million tonnes of recycled materials, about \$400 million worth of commodity sales, about 5600 jobs, and about 191 million in landfill levy funds, would be lost to the Australian economy if the current draft recommendations were implemented in the absence of any supplementary alternative policy positions and statements from the commission which we would look forward to seeing in the final report.

The paper goes on to say that the New South Wales branch of the Waste Management Association supports a range of current policy instruments. I will just quickly summarise those. The branch supports the waste hierarchy. It strongly supports the commission's recommendation that the full cost and benefit be evaluated in developing any public policy, whether that's waste or recycling, and you have certainly shone a light on some issues around the full cost and benefits being fully evaluated at the original policy-making stage.

In particular the committee reflected upon the original decision of the federal government to introduce the 50 per cent waste reduction target, I think it was 1991 from memory, and whether that had attached to it the full cost benefit analysis that you are recommending and we would agree that if it didn't it should have and all subsequent state government policy frameworks should have similarly had accompanying cost benefit analyses because the industry and the community have moved on the basis of those federal and state policies to adopt a range of programs, implementation funding, capital et cetera, to deliver those policy objectives.

We recognise the legitimacy of resource recovery and waste minimisation as public policy statements and believe that governments have a right to say, "We want to achieve an X per cent reduction in waste to landfill as a statement of public policy." We recognise that waste recycling and treatment can lead to lower greenhouse gas production. We strongly support the use of landfill regulation to raise operating standards of current landfills and would make a distinction between the poorly run landfills and the good performing landfills and we would encourage all EPAs to direct their attention towards the poorly performing landfills and recognise that there are a number of well run professionally operated landfills in Australia that are meeting higher levels of standards.

MR WEICKHARDT: Mike, can I just clarify in that sense, you mentioned the association is a broad church. What percentage of New South Wales landfills would

be members of your association?

MR RITCHIE: Of landfill companies, landfill operating companies?

MR WEICKHARDT: Of landfills themselves.

MR RITCHIE: Of the number?

MR WEICKHARDT: Yes. I mean, would your members represent 90 per cent of all the landfill - - -

MR RITCHIE: I would have said, yes, 80 to 90 per cent, I would have thought as an off the top-of-the-head number.

MR WEICKHARDT: So they're all saying, "Yes, we want more enforcement, and we believe that, you know, sort of we should comply," and yet you're saying only 30 per cent do so - - -

MR RITCHIE: I'm not saying that. I'm saying there are other studies in the marketplace that are showing that the level of compliance with the minimum standard specified in your document, the question of whether they're conforming to their current regulatory licence is another question entirely. That's a question to direct to the EPA. Whether regulatory licence reflects the kind of minimum standards that you have put in your draft report is the question that this is trying to deal with.

MR WEICKHARDT: But your members are saying, "We think compliance with those sort of minimum standards would be a good thing"?

MR RITCHIE: Broad church, yes.

MR WEICKHARDT: And yet we have got the situation where, at the moment, not everyone is complying so it's a bit of a conundrum. In some senses you're not apparently in SITA - if I put your hat on in that capacity - you're not relying necessarily on regulatory requirements to comply. You're doing it because you think it's the right thing to do.

MR RITCHIE: Yes.

MR WEICKHARDT: So to a degree your association might have a useful role in acting as a conscience for some of your members in terms of industry reputation and sort of societal sort of reputation issue.

MR RITCHIE: Agreed. I think the Productivity Commission draft report, as I

mentioned earlier, has stimulated considerable debate around some of these issues and as I mentioned previously there is a landfill audit taking place at the moment by the landfill division and there has been preliminary discussions about the development of a landfill policy by the Waste Management Association and there are certainly some draft words circulating among some key stakeholders. It's not a broad group yet, it's in its preliminary phase, but it is an attempt to acknowledge some of these points that I'm making here that if we don't have minimum standards and they're not enforced then poorly operated landfills can out compete the well-run ones. There's a cost disadvantage in being a performer of both excellence and even minimum standards. If someone can operate it below that again then you have a biased market and a distorted market.

MR WEICKHARDT: Yes, but I assume that your association probably has the right to name, shame and expel members who don't comply with your association's sort of commitments in these regards.

MR RITCHIE: That might happen at some point in the future but until the association develops an agreed policy statement on landfill or on any number of these matters then that flow-on process would be completely inappropriate because we don't have a current minimum standard for the operation of a landfill. In fact there isn't one Australia-wide and that's part of what this discussion is about. You have named four. This submission here names six minimum standards and we can come to those in a minute and what is the appropriate balance of some of those issues and to what extent is one a higher order priority than others. These are some of the discussions we need to have and certainly the New South Wales branch will continue that process of trying to articulate a common agreement on what a landfill is and how it should be operated.

So just to quickly finish some of the broad points of agreement in our submission amongst our members, the New South Wales branch recognises the value of market-based instruments in delivering better resource recovery outcomes. It supports the conclusion that well-run landfills are relatively benign as regards to the immediate environment. It believes that most landfills do not conform to the Productivity Commission minimum guidelines and certainly do not incorporate gas capture, there is already some evidence in some of the submissions on that, and it would support the need for improved data collection.

It would support your comments in relation to the need to remove barriers to the export of recyclables and in relation to New South Wales, and we can only comment on the New South Wales government's activities, it supports the New South Wales state policy on waste avoidance and resource recovery; albeit we acknowledge there are significant deficiencies in that framework, particularly around the approval facilitating and encouragement of new infrastructure to deliver their targets. Now, we can have a debate about whether targets is appropriate but in terms

of the planning framework the New South Wales Waste Management Association would say, "We need to seriously fix flaws in the planning instruments in New South Wales," and that general comment applies nationally, that is, it is exceptionally difficult to get new waste infrastructure approved virtually anywhere in Australia.

A number of our members have reflected upon your comment that well-run landfills, that we should be erring towards well-run large landfills, and while we might debate the merits of that in terms of the public policy, one of the comments back has consistently been, "How would you ever get one approved?" The commission report does not tackle that issue of planning approvals as well as many of our members would like and some of the impediments to delivering resource recovery infrastructure, alternative technology infrastructure, landfill information, are exceptionally difficult in the planning regimes of just about every state government.

MR WEICKHARDT: Is New South Wales typical or - - -

MR RITCHIE: Yes, New South Wales is typical and you have seen a re-allocation of planning responsibilities in different states. Some have amalgamated local council decision-making like you have recommended. Some have left it at the local level. Others have got call-in instruments that allow the state to call in major facilities. New South Wales has just changed its planning laws to allow that to happen. That, we believe, will hopefully change some of that inertia that is in New South Wales. The extent to which the state government will call in waste infrastructure though is not yet known and it should not have to be.

I mean, we should be able to get waste infrastructure built through normal planning mechanisms rather than having to go to the state minister for a call-in and that applies everywhere. I mean, we really need some frameworks for waste planning; for waste zones where it's a permissible use; tonnages where it's a permissible use; and that we don't necessarily have to go through the kind of hurdles with local government that we have at the moment.

The other issues dealt with in our submission, we listed off the main points of what we believe are minimum standards for putrescible waste landfill should be. You mention four in your report, we would name six: gas capture efficiency, demonstrated rapid stabilisation of putrescible waste, fully engineered leach out collection and management, fully engineered liner system, significant landfill buffer zone and a demonstrated host community engagement, we would say are minimum standards for operation.

We would also add to that, that all landfills should have weighbridges and we didn't name that as one of the six but, you know, it's common sense that if we're going to measure and collect data on landfills that we need to have good data

collection systems and a weighbridge is absolutely fundamental to good data collection. We in the industry have been very frustrated with the EPAs and not being able to provide good and accurate and up-to-date information on the waste industry. Usually it's two to three years out of date, two to three years old, and usually it's based on surveys of local councils, many of which do not have weighbridges. So they're guesstimates rather than accurate data.

Our point on landfill levies, you make the point that landfill levies should capture externalities and we would agree with that, that if you're going to have a landfill levy it should at a minimum capture the externalities. We argue and the New South Wales government has argued and the Waste Management Association has recognised that there are a number of other reasons for introducing a landfill levy, one of which is a statement of public policy, one of which is to change the market economics between one technology type and another, and the third is to raise funds for the delivery of waste management strategies, policy and infrastructure. Different state governments in Australia have used different ones of those.

But the starting position where we would agree with you is that landfill levies as a minimum should capture the externalities, and if I could just finish the point, as a consequence of that, there is an argument for a differential levy reflecting the performance standard of the landfill. So well-run landfills lower levy than poorly run landfills to try again to capture some of that environment impact.

MR WEICKHARDT: Okay. Just to clarify our point, I think we considered all those issues that you've raised and our conclusion was that we didn't like any of them really. If you were going to have a levy to capture externalities we understood that, but our preference was in the case of almost all these areas that it would be better to have regulation to enforce and therefore internalise the externality rather than simply say to the community, "Don't you worry about this guy, he's got a whole lot of leachate that's polluting your waterway but we're charging him for it." We felt it was far better to have the externality internalised by good regulation.

MR RITCHIE: As a starting position we would agree with that.

MR WEICKHARDT: Okay.

MR RITCHIE: Where we would say is if you're going to have a levy that is attempting to capture some of those other externality, like CO₂ emissions which perhaps are not in the regulatory regime, that obviously a landfill with a gas capture extraction and an energy generation capacity and contributing back to the grid would necessarily have lower emissions, therefore should potentially have a lower levy contribution. That's an argument made by again some of our more significant landfill operations that have invested multi millions in best practice landfill operations, paying the same levy contribution as perhaps some poorly run landfill

that perhaps, you know, has more significant environmental impacts. I think that's a brief walk through. I'm happy to take questions.

MR WEICKHARDT: Okay. Thank you very much indeed. Can I go back to this issue of resource efficiency because under methodology you cite on my pages which aren't numbered, but a sort of method that the EU have used to look at a whole range of resource efficiency indices. As I understand it, all of these are measured in tonnes, they are all weight measures, and I'm not quite sure what you actually do with these. What do you conclude from them, and is our concern that, in fact, when you've measured these that you might well end up improving some of them but at the expense of net community benefit.

MR RITCHIE: I'll let Mathew answer the specifics, but it comes back to the discussion we had earlier, as long as you're measuring and embedding all of the real costs, it doesn't really matter what specific tool you use, as long as you're capturing all of the external costs and benefits then the cost benefit analysis should be robust. Our argument has always been that many of those external costs are not being adequately captured in the current pricing regime. Mathew, do you want to comment on the specifics?

MR WARNKEN: Yes. So I think, commissioner, the good thing about looking at tonnes is it gives a different view of the performance of the economy. So just like, you know, GDP has generally been recognised as having the highest GDP per capita is one measurement of an economy's function, but I think the states has the highest GDP per capita but it also has the highest obesity rate on a per capita basis. So I think there's a general understanding that just looking at say economic efficiency won't give you another picture on another measurement of the functioning of that economy. So again on a first order basis it would seem that if you could get the same level of GDP, I think we're a trillion dollar economy now, so if we would get that same level of GDP with half the material inputs, on a first order basis that would seem to be an overall benefit because we're using less material inputs.

So I think the issue of measuring on tonnes is to be able to, you know, gain that picture of performance on another series of metrics that can then inform policy and decision making. Sure, you know, a tonne of platinum isn't the same as a tonne of bricks, but if we're not measuring any kind of tonnes of performance in terms of total materials in, total materials out, you've got no ability to gauge how our resource consumption per unit of GDP is functioning. Again there's a growing body of work that suggests that as we're moving forward and looking to try and achieve a more sustainable society, what we're in fact trying to do is improve value and we want to reduce impacts, and one of the ways that we can reduce impacts is doing more with less, getting greater functionality out of the unit input, and I think that's the value of recycling obviously, if it can go round the economy one more time you essentially get double the functionality for the same unit tonne input, giving or take obviously

energy balances and other things.

So that would seem to be, on the face of it, to be a very important metric to consider in this whole question of waste generation and resource efficiency. So tonnes matters. I don't see any reading of economic efficiency where you can gain that level of understanding as to, well, hold on, how many tonnes are we actually using to get this level of economic output.

MR WEICKHARDT: The difficulty I have with that is what policy lever does a policy maker pull when they have this measure of tonnes, and how do they know they're not doing that at the expense of GDP. It might very well be interesting to look at after the event and saying, "Well, isn't that interesting, economy x has, you know, a higher GDP per capita and has less material intensity," interesting, but what does a policy maker do about it?

MR WARNKEN: Are you asking the association's view?

MR WEICKHARDT: Well, you're suggesting that this is a good measure and I'm suggesting - - -

MR WARNKEN: I mean to say I'm suggesting it's an important measure and like there's levels of complexity. I mean, everyone agrees that we're not dealing with simple things, but this doesn't mean that we should, you know, step back from engaging with that complexity. I think it's an important measure so we're able to understand, you know, what those tonne inputs are, and if you're not measuring that, if you're not considering what our actual materials intensity per unit of GDP output is, you know, how can we even address that question of whether it is a net social good to reduce material intensity.

Again, this seems to be a growing consensus amongst NGOs amongst a lot of reports coming out of Europe, that reducing materials intensity is a fundamental principle of moving to a more sustainable society. There also seem to be a number of flow-on benefits in terms of innovation, new technology, moving to a server sizing economy, all of which is economic upside for actually addressing this. You're asking what policy lever do you pull? Surely actually looking and trying to measure that level of material in terms of getting agreement as to do we actually want to reduce material intensity, so if we set that as a policy goal and we get agreement and say yes, we think we should be reducing materials intensity across Australia, then we look at what contribution does recycling make to reducing materials intensity. Then the equation changes slightly and says, well, what's the most economically efficient way to reduce materials intensity because we've agreed on that as where we are as a society want to head.

MR RITCHIE: I guess I would ask the follow-up question to that, are you

questioning the statement that reducing materials intensity has a significant or is a potential contributor to sustainability and, if so, I'd direct you to the cabinet office inquiry again in the UK which looked at specifically that issue and said reducing materials intensity per unit of GDP output is a significant determinant of the UK economy's sustainability and, yes, you know, it's worth asking the question, is materials intensity per unit GDP a measure, but if it is then, yes, tonnes is obviously one indicator.

MR WEICKHARDT: In simple terms doing more for less has got to make sense. The point I suppose I'm driving at is that when you have these measures I don't think they help a policy maker or a manufacturer having a look at the number of tonnes concerned actually drive the way they optimise their business. I don't think many businesses look at the stuff going across the weighbridge and say, "Yesterday, you know, we sort of had more tonnes in versus more tonnes out." What they look at is dollar values in and dollar values out, and they equate that to a value added per employee or a profit per employee or whatever.

MR RITCHIE: I'm not sure that I would agree with that. I think at a national scale you want to know what your unit of efficiency is, whether that's, you know, per tonne contribution to GDP output, but certainly at a commercial scale the companies I deal with on a day-to-day basis, they want to know how many tonnes went out and what form those tonnes were, whether that's tonnes of plastic, tonnes of paper, tonnes of PET or tonnes of general waste, because each has a different market price which then directly affects their bottom line.

So tonnes at the company scale are incredibly important. They measure them, and the level of sophistication of information that companies want in terms of tonnes is growing expedientially. Five years ago they didn't need it, they wanted an invoice. Now they want to know what tonne, what material type, what was its contribution to CO_2 emissions, what savings have I made in landfill volume, what savings have I made in water consumption, air emissions - tonnes is the commodity of discussion.

MR WEICKHARDT: If I trivialise the point, if that were true every company in Australia would be buying hydrogen as a fuel rather than coal or gas because that has higher energy per weight than anything else. It's not that that drives a company's purchasing decision on fuel, it's what do I get the maximum megajoules or gigajoules out per dollar of purchase. So weight is, I think, it's in some cases interesting, but it's a poor proxy for measuring economic efficiency.

MR RITCHIE: It is one measure of economic efficiency. I don't think anybody is arguing that you do, you know, tonnes per unit, GDP output or GDP output per number of tonnes is the only measure of economic efficiency, but it is certainly one measure of resource efficiency and resource use, and far be it to recommend the UK study again, but that's exactly the point they come to is that you need some measures

of net economic efficiency and weight, tonnes waste to landfill is one but there are plenty of others.

MR WEICKHARDT: All right. We've probably laboured that long enough. Let me just raise one other issue before we break. On a page a bit further back where you try to estimate the likely impact on the waste management resource recovery industries, you've quoted a table which shows commodity values for a whole series of potential materials that could be recycled. Can you help me understand how those commodity values are assessed, and how much they depend on the state of those commodities and their location and the degree to which they're either totally disbursed or segregated from other materials.

MR RITCHIE: Do you want to comment on that for starters, then I'll come back.

MR WARNKEN: Yes. The commodity values, the actual dollars per tonne was sourced from numbers that were in the public domain. So the purpose of this and the materials recycled were source separated recycled. So this is not the commodity value of what would be in waste. This was taking the numbers, I think it was the Hyder report as part of the DEH submission which appeared in the draft report as the commission sort of accepted that, that was a snapshot of waste generation, recycling and disposal to landfill.

So those recycling numbers represent source separated materials that, you know, in their individual streams. We then take some numbers that were available in the public domain as an indication of their sale commodity value in order to estimate, you know, the likely value of the sales that recycle it. The purpose of this model is to try and, you know, start to look at what some of the impacts of a policy framework where there's no landfill levies, where there's no waste hierarchy, there's no targets and there's no looking at greenhouse gases as part of waste management.

MR WEICKHARDT: So are you saying those commodity values are commodity values in a pure 100 per cent separated state.

MR WARNKEN: Recycled, yes.

MR RITCHIE: Recycled. So if you take glass, for example, the ACI buy price for glass for source separated coloured is \$72 a tonne. Aluminium, you know, average is \$1500 up to \$1800 a tonne for source separated aluminium in most metro market places. If you ask the question about whether that's the net price payable for a tonne that has got to be moved from Beela wheeler to Sydney, no, it's not, it's the purchase price in our metro centres of Australia.

MR WEICKHARDT: All right, thank you, that's helpful. Thank you very much indeed for your submission, thanks for your appearing at the hearing.

MR RITCHIE: Absolute pleasure, thank you. Thanks for the opportunity.

MR WEICKHARDT: We'll adjourn briefly and then we've got the City of Ryde.

MR WEICKHARDT: Our next participant is the City of Ryde and if you could, please, for the transcript, give your name and the capacity in which you're appearing here.

MR WOODBURY: Yes. Kim Woodbury, I'm the group manager of public works for the City of Ryde.

MR WEICKHARDT: Kim, thank you for your submission and for coming along to the hearings, if you could, please, for the transcript just give a brief introduction to your submission and then we've got some questions.

MR WOODBURY: Our submission predominantly revolves around recommendation 12.2 in relation to effects on local government, and firstly the City of Ryde must say that they're disappointed that community consultation process did not include direct contact with local government, and local government is a key manager of waste across Australia. So we first became aware of the Productivity Commission's work through some recommendations that were listed in the WMAA bulletin or magazine in June or July was the first we became aware of it. So I must just say that to start with.

MR WEICKHARDT: Okay. I'm disappointed by that because first of all our process advertises nationally in all national newspapers. Secondly we contacted all the industry associations and certainly the local government associations and indeed, if my memory serves me correctly, we saw the Canberra local government association that supposedly represents all local governments throughout Australia and made them well aware of this inquiry and asked them to let all their members know. So it's disappointing that those - - -

MR WOODBURY: There's obviously a breakdown in communication somewhere along the line.

MR WEICKHARDT: --- endeavours didn't get through.

MR WOODBURY: Okay. So I thought we should just make that point because our submission was fairly kind of just before the closing date. So as I mentioned we've concentrated our submission predominantly around 12.2 which basically recommends that state and territory governments should consider shifting responsibility for waste management in large urban centres from local government to appropriate constituted regional bodies. Our position predominantly revolves around a case study using City of Ryde where we believe we've actually produced very good outcomes for the City of Ryde residents, and also the actual evidence that we've got basically says that the assumption or assertion that there's always economies of scale as you get bigger and bigger doesn't always apply.

The case study we had, we've found diseconomies of scale in that particular instance. It's only one sample, as you'd be aware from reading the submission, but we've achieved disposal rates of 34 per cent lower by going out with the City of Ryde with a well managed tender process stating specifically what we want for that particular area - 34 per cent lower disposal fees than a combined region of councils that went out - you know, City of Ryde has got a population of about just over 100,000 people, and the NSROC group of councils, northern Sydney group of councils of approximately half a million people. We believe that was through the actual tender process that we followed. Also our collection prices per unit rate compared to our previous contract were actually lower as well. We actually included more services so there were actually some additional costs, but when you compare apples with apples on the unit rates we actually achieved a good outcome.

That also reflects - there were some assertions about ability to get quality staff in local government. I believe that comment is not reflective right across local government. It probably reflects local governments that are under resourced by the nature of that particular council and there probably are issues, and certainly in regional areas getting quality staff or any quality professionals is always an issue, and for smaller councils it may also be an issue, but I think it's more so a case of the actual reform of local government because I think you'll find where resources are less than desirable, let's say, or there's a shortage of staff or ability to get quality staff, that reflects similarly across other services that council provides such as maintenance of infrastructure, asset management, so it wouldn't be isolated purely to those ones there. So I think the assertions certainly that were recorded in the Productivity Commission report are fairly general and in many cases are - well, certainly in our instance, those assertions are not backed up by what we've actually achieved.

Just a couple of other comments as I mentioned about fewer transaction costs because of one organisation or a larger organisation. The transaction cost in collection and disposal of waste are fairly low. So if you're looking to reduce your transaction costs you're talking about a fairly low percentage reduction possibilities if you're arguing economies of scale. The other thing you've got to - - -

MR WEICKHARDT: Yes, sorry to interrupt, but can you just clarify, Kim, do you have your own landfills in the City of Ryde?

MR WOODBURY: No, we don't, sir, and generally across Sydney councils don't have landfills. It's mainly regional centres.

MR WEICKHARDT: Is the City of Ryde proposing to put a landfill under their operation, because if you followed your logic you'd say you could do that at a much lower cost and it would be much more efficient than using some centralised landfill.

MR WOODBURY: No. The City of Ryde's argument is about waste management.

There's plenty of providers, whether that's internal or external you've got the choice, and we go external because that is the best deal that we can currently get.

MR WEICKHARDT: So your comments are really around waste collection, are they?

MR WOODBURY: No. One of the things just in the productivity report which wasn't clear is whether the Productivity Commission believes that management of waste collection and management of waste disposal should be integrated and under the one authority as far as the client is concerned. City of Ryde believes strongly that that needs to be the case because if you're looking at any waste education programs and overall waste management, if you're looking to increase recycling and reduce waste to the landfill, it's best to have that encompassed under the one umbrella, otherwise basically the drivers for waste disposal is to increase waste disposal, whereas basically the drivers for local councils would be to reduce cost but also achieve environment outcomes. That's basically so we've got a number of drivers in relation to that.

So reduction of disposal costs is driven both by the unit rate for disposal, but also by reducing the amount that goes to landfill, consequently increasing recycling or encouraging less packaging and consumption which is generally outside the realm of local government apart from basically just waste education.

MR WEICKHARDT: Okay.

MR WOODBURY: Sorry, if you like, unless you've got a question there I can just go on for a few other ones and just complete up.

MR WEICKHARDT: Okay.

MR WOODBURY: So I've covered the lower unit costs. I've also covered the high level of skills assertion. There was also an assertion that greater certainty to waste management facility operator could be had by giving responsibility to a regional body. Having one client rather than many clients, or having fewer clients than many clients, really doesn't, in my view, impact on the ability of operators to set up landfills or operate landfills within the metropolitan area. There's actually an argument because of the nature of alternate waste technologies, differing views that there are as to and on how they work, how successful they are and how sustainable they actually are.

That's an evolving thing and it has evolved over certainly the last five years there's been a lot of development, there's been a lot of different alternate ways, technologies that have been tried and have failed, and to have fewer clients actually may encourage fewer technologies in relation to those, but the technology often in

relation to disposal are built around the capacity of the site. What appears to be implied logic in one of the assertions in there, that having a regional body would actually improve that somehow or improve the planning process. The planning process is quite separate to waste management. Planning process or the planning instruments are set at the state level. They're already set by the state level. Local governments basically have to comply with those planning regulations.

MR WEICKHARDT: I don't know whether you were here when the previous participants said that the whole area of anyone who is trying to put in any waste disposal or waste sorting facility in virtually every state, and New South Wales is no different, is a nightmare so far as they're concerned, and they pointed a finger well and truly at both local government and state government. They said, 'You try to get a landfill approved and an AWT approved, a MRF approved, anywhere in New South Wales is a nightmare." So how can you say that it's working okay.

MR WOODBURY: No, that's not the point I was making. There certainly are issues in relation to getting approvals for new facilities. That revolves around the current planning regulations, the majority of those are state regulations that councils have to take in determining a development application, also community response, which has to be taken into account in assessment of any development application. But what I'm saying is that the management of waste as a client for the local government which is in relation to this 12.2, that's a totally separate argument to the argument that's been mounted in relation to that one there, it's all totally separate issue.

The issue of allowing further approvals - the current process basically is it can be done under a local development application assessed by councils. There is an appeals process through the land and environment courts. So if councils did not approve something in accordance with the requirements that they are required to take into account in relation to development application, the applicants have got the right to go to land and environment court. If it's above a certain size they can also request the minister to call it in and it's determined by the minister on advice and recommendations from the Department of Planning, a state thing, so they have mechanisms in place there.

I think the real issue that they're saying is it's hard to get it, it's hard to get it in there because of, if you like, what they perceive as red tape, others may perceive as fairly kind of stringent environmental controls to actually do that and take into account community consultation. That's a separate issue and I'm not saying that's perfect, by no means, and I'm not saying all councils are perfect and everything, that's certainly not the argument.

MR WEICKHARDT: Okay. Sorry, have you got other - - -

MR WOODBURY: No, I've pretty much completed.

MR WEICKHARDT: Okay. Thank you for your submission. I guess - there are various things I want to pursue so let me start with one which you haven't mentioned but is of significant interest to me, and that is that you mention that you have experience of fitting chips to your bins.

MR WOODBURY: Yes, we're currently in the process of doing that. Our new waste service started in May and I've got quite a number of bins are already chipped, but it's very much in its infancy, we're at the forefront in relation to this. For our commercial waste now, we've actually got the system actually up and running, so we've got when they pick up a bin it's data logged, that's transferred back via a wireless link basically to a data base, we've got access to the data base from our supplier. So they pick it up, within half an hour we've actually got recorded that that was actually lifted. The weighing device, that's not fully operational at the moment, but we'll actually have the weight of what's being lifted.

MR WEICKHARDT: Is your intention after you have, you know, got this system fully installed and debugged to move to a situation of charging on a weight basis for - - -

MR WOODBURY: Counsel has no policy in relation to that at this stage so I can't really comment on that. The initial intention particularly in relation to recycling and trends, we will be able to see the impacts of trends but also waste education campaigns, what the effects are and how long that effect is so initially that's the process there. To go to a fully, if you like, user pay based on weight or per lift, you know, kind of as far as participation when you put the bins out you pay for it or you don't, council hasn't fully turned it's mind to that but it's certainly got the opportunity to be able to do that once the system is up and running. We believe it will be at the end of the calendar year before we've got the system fully operational.

MR WEICKHARDT: What do you see as the potential advantages and disadvantages of being able to move to that sort of scheme?

MR WOODBURY: Well, if you look at comments from our clients which are our rate payers we get arguments in the - because we've actually changed our system as you've probably read in the submission. In changing the system we do charge for additional bins at the moment, so we do have a discreet, I suppose, jump or quantum jump for user pays so basically if you've got an extra bin or a larger sized bin then you pay more. There has been comment on those basically both ways, some people are saying, "It should be all one because I pay my rates and everybody should have the same opportunity to do whatever," others are basically saying, "It should be a full user pays and if I don't put my bin out or if I don't put as much in my bin I should be paying less."

We get comments back both ways and it would probably be a fifty-fifty split but most of the comments we do get back are people who have an issue with the service or whatever. You know, obviously bin rollouts you get quite a bit of feedback when you're changing systems when they ask, you know, "What is it all about?" and, "What is it for?" It's probably fair to say that politically it's - I suppose "a brave move" is probably the right word - to actually do that because you have to be able to validate the actual lifts if you're going by weight. If you're going just by lift itself it's probably a bit easier but you've always got the thing that if you went to a full user pays domestic waste service that people could then put rubbish in other peoples bins, in the neighbours bins and the neighbours pay for it so it would be fairly problematic.

So for that reason we've just said initially we'll use it as far as tracking of what we've got so we'll actually have - you know, we hope to think we'll have the best quality data of anything going around in Australia hopefully within six months time and we'll also track that in with waste education programs and look at the effects of the waste education programs and see what benefits we're getting from waste education and what sort of areas we should focus those into and hope to get economies there.

MR WEICKHARDT: Now, you mention the charges that you have now put in place for extra bins and different types of bins and clearly there's much higher charge for the general waste bin than the recycling bin. To what degree do those charges reflect the costs of servicing those particular streams of waste or to what degree is there some sort of cross-subsidy between those?

MR WOODBURY: In relation to the additional bins?

MR WEICKHARDT: The additional bins or the different sizes of bins.

MR WOODBURY: Yes. The standard bins basically come under your waste levy that's in your rate so you pay \$172 per year for the full service and you're entitled to, you know, a 140 litre garbage bin, a 240 litre commingle recycling bin and a 240 litre green waste bin so you get that for that. The dollars that are listed there are for additional bins and it's probably fair to say that they strongly discourage use of or requests for an additional garbage bin and they encourage additional recycling bins however it's fair to say that there are not many - with the two 240 litre recycling bins - as in commingled and green waste - there's very little call for those particular ones.

MR WEICKHARDT: But to what degree do those additional charges reflect your costs as opposed to some - - -

MR WOODBURY: They don't reflect the cost.

MR WEICKHARDT: They don't reflect the cost.

MR WOODBURY: No, they don't.

MR WEICKHARDT: So how did you set them?

MR WOODBURY: How did we set them? They're set purely on encouragement and discouragement, encouragement of recycling as opposed to - so if somebody had extra materials that they consumed or waste that they produced we're strongly encouraging that they recycle those and get an extra recycling bin rather than get an extra garbage bin.

MR WEICKHARDT: On what basis do the council make the decision on those sort of levels?

MR WOODBURY: The council has made that decision purely on environmental issues basically.

MR WEICKHARDT: How did they decide what those environmental numbers should be? They don't reflect costs you were saying.

MR WOODBURY: Well, it's an environmental based on encouragement or discouragement so it's looked at what kind of rate would encourage or discourage, it's not looked at externalities as far as environmental - no.

MR WEICKHARDT: Okay. So it's just a sort of gut feel of, "This will be good for you."

MR WOODBURY: That's probably a fairly simplistic way of putting it but it's certainly - the actual rates need to tie in as well, the total of those match in with the existing service so if somebody actually had two properties that would still come back to the \$272 for the standard rate because you have differences. One other thing that I think some people don't appreciate is to go down to a tagging system but not even only that but also to go to a reasonable collection service you need to know a lot of information about properties and councils are best placed with that. We have property databases as we were required to do with all the rate payers and lots within, in our case, the city of Ryde, so we've got all that information. You need to keep those records and council has that as part of its general business so the waste collection side fits in well with the local knowledge that council has in relation to each of the local streets.

The other point I probably should make is that the city of Ryde collection costs are twice the cost of disposal so if you're looking at, you know, savings then the

collection and the management of the collection is critical to the overall thing of that. So the local knowledge of the area is very critical to the thing and what we've found generally is that the major issue with waste when you look at waste management collection and disposal services is that the general public are much more vocal in relation to the quality of service rather than the actual cost of the service. They will complain about the cost of the service but because it's an essential service if you don't have your waste collected and there's not a reasonable response time you will very soon within that day have a major issue, if you've got a marginal increase in costs or a marginal reduction in cost you do get comment back but nowhere near the extent of the quality of service and that's one of our major concerns.

MR WEICKHARDT: I take your point that local knowledge is important in this area but it's probably important in terms of delivering your post too and Australia Post do seem to do a reasonable job of that so I'm not sure that that necessarily mandates how the organisation is configured. One other issue about charges that has been put to us, you will have seen in our draft report that we suggested that there needed to be better compliance with some of the landfill disposal regulations than existed at the moment and it's been put to us in the past by some people that a factor that inhibited councils from actually improving the performance of some of their waste management processes - and this is perhaps particularly relevant in rural areas - - -

MR WOODBURY: I've worked in rural areas, by the way, for local government.

MR WEICKHARDT: Okay. But they noted that an inhibiting factor was that the state government had a cap on the rate at which they could increase their charges for waste disposal and - - -

MR WOODBURY: That comment is incorrect. The waste levy is independent of rate capping.

MR WEICKHARDT: Is it?

MR WOODBURY: Yes. It needs to go to the minister but councils have very broad latitude in New South Wales, other states don't have rate capping so I find that very hard to believe. The other thing in the comment - by the way, the city of Ryde would fully support your 12.1 recommendation put it implies that there is cost shifting currently within landfills. In New South Wales the Local Government Act basically excludes that from happening and auditors check off the books every year in relation to particularly that particularly for rural councils. Waste, water and waste water are specifically legislated that they cannot cost shift those things because they have to run as a business to themselves - domestic waste that is, domestic waste management.

MR WEICKHARDT: So, sorry, just can I clarify this point about the waste levy? You say it's independent of rate capping but an increase in the waste levy itself has to go to the minister.

MR WOODBURY: Yes, the minister is always advised of all the proposed increases.

MR WEICKHARDT: Does the minister have 100 per cent track record of agreeing to the increases?

MR WOODBURY: I'm not aware of any submission - I can't speak definitively on this but I'm not aware of any proposed increase on waste levies that has been knocked back by the minister.

MR WEICKHARDT: All right. Thank you. That's a useful clarification. Now, can you help me understand better this issue - and, as you say, it's a case study of one but it's one that you're very familiar with - of why you as an individual council were able to secure better rates than a group of councils negotiating collectively. It certainly isn't the experience of Coles or Woolworths that the corner store is able to get better rates than they are when they're negotiating with their suppliers. Why is it the city of Ryde was able to get a better rate than a group of councils acting cooperatively and, to put it another way round, why couldn't the city of Ryde have gone back to the group of councils and said, "We've got this deal, if you come in and put some more volume here we can get an even better deal"?

MR WOODBURY: That's a good question, it's one's that's - I'm not - the tender is in the game so I can't fully answer that but one thing we can say, that our specification documents, I believe, are fairly clear so that the tenderers looked at those documents, could assess their risks in relation to those particular ones. When you've got different group areas, particularly in the collections area, not so much the disposal area, but the collections area it depends whether you're in a city where you've got restricted access to bins and so a need for a different bin system in some cases compared to outer suburbs so you do - and those kind of things basically limit the amount of economies of scale once you get past a certain size.

MR WEICKHARDT: It's interesting that in regard to the recommendation we're discussing there's been almost universal acclamation of that recommendation by those people serving the waste industry and a large number of local councils saying, "No, this is the wrong thing to do." How do you address the concerns of those who are trying to provide services to local councils with their, for example, providers of AWT facilities who say, "It's impossible to deal with one local council, they don't have the scale that can provide what we need to put in place, they're not willing to commit to something like a 15 or 25-year contract which is necessary to justify the heavy capital investment and when it comes to planning approval they say, 'We can't

do anything about it. Go and see the state government." We had GRD yesterday in here saying, "It's just impossible for us to put an AWT facility in and deal with one council."

MR WOODBURY: Perhaps I could answer that this way, there are a number of players in the AWT industry in as far as providers or, you know, operators, each of them believes that their technology is the best technology. In a lot of cases the results that are produced from the ones that have been set up are mixed, some work well, some don't work well. It's a long-term commitment and it is a high risk. That would also be faced by the regional boards if regional boards were proposed.

Over the last few years there have been a number of deals with AWT through some groups of councils, some individual councils in relation to AWT. It's crystal balling to say whether that would have actually been improved by regional boards or by councils. I think - and again there's two issues, one is actually getting the planning approval to actually build the thing, the other thing is to get commitment up front to do it. Being high risk from a client perspective, if the system works and it can be proven and it's cost effective they will pick up clients, if the system is not proven or there's not substantive risk taken by the operators then you can hardly expect a client to take a large portion of that risk basically to commit to a certain number of years and basically probably take on a lion share of the risk in relation to setting up those facilities.

MR WEICKHARDT: I have some sympathy for somebody who is about to invest \$100 million saying, "I'm not going to do that unless I've got some commitment of people to use it." You're saying they should put the \$100 million in and wait until the customers come to see them.

MR WOODBURY: Well, if that technology is proven elsewhere and that can be demonstrated to the councils the councils will do that. With the tender that we had we opened it up to any kind of technologies in relation to disposal.

MR WEICKHARDT: But your volume wouldn't have justified the investment in one of those sort of facilities.

MR WOODBURY: That's correct, however if you look at a certain number of facilities I'm aware of with waste technologies they're already fully committed a few years after being commenced. So it's not always the argument or the case that they can't set up, in a lot of cases - for example, there was one alternate waste technology that was available when we went to tender, within six months that was then basically - had reached their capacity and couldn't take that so that option was then not open to any other players after that.

MR WEICKHARDT: Do you have any sympathy for the waste management

company that made a submission in our first stage of gaining submission who said that in Sydney they have to deal with 47 different regulations for waste skips.

MR WOODBURY: I have a lot of sympathy for that and I think it's really a case of getting the regulation right, there's a whole lot of different acts and codes and regulations and obviously that is a major issue that needs to be addressed.

MR WEICKHARDT: So how is the city of Ryde contributing to making sure that the 47 go to one code rather than every council having their own separate particular code of practice or use of regulations for skips?

MR WOODBURY: Well, I think there needs to be a model code. A lot of this is under state legislation and regulation, where it's - - -

MR WEICKHARDT: I think they were saying that it's under local government regulation.

MR WOODBURY: Where it's under local government regulation a model code could be produced and either regulated from the state government or where the state government gives a direction to strongly encourage councils to adopt the model code or stick as closely to that as possible given the circumstances.

MR WEICKHARDT: We heard in Western Australia from the Eastern Region Metropolitan Council, that is I think, if I'm correct, a council which is a unification of seven other councils that claim that they have an arrangement that works much better than any other arrangement in the eastern states, that it gives them the benefit of scale, it gives them collective action and access to a landfill that they jointly own and operate. One of the people that attended the public hearings in Perth said that he had worked in both Sydney and Melbourne and that this sort of arrangement was infinitely better than anything he had seen in Sydney and Melbourne. Have you looked at that sort of arrangement?

MR WOODBURY: No, I haven't but I would probably have a question for yourself. How big is the population and its services and is it a rural area or is it an urban area?

MR WEICKHARDT: No, it's part of the - I think there are two such sort of associations in Perth. It's part of the Perth centre area itself and probably covers, I don't know, 30 per cent or 40 per cent of the population of Perth.

MR WOODBURY: Well, I can't really respond. I haven't seen, you know, what they're doing there but if it works well for them that is to be encouraged and certainly we wouldn't discourage councils working together to do those, particularly where you've got smaller councils with fairly smallish populations.

MR WEICKHARDT: Have you looked at the proposed Melbourne model of what they're proposing to do to try to, I guess, provide model codes of the way councils will operate and act regionally?

MR WOODBURY: No, I haven't looked at those.

MR WEICKHARDT: Okay. Well, again, that seems to have some sort of attribute of getting, I guess, a degree of advice and expertise that's relevant. You mentioned that, you know, sort of retaining the knowledge and expertise in local councils is not a problem but I guess for - - -

MR WOODBURY: It's not a problem in all areas.

MR WEICKHARDT: Not a problem in all areas but, I mean, if I take the example of a local council in Victoria, in the city of Port Phillip that presented to the first hearing, they were looking at an AWT investment of the order of \$100 million and they said, "It's way bigger than anything the council has ever done. You know, the supplier is talking about a complex contract, financing arrangements, indemnity arrangements," he said, "We're completely out of our depth." I can empathise with that, I can't imagine that local councils deal with those sort of contracts on a regular basis at all and so the Melbourne attempt was to try to provide a centre of expertise and advice to councils in those circumstances.

MR WOODBURY: If I understand you correctly, so the city of Port Melbourne would own the facility?

MR WEICKHARDT: No, I think, if I understand it correctly, a regional group of councils would contract but the contract would be put together with the help of a state government branch that facilitated these sort of contracts and provide expertise and advice and contracting advice and I understand the UK have a similar sort of model.

MR WOODBURY: Yes. Certainly the level of expertise to actually project manage and own a facility is more problematic for council. They could certainly adopt the model of providing a site and inviting tenders, open process for alternate waste technologies and to put up business cases and to go into a private partnership to set up a facility. That's certainly - and other councils have done that and certainly regional councils have done that, there's a number of those. In the urban areas it - in Sydney certainly it's been more left to - there area a few ones of green waste recycling where councils have done that but generally it's been left to private industry to come up with the landfill or the alternate waste technology and that's the issue that kind of you're grappling with and basically it's a client-provider relationship.

MR WEICKHARDT: Okay. Well, look, thank you very much indeed for your submission and for participating in the hearings.

MR WOODBURY: Okay. Thank you.

MR WEICKHARDT: We're going to adjourn briefly now and we'll resume at

quarter to 11.

MR WEICKHARDT: We will resume the hearing now. Our next participant is the National Association of Retail Grocers of Australia. If you could give your name, please, for the transcript and the capacity in which you're appearing.

MR VAN RIJSWIJK: Yes. My name is Gerard Van Rijswijk. I am the senior policy adviser of the National Association of Retail Grocers of Australia and I'm appearing on their behalf. Actually I put in two submissions to the inquiry. One is a personal submission and one is a submission on behalf of NARGA. I would like to start off making some comments on the personal submission and then follow on with comments on the NARGA submission.

MR WEICKHARDT: So this chunk is your personal submission.

MR VAN RIJSWIJK: The first chunk is the personal submission.

MR WEICKHARDT: Let me say thank you for that.

MR VAN RIJSWIJK: Okay. It is in fact a PowerPoint presentation of a presentation that I have put the Australian Institute of Packaging conference held in Surfers Paradise a couple of weeks ago, or almost two months ago now, and it talks about this whole question of recycling. It's titled Good Recycling, Bad Recycling, and How to Tell the Difference. I was particularly concerned about the way waste policy was heading in the country and continues to head in this country. When you look at a waste policy document they always start off with defining sustainability but sustainability definitions are many. The one that's most commonly used is the one that came out of the World Commission on Environment and Development in 1987 which says:

Development reached the needs of the present without compromising the ability of future generations to meet their own needs.

What our commission here has done is translated that into the need to base waste policy on consideration of economic efficiency. In my view that best captures that whole essence of the here and now and the future, so how else can you actually bring the needs of the here and now together with the needs of the future unless you look at the whole question of economic efficiency. I want to just highlight that. One of my friends said recently, you know, "How do we work out the question of future needs?" There has been a lot of talk this morning and yesterday and throughout other submissions about this question of needing to conserve resources. That's what it's all about, resource conservation.

Okay, which resources are scarce? Nobody has actually listed scarce resources to need to be conserved. Even if we could do that which resources would the future need? I will give you two examples. One is if I was living 150 years ago and looked

at the resources that needed to be conserved, where our transport economy in those days was very much horse based, I would say a main concern would be the ability to provide for sufficient hay to feed the horses and a mechanism for taking the waste away.

MR WEICKHARDT: Probably a blacksmith's anvil and horse shoes.

MR VAN RIJSWIJK: Yes. No, going back 50 years and looking at the telecommunications industry 50 years ago, the concern would be is there enough copper in the world to actually keep the telecommunications industry going. Incidentally copper prices are high right at this minute because of not a scarcity of copper ore but a scarcity of the ability to supply it. But then we had the invention of fibre optics and all of a sudden copper supplies are not as critical as they were thought to be, and of course the need to look for the future in demand for copper is not as critical, so we don't know what the future will want and we don't know what resources we need to conserve or recover or whatever to look after the future. Therefore we need to bring together a package of activities which looks at the overall efficiencies of our system and the economic efficiency measure is probably the best way of looking at that.

The second thing that concerned me in that presentation was this whole question of environmental mythology. If you look at all the environmental and waste management papers coming out of government these days we start talking about running out of landfill space. We're not running out of landfill space. We generate holes in the ground 10 times faster than we can fill them. What we have run out of is the ability to plan for landfill capacity and to have proper policies settings in the planning area to make landfill capacity possible. It's just like we're saying in Sydney we're running out of water but the fact that we haven't built a water storage facility for over 50 years never comes into that equation. It's the planning for the future that's not taking place.

The use of the waste hierarchy or reduce, reuse, recycle as rigid rules, even built into waste legislation worries me because waste hierarchy has no scientific basis whatsoever. You hear statements like, "Australians are the most wasteful people." Well, we certainly aren't. I mean, there are real problems in comparing waste data and when you make those comparisons properly Australians are not as wasteful as a lot of people think. We were told we were a throwaway society. I say, "Hallelujah for that," because often a throwaway approach is better than a reuse approach, and you need to again look at the cost benefits of those systems to actually make the difference, not simply invent a slogan and work on the basis of the slogan.

Yesterday's hearings talked about the significance of entropy and the need to actually consider the laws of physics and not try and work against the laws of physics in measuring - in trying to increase recycling beyond the point where it makes sense.

The significance of entropy is that it takes energy to create order out of chaos. When we look at resource recovery in the state policy sense, and I go back to 1991 when Victoria passed its Resource Recovery Act. Its Resource Recovery Act was all about recycling of packaging as if that was the most resource intensive part of our economy. At that stage they wanted to introduce a German-style packaging levy, a tax, to facilitate that recovery.

When we talk about recycling of packaging and recycling from households we are talking about the most mixed form of waste in the most disbursed form. I mean, it's disbursed amongst 8 million households so the entropy is very - or the chaos is huge and to get order out of that chaos you need to expend a lot of energy to bring all that stuff back together again and these sorts of realities are ignored. Also ignored is the high level of recycling that's already occurring without even considering the household aspects of our society. I give you two examples. One is the steel industry. It recycles 3 million tonnes of steel a year from its own sources and from commercial sources. The household component of that is 60,000 tonnes, about 2 per cent. To get that 2 per cent you have got to send a truck past 8 million households once a week or once a fortnight and you have got to say, "Well, is that a good use of resources?"

The other example is the use of offcuts from the paper industry. A large part of newsprint recycling and paper recycling is not household recycling. It comes from more concentrated sources and therefore it's a more efficient way of recovering these resources. A third example comes from the dairy industry when in 1995 the dairy industry in New South Wales were asked to write an industry waste reduction plan. The industry waste plan had nothing to do with the industry. It had to do with household waste. Sitting around a table there negotiating that plan, local government wasn't even represented, but the green groups were. The green groups were demanding the return of the refillable bottle and steel cows in supermarkets to avoid packaging.

The study done at that time showed that 70 per cent of the packaging associated with milk actually is within the distribution sector and doesn't reach the household and most of that is returned either for recycling or through use. I'm talking about crates and pallets and all sorts of packaging mechanisms that are in place in a distribution of goods where that packaging never reaches the household. So the concept that regulators have about waste and resources I believe is highly flawed, and as they base their legislation on those type of concepts, I think we end up with real problems. I just wanted to mention those as, if you like, a starting point for the material we have put together for NARGA. The first thing I want to say about the NARGA - - -

MR WEICKHARDT: Could I just then pause for the transcript. So we're changing now to a participation by NARGA and let me, before we move on, say thank you very much for that submission. It was, I think, very helpful and I think we

agree with a great deal of the material that you have put forward.

MR VAN RIJSWIJK: Thank you.

MR WEICKHARDT: So your NARGA submission.

MR VAN RIJSWIJK: The NARGA submission. The first instance, of course we say that we are firmly in support of what the commission has recommended in terms of the basis for waste policy. Basing waste policy on the maximisation of economic efficiency or optimising total community benefit. Again we can probably simplify that. If I had the unfortunate position of being a waste regulator and looking at the question of recycling I would say, "Well, if we recycled an item or asked industry to recycle an item, does that produce a net environmental benefit? If it does, does it produce that benefit at what cost? Is that a cost efficient use of those resources? Can I use the same money elsewhere to get a better environmental benefit?" And that question is never asked, "Or can I use the same money elsewhere to get a better benefit for the community as a whole? Is it better to put that into roads or schools or hospitals or whatever rather than try to recover an extra bit of rubbish from the rubbish stream and turn it into a resource which we have plenty of?" That's how I see this whole question of resource and capital efficiency or optimising community benefit. In waste policy discussions and waste policy papers I see none of that analysis going on.

So our position on waste policy as NARGA - I'm drilling down very much into what happens at the retail level. The current policy settings have an adverse impact in terms of increased costs at the retail level and less than optimal resource allocation. For example, the tendency is to ask the retailers at retail to become involved in recycling, so the retailer has to donate retail space, expensive space, to actually incorporate recycling facilities. So we're asked to provide recycling facilities for plastic bags in supermarkets; recycling facilities for packaging materials, other materials, in shopping centres. There's a new emphasis on away-from-home recycling in the National Packaging Covenant and no doubt shopping centres are going to be included in that. These are all cost impacts on the retail sector.

Even the recycling of cardboard boxes, which is very common, has a disproportionate effect on smaller retailers. If I was a Coles or a Woolworths I get a good price for my cardboard. In fact the cardboard contract for the major supermarkets is a highly prized contract and it's fought over between the major carton and cardboard recyclers. As you go down the pecking order into smaller and smaller shopping centres and smaller and smaller stores there is less of an ability to aggregate the material; therefore the prices paid are lower to the extent where, at the small shop level, the shopkeeper actually has to pay to have that material taken away so a policy which focuses on cardboard recycling, which is a highly recycled

material, even has a disproportionate effect on small business where it becomes a cost to small business and a benefit to large business.

It should also be noted here that councils now require high rise residential developments to provide recycling space on each floor, along with the waste disposal chute or waste disposal space. Again those costs are significant when you look at the per square metre cost of development and again those sort of costs aren't incorporated in any cost benefit analysis. Of particular concern to retailers are the proposals still at state level to move towards container deposit systems, particularly where suggestions are that retailers could be asked to provide for container return services either through providing space for return of materials or space for, say, reverse vending machines as is currently being looked at in Western Australia. Now, all of those again impose additional costs on the retailer.

The current policy settings seem to emphasise packaging recycling and emphasise packaging recyclability and that's very much evident in the current version of the National Packaging Covenant but if you look at current trends in packaging technology they are away from the old-fashioned rigid materials which are currently recycled through the kerbside system; glass, steel, aluminium, et cetera, and they're moving more towards composites or multi material systems like laminates which use far less material. We were talking about dematerialisation this morning. Dematerialisation is a reality in the packaging sector only it's not being recognised. The focus is still very much on recycling.

I can see a situation developing where recycling will become less and less viable, particularly as changes start to occur in the newsprint sector. We are already seeing major newspaper publishers moving towards web-based dissemination of news and circulation of papers declining. Now, newsprint is the core of a kerbside system. There's no doubt about that. Without newsprint kerbside recycling would be totally unviable. Even aluminium can recycling on its own in a kerbside setting would be unviable, valuable as they are, so without newsprint we wouldn't have a kerbside system.

Now, as the volume of newsprint declines the proportional cost of recovering those other materials will start to increase and affect the viability of recycling. Looking at recycling in a broader context like that, we see policy trying to push more and more unsustainable in financial terms into the recycling system and the Packaging Covenant certainly suggests that more types of plastics and lighter weight products need to join the recycling system and that's totally counterproductive.

The other problem in the packaging industry is that there are new innovative technologies such as active packaging and smart packaging coming into play. These have benefits beyond just containment. They have product preservation benefits, safety benefits, tracking benefits et cetera, which optimise distribution and so on of

these goods and again a recyclability constraint on those technologies would impair the ability to use those technologies. So we would say that the current waste policy settings do not appear to optimise community benefits and they do appear to impact adversely on business, and in our case, particularly on small business.

I might just emphasise the fact who NARGA represents. NARGA does not represent the major grocery chains such as Coles and Woolworths. We are actually a national body, a peak body, representing the smaller grocery outlets who are represented at the state level by individual associations and those details appear in our submission.

The next item I wanted to tackle is this whole question of plastic bag reduction. Now, the push to reduce plastic bags has come from EPHC. EPHC in its wisdom has decided that it's going to be managed as part of the National Packaging Covenant process. The smaller retailer input was not called for at a time that the targets were set and again we feel that this whole push to eliminate plastic supermarket bags will have a disproportionate affect on the smaller retailer. They don't have the infrastructure and the management systems that larger retailers have. In the case of setting a policy for plastic bags it would appear to us that rather than looking at plastic bags as a litter problem or as part of a litter problem the plastic bags themselves became defined as the problem.

Having decided that plastic bags were the problem, the policy solution was simply to reduce plastic bags. So rather than seeing plastic bags as a litter issue or a behavioural issue, they became an issue in themselves. Rather than addressing plastic bag litter as a broad litter strategy, the strategy seems to have been designed to target plastic bags themselves and we say it's just like saying, "Well, there's a real problem with car accidents on the road. Rather than police the road rules and stop going through red lights and doing all sorts of things that are wrong as far as driving is concerned, we won't bother about that. We'll just take cars off the road and that will solve the road accident problem." So we're seeing a similar sort of policy position here.

Rather than saying, "Look, we're going to solve the plastic bag litter issue by addressing litter problems we'll take the plastic bags out of circulation." So we don't both fining people for litter infringements, although some of that occurs, and different states have different records in that regard. The emphasis is going to be on taking the plastic bag itself away. The advantage I think to the regulator seems to be that you can make the supermarket responsible for the action rather than the individual responsible for the action and that seems to be a trend in regulatory policy these days. "We'll take the responsibility away from the individual and move it up a rung or two to the manufacturer or to the marketer or distributor rather than the individual." I want to have a quick look at the regulatory impact statement process.

I want to have a quick look at the regulatory impact statement process that took place at the time that this decision was made. First of all, the regulatory impact statement did not look at the alternative of litter enforcement and did not look at the alternative of no regulation which is one of the settings that you would want to look at if you're putting in place a regulatory impact statement. The regulatory impact statement was prepared on behalf of the Department of Environment and Heritage by Nolan-ITU and examined a range of tax or levy options. It refers to the success of such a levy in Ireland saying that, "This levy has resulted in a dramatic decrease of 95 per cent in single-use plastic bag consumption." Well, there has been no survey conducted on exactly how much of a reduction has occurred in Ireland. There are no official figures available so again this is just a stab in the dark.

Further, it's claimed in the report that, "Ireland is the only country with a plastic shopping bag levy paid directly by the consumer." Well, that's also not the case. There have been many countries in Europe that have had levies in place for a number of years where we could have had a good look at what impact those levies had. The report also suggests that:

Plastic shopping bags make up 2 per cent of letter, although a proportion of all shopping bags that end up as litter cannot be estimated because the size of the litter stream us unknown.

But the report suggests that that is less than 1 per cent. It's interesting to see that that 1 per cent figure has been taken on board by Minister Thwaites in Victoria in his recent media release and he has turned that 1 per cent of litter into 10 million bags littered in Victoria. Now, lots of these figures are sort of thrown about and the report I referred to before said, "Well, maybe there are between 50 and 80 million bags littered in Australia if you look at that 1 per cent figure," but those figures are never put through a reality check. If there are 80 million bags littered in Australia every year and there are 8 million households in Australia every year we would expect to see 10 plastic bags outside each household at some point in time during the year or more if they accumulate because these things don't break down and we see no evidence of that. These figures are just conjured up, no basis at all for them, and they become part of the folklore or they become a factor and which turn into a fact.

The 2 per cent litter estimate is derived from a 2002 Clean Up Australia rubbish report. I have made a lot of comments about that report in our submission and we don't regard it as a proper litter survey and we don't put much value behind that 2 per cent figure. The only other figure I have been able to come across, and I can provide that data for the commission, is a survey done by KESAB in South Australia who do a quarterly litter survey and who, for the last three surveys, have looked at plastic bag or lightweight shopping bags as one of the elements in the litter stream. They have come up with three different estimates which range from a half a per cent through to 1 per cent.

Again South Australia is not indicative of Australia as a whole for two reasons; one is they have container deposit legislation which takes containers out of the litter streams so their litter stream is not characteristic of the rest of Australia. The second thing is that they have a very poor enforcement record. If you look at the litter enforcement record in New South Wales there's an average in excess of a thousand litter fines a month. In South Australia there wouldn't be 10 a month. So they have relied solely on this concept of container deposit legislation and the education campaigns conducted by KESAB as their litter strategy whereas when you look at litter in other states of course there's more of an enforcement. So my suggestion is that the profile of plastic bags and litter in other states could be perhaps lower than that shown by the South Australian survey.

Other states do litter surveys but don't isolate plastic bags as an item and in some cases don't really provide a good indication of litter as a whole. For example, whereas South Australia counts an average of 25,000 litter items in their survey, New South Wales, a much larger state, counts 3000 in their survey so there's of course a diminution in the reliability of that kind of data but they don't look at plastic bag litter as such. So here we have a something where government has acted to take plastic bags out of the stream, or out of the supermarkets, when they don't even know how many plastic bags there are in litter. The first basis you have for setting policy on anything is to actually define the problem. The problem hasn't even been defined and the solution is being imposed. I find that very curious. Then we'll look at the detail of that DEH report.

MR WEICKHARDT: Gerard, we're reasonably tight on time so if you could keep moving, please.

MR VAN RIJSWIJK: Yes, I will quickly go to it. The details of that DEH report, you see a figure of 100,000 marine animals killed annually being quoted. That 100,000 marine animal figure comes up repeatedly in the literature. It actually refers back to a study in Newfoundland where 100,000 animals were killed by entanglement - not by plastic bags - but by entanglement from a period from 1981 to 84, over four years. So the annual level is 25,000, not 100,000, and the entanglement was not plastic bags. It was a whole range of marine debris items. So even the policy foundations; if the policy foundations for plastic bags was supposed to be on the basis of marine entanglement that research wasn't properly done. So there is absolutely no foundation for this plastic bag policy. We believe that the government has not been well advised on the plastic bag issue and we are concerned that continuation of this process will impose adverse costs on business and again in turn adverse costs on the consumer.

The Irish experience, I've detailed our concerns about the lack of understanding of the Irish experience and I have more information I can provide the commission on

that. I've got more recent information that has come in just over the last couple of days which I'll be able to provide which very clearly says that the Irish situation has been totally misrepresented. In actual fact there's pressure now in Ireland by green groups for the Irish government to increase the levy from 10 cents to 20 cents because they say that a 10 cent levy is wearing off, that people are again starting to buy these bags and use these bags because they are useful and, again, from a litter perspective there's been no change apparently in the litter aspects of bags in Ireland.

MR WEICKHARDT: If I could just interject.

MR VAN RIJSWIJK: Yes.

MR WEICKHARDT: If you have some more information - - -

MR VAN RIJSWIJK: Yes, I do.

MR WEICKHARDT: --- we would be very grateful for that.

MR VAN RIJSWIJK: Yes.

MR WEICKHARDT: Thank you.

MR VAN RIJSWIJK: The NARGA position on a national packaging covenant. The first national packaging covenant was signed in August 99. It was negotiated against a backdrop of complaints by local governments that they were carrying the cost of recycling, although this is passed onto householders, through rates and that should be seen as the basis for the first packaging covenant. We went though a period of 18 months of negotiation with local government where local government was pushing forward the German-style levy approach and we were able to convince representatives we thought that it didn't make sense to introduce another tax and a whole system of taxation that accompanied that for what was then a recycling cost estimated at something like 50 cents a household a week, you know, to set up a whole new taxing mechanism like a GST type mechanism as is done in Europe for that level of funding, however the covenant did provide funds to actually improve the efficiency of recycling and thereby hopefully reduce the cost to the community.

The covenant mark II completely changed the focus of what that first covenant was about. The first covenant has set objective which were to establish a framework based on the principle of shared responsibility, establish a collaborative approach and establish a forum for consultation. When that first covenant was evaluated it wasn't evaluated against those criteria at all, it was evaluated against a completely different set of criteria and therefore was seen by many to have failed therefore the second covenant was toughened up but the way it was toughened up was to impose additional requirements on companies, the provision of a whole data set were very

costly generate and very costly to obtain.

We don't believe that provision of the data itself actually does anything for the environment, in fact there was a requirement, I believe, in federal government if you are going to ask business for data you've got to go through the ABS and get the ABS involved in deciding whether it's worth doing that at all and if it's worth doing how that date was supposed to be collected, that loop was not gone through and now we have a series of KPIs and data requirements imposed on industry through the covenant which had nothing to do with the initial intent of the covenant. Now, these impose considerable costs on business and, again, there was a regulatory impact statement done on the additional covenant requirements which suggested that the individual cost to business might be \$100 a year, well, I would suggest that reading the covenant document itself would cost more than \$100 a year just in time so, again, no reality fix was used for that RIS.

We would support the commission's recommendation on a national packaging covenant where you say in terms of the scheduled review of the national covenant the review should be expanded beyond the assessment of effectiveness, an independent review should consider all relevant evidence about the covenant and supporting regulation and see whether it delivers net benefit to the community. We would go further than that and actually ask whether it's actually worth regulating packaging at all. I mean, I've been involved in this issue for many, many years, well over 20 years, and all these regulations tend to do is nibble at the edges and actually interfere with the processes of packaging optimisation that incurs within the industry - on the basis of cost, it's cost driven. Businesses don't want to spend money on packaging, they want to deliver product and the cost of packaging itself actually is a driver to reduce packaging.

Now, if you start putting rules in place to say, "Well, you're using this kind of packaging but we'd rather use something else recyclable," then you could be going backwards and in many cases you are going backwards. So I would say that in the final report one recommendation should be do we need to regulate packaging at all, I can't see a convincing case for regulating packaging and the only reason we went into the process of coming up with a covenant or an agreement was to get over this push coming from local government and state government for European type taxes to actually be imposed on packaging in Australia.

The covenant framework does help stop individual states going off in their own directions in a regulatory sense because they have signed a covenant and one of the conditions is that while the covenant is in operation you're not going to go off on your own and regulate. However, what's happened in the meantime - and, again, this plastic bag issue is an interesting example - Victoria has put a bill before the parliament to amend their environmental legislation where the bill will provide a head of power to regulate plastic bags. Now, that's quite interesting because they're

saying, "We're not going to actually pass the regulation for plastic bags, we're only going to provide a head of power to pass the regulation for plastic bags.

There are two reasons for doing that. One is they can go to industry and say, "If you don't do what you're told we will regulate. So, you know, we can twist your arm, we'll get you to do what we want you to do because you know we've got the big stick behind our back to regulate." The second thing is until the regulation is actually written there's no need for an RIS or a cost benefit study and we see time and time again particularly in environment departments ways and means around the COAG principles, way and means around competition policy where the need for a cost benefit study or a proper cost benefit study is avoided. A good example is the CDL system in South Australia, they did a very cursory cost benefit study when they extended CDL in 2003 and were able to convince the Competition Council that it was in the public interest but there is no proper cost benefit analysis backing up that legislation.

So we see that the advice to government provided by the regulatory agencies to be of fairly poor quality, it's full of mythology, it's not rigorous in its approach, it is very much based on regulatory transfer where particularly they look at Europe and say, "Gee, wouldn't it be nice if we had legislation like that," and that's particularly evident in extended producer responsibility. It's a case in point where, you know, extended producer responsibility has been adopted in Europe and the perception here seems to be that Europe know what they're doing, that they've done the work, they've done the cost benefit work and they clearly haven't. I can point to a recent study by the European Union into battery recycling where after 10 years of having a battery recycling requirement they only then look at it and this seems to be the approach, you put the legislation in place first, in 10 years time you come back and say, "Has it worked?"

Now, in the case of battery recycling one of the focuses was to take cadmium out of the system because cadmium is toxic so everybody had to recycle cadmium batteries. The review showed that cadmium batteries contribute less than 1 per cent of the cadmium load on the community so even if all cadmium batteries were removed - and of course on the basis of the European legislation battery manufacturers are formulating away from nickel-cadmium batteries - even if all cadmium batteries were removed the benefit to the community would be minimal, zilch. So the assumption here seems to be if we copy Europe then that's okay because Europe has done its homework but it's simply not the case. So we will be very supportive of the commission's approach where every regulatory proposal needs to have a rigorous cost benefit analysis conducted but we don't see evidence of that happening at the moment.

MR WEICKHARDT: Okay. Well, thank you very much indeed for many of those comments. In the limited time we've got available can I just focus in on a few issues

around the area of plastic bags which has received an inordinate amount of attention in our report and really I don't want to get bogged down by it but we've had a lot of people talk about it and it does appear - although this is a bit of a moving target - but it does appear that the primary concern started off around litter and the concerns that some of that litter ended up with marine entanglement or ingestion. What options in terms of reducing the numbers of plastic bags in the litter stream do you believe the regulators ought to be considering other than a ban and do you have evidence from elsewhere around the world of those sort of steps being more effective than perhaps a ban might be?

MR VAN RIJSWIJK: Well, the first comment you can make here is that the regulator doesn't know how many bags there are in the litter stream, there is no proper litter survey other than its South Australia which gives an indication. So how you could come to a conclusion that a primary environmental priority for Australia would be elimination of plastic bags, I don't know, other than if you wanted to take a populist approach. If you wanted to - - -

MR WEICKHARDT: If you just take the community concern as a proxy for the fact that people would like to see those numbers reduced, how would you suggest attending to that issue?

MR VAN RIJSWIJK: Well, I would suggest that the best way of doing that is enforcing current litter laws and continuing the current anti-litter education programs. The proper policy position should be that, yes, there are plastic bags and litter, they make up a small percentage in litter. If you look at the South Australian survey they come number 16 on the list of the 20 most popular littered items so they're not a major litter item and the proper approach from a policy perspective would be to say, "Well, yes, litter is a problem as a whole and plastic bags are part of that problem but we address it as part of the litter problem."

MR WEICKHARDT: So is one state or, if we look more broadly internationally, any other area in your view particularly best practice in terms of enforcement, reduction, education, moral suasion, whatever? Where is best practice?

MR VAN RIJSWIJK: Well, it varies because various states use a mixture of those and of course you have NGO involvement as well so the mix becomes quite complicated. But, you know, if you look at the New South Wales record I think they have a good enforcement record, Victoria seems to have a reasonable enforcement record, South Australia does not, Western Australia does not. You get a lot of public policy statement being made by ministers, "We would enforce litter fines," et cetera, et cetera but when it comes down to the basics of actually doing it the responsibility is so dispersed that there is no focus on that as an enforcement activity. There are quite a range of officers who can impose litter fines ranging from council rangers, parking officers, police, et cetera, et cetera that there is no focus to that kind of

activity. New South Wales seems to have addressed that pretty well and there's a good record of litter enforcement here but I don't see that evident in many other states.

MR WEICKHARDT: Okay.

MR VAN RIJSWIJK: If you look at the worldwide situation the only responses we see on the plastic bag issues are the knee jerk type responses we see on the plastic bag issues are the knee jerk type responses and we've seen it in Ireland, we've seen it in Taiwan, we've seen it in South Africa, earlier in Europe; Germany, Holland, Belgium and countries like that looked as plastic bags as an issue and required retailers to charge around 30 cents typically for a plastic bag.

What happened in those situations is that retailers tended to go for heavier bags to make it look like they were value for money and of course you would end up using more resources. So, again, it points to the need to look at a policy and took at policy consequences properly before any sort of policy is implemented.

MR WEICKHARDT: You may have some special insights because of your knowledge of this particular sector, there were a lot of people who reacted very noisily when we published our draft report to our suggestion that before any ban were put in place that there be a cost benefit analysis. Can you help me with any insights as to why that was egregious to some people in this sector?

MR VAN RIJSWIJK: I think the whole question of plastic bag litter came into the public arena through campaigns mounted by NGOs, helped certainly in some states by the media who saw it as a nice little item to fill up newspapers with. People look at these sorts of single issues, no matter what they are. I mean, you go back 20 years or 15 years and it would have been glass milk bottles, they were iconic if you like and, "Gee, we don't want to let go of those." People will seize on these single issues as maybe symbolic of a desire to do something about environmental degradation or environmental improvement. It doesn't mean that the issues are real, and I think it's up to the parliament and the agencies advising politicians to separate myth from reality and I don't think they're doing that.

MR WEICKHARDT: NARGA, we had a representation and a participation yesterday from the Australian National Retailers Association and I think to represent the bigger retailers, their point was, well, our efforts to reduce plastic bags, which I think they've got to 45 per cent, don't appear to have had any reduction in terms of the litter statistics, therefore the problem is not with our sale of bags, it must be with the other people. Now, do you represent the other sort of 50 per cent of plastic bags that are distributed by small retailers, and if so, do you have a view as to what they might be able to do to avoid this problem of bags arriving in the litter stream.

MR VAN RIJSWIJK: Maybe they don't see it as a problem. NARGA represents probably around about 20 per cent of the grocery sector and it's not just the grocery sector that uses plastic bags. I mean, you see plastic bags in butchers and bakers and fruit shops and take-away food places and so on, and those sectors have not been directly addressed through this policy. The difficulty with putting in place - before I do down there - the major group of businesses in NARGA are the IGA stores. IGA as a group has tacked the plastic bag issue and has put out information to their retailers to say, well, you know, we need to cooperate with this program and we need to be careful about our plastic bag use and try to minimise it, but a lot of the IGA stores are relatively small stores and they do not have the facilities or all the space to actually put in place recycling bins and things that some of the bigger supermarkets have done.

The question needs to be, are these activities of reducing plastic bag use actually producing the outcomes that we're looking for. Now, given the fact we don't even know how many plastic bags are in litter, how can we tell whether the litter aspects of plastic bags are reducing. So we have a policy in place to do something to produce an outcome which we can't measure.

MR WEICKHARDT: No. Okay, Gerard, thank you very much indeed for all that. I'm sorry time has beaten us and we'll have to pull stumps there, but thank you very much indeed.

MR VAN RIJSWIJK: Okay, thanks.

MR WEICKHARDT: We'll adjourn briefly and next we have DEC.

MR WEICKHARDT: Our next participant the DEC. Thank you for coming along. Thank you for your submission. If you could just give your names and the capacity in which you're appearing today, please.

MR ROGERS: Tim Rogers, I appear on behalf of DEC.

MR GORTA: Mark Gorta, I likewise appear on behalf of DEC.

MR WEICKHARDT: Okay, thank you. All right. Assume we've read your input and thank you for that, but if you'd like to make some introductory remarks please go ahead.

MR ROGERS: Commissioner, I think on the basis that it is a brief submission and you have read it, we'll be equally brief. We've been advised that you had some specific areas of interest about landfill management and we've also done some research on one particular issue arising out of the first report and we'd probably like to cover that off and then happy to take questions.

MR WEICKHARDT: Okay, all right.

MR GORTA: Okay. The two things that I was proposing to speak about was something you brought up in Western Australia about flyash, and the other was the sort of broader issue of the challenge of regulating waste in a fairly broad sense. Are you happy for me to comment on those two things?

MR WEICKHARDT: Please do.

MR GORTA: Okay. What I was going to say about the flyash has changed since talking to Craig Heinrich from the Ash and Slag Association just outside, but you mentioned that there was an incident in New South Wales where 500,000 tonnes had not been able to be used because of something to do with our regulatory framework as I understood it loosely.

MR WEICKHARDT: That's what we were told.

MR GORTA: I've spoken to Craig. I've also tried to dig out our involvement in what I think was that matter and there was a proposal by a company to use flyash basically as fill as I understand it in a residential development. We were approached about that. The proposal was for a flyash product to be produced which had a name which I don't recall, but it was clean flyash that would satisfy any regulatory requirement. We communicated with the company and were talking about standards more generally for that product. We were later advised that they went ahead and used an alternative fill for the site. Flyash, if applied to a site that is used solely for receiving flyash doesn't cop the levy. So I don't quite understand what the problem

was, and I think there may have been a misunderstanding but I will follow it up with the person concerned that Craig has talked to me about.

MR WEICKHARDT: Okay.

MR GORTA: We've actively supported reuse opportunities for flyash in a number of areas, encouraging it in cement manufacture. We've brought in a residue waste regulation, to use a simple term for it, which prohibits a number of waste, including ashes, from being used for growing plants and uses that are involved in growing plants. We did that collaboratively with our agricultural colleagues. We've got a specific exemption for clean flyash from that prohibition which we've developed based on submissions from the Ash and Slag Association. So I actually think it's one of the success stories of resource recovery rather than the other way around.

Another thing that we are doing is developing what we loosely call the 3F regulation which is to enable us to more clearly define what is treated as waste and what is treated as resource recovery in terms of things that are used for land application, and the two Fs involved there are loosely called fill and fertilisers and also used as fuels. One of the broad weaknesses of waste regulation is that it tends to be complex and our goal is to simplify it, and that is one of the things we're working on in terms of simplifying it, and that is spelt out - we'll be consulting on that as part of this regulatory review which hopefully we'll be doing in the second half of this year.

MR WEICKHARDT: Okay, thank you. One of the issues in our terms of reference is to look at regulatory impediments and certainly that seemed, if that example took place, to be a bit of a bizarre and averse outcome.

MR GORTA: Look, I'll follow it up further to get to the specifics - - -

MR WEICKHARDT: Okay, thank you.

MR GORTA: --- but as I understand it, it was something that occurred two years ago. Would you like me to talk about the challenges of enforcement in relation to waste?

MR WEICKHARDT: Yes, indeed, please. We had quite a session this morning on that with representation from both SITA and also from the WMAA where they were expressing considerable concern about what they saw as lack of enforcement and therefore the unlevel playing field in the landfill area so, yes, I'd welcome your input.

MR GORTA: Okay. Well, my focus is broader than landfills. Waste is seen by some as nothing more than a nuisance by-product that should be disposed of at

minimal cost. That approach and the desire to avoid the proper costs of managing waste provides incentives to by-pass the regulated waste industry. Internationally and locally the waste sector has a history of components that exhibit unscrupulous behaviour. It contains highly responsible players, criminals and the in-betweens, those who may be tempted to cut corners given enough opportunity. So we take the regulation of waste quite seriously.

There's substantial money to be made by operating outside the regulated waste sector and the threat of detection is often perceived to be low, and I'm actually quoting from an ICAC report back from 2002 there. Dealing with players who are willing to brazenly exploit legal loopholes or who have no regard for the law poses quite significant challenges for enforcement. It also, if they're given free reign, it undermines the legitimate operators who are trying to do the right thing and it damages them in the marketplace. This, I think, provides, if not unique, fairly special circumstances and challenges in relation to the regulation of waste.

This isn't a comprehensive list, but illegality from waste can include illegal dumping, disposal of waste in the guise of beneficial use as fertiliser, fill or fuel, as I mentioned before, misclassification of waste to enable it to be treated or disposed of more cheaply and less securely than if it had been properly classified, and there can be considerable environmental consequences of that. Inappropriate management at landfills and land application sites, mismanagement of hazardous waste and levy payment exemptions and deduction fraud.

Now this brings me onto what I mentioned earlier that those challenges have tended to lead, and I think I can say this generally about a regulation of waste, a fair level of complexity. That presents difficulties because the more complex it is, the harder it is for those who want to comply to actually comply, and in some ways it provides avenues for those who want to avoid it or evade it to get away with it. So the thrust of our reforms over the last few years, and those that will continue over the next 12 months certainly, is to simplify as much as possible and provide clarity. We can't simplify it too far, there's a limit to how far you can go, but there isn't any excuse for us not providing clarity.

One of the things we need to provide more clarity on is when a material is a waste and when it's a non-waste. That's an area that's exploited by those who improperly claim that their stuff is not waste and then use it in a way that causes harm to say land, or use it in a way that's just bogus and a way of avoiding their disposal responsibilities. Now, we have got a reform program that includes some of the things that have happened recently, like the residue waste regulation that I just spoke about that prohibits the use of higher risk waste like various ashes and the more hazardous waste for growing plants while providing a mechanism for exempting things that are okay.

We introduced that - it took effect in late last year and we have not needed to issue any more exemptions than those that we'd identified in the development of the proposal. We issued a suite of exemptions at the time. We've fine-tuned some of them since but we haven't had any further applications so it seems to be working fairly smoothly and talking to Craig, I understand the flyash provision is working quite nicely. We made amendments to the act, the Protection and Environment Operations Act, to enable us to do the regulatory amendments we're proposing in relation to that fill, fertiliser and fuel; I won't dwell on that any more.

We simplified the regulation of waste tracking, of various storage and transport requirements earlier this year and we've done a lot of communication on that. We hope to consult later this year, not just on the 3F stuff that I've spoken about, but also on changes to the schedules about who needs to be licensed, for what, and what sort of quantities are involved. An area that we've had fairly substantial lobbying from the waste sector is the threshold for landfills, that we have been criticised for having a threshold for landfills that is too high from that perspective. I don't want to prejudge the outcome of that process, but that is an area that we'll be consulting on.

We see our job as delivering approachable, consistent, clear and firm requirements and enforcing them through a range of tools. We have been running a range of campaigns to deliver that compliance. I might leave it at that, but I'm happy to elaborate on anything.

MR WEICKHARDT: Okay. Well, thank you. You will have noted in our draft report that we said that we felt that enforcement of regulations around landfill was important and we were commending that, particularly in that some people had at different stages in the life cycle of regulations pointed out landfill levies as providing a proxy for the externalities associated with landfills in some states, and I think New South Wales perhaps lost that direct linkage or justification, but we were of the view that it was better that regulations were adequate to both internalise any externalities associated with amenity loss, leachates or things of that sort, and that they were appropriately enforced.

Now, interestingly, a large number of people who have participated in this set of hearings since the draft report, who are in the waste management industry, have endorsed that recommendation, but have pointed at, in their view, a large number of non-complying members of their industry. I guess a question would be, of the landfills that are regulated in New South Wales, do you have any measure or index of the numbers that do comply with their licence conditions and those that are fined or prosecuted for not complying?

MR GORTA: No, not offhand, but those that don't comply we deal with them and we can deal with them in a number of ways: prosecution is the tough end, there are penalty notices, there are orders and directions. So there's a whole suite of measures

that we can take. There are about 50/60-odd landfills in the area that's levied, I'm not sure of the numbers beyond that, and they are a very diverse group in scale of their operations and in the nature of the business that's behind them, some of them are multi-national corporations, one is a government-owned entity, others are very small players in the marketplace.

MR WEICKHARDT: Are the statistics of the numbers who have been served with any of those forms of notices about, you know, sort of either a reminder, "You're not complying or by the way we're about to serve a penalty," are any of those statistics publicly available?

MR GORTA: Our prosecution figures are things that we can access pretty regularly. They don't mean much because - - -

MR WEICKHARDT: We couldn't find any examples where we'd looked in the draft report of any landfills in Australia who had been prosecuted for failing to comply.

MR GORTA: That's not true in New South Wales.

MR WEICKHARDT: Okay.

MR GORTA: We could give you examples of cases.

MR WEICKHARDT: Okay, that would be helpful.

MR GORTA: But I think they're exempt, they are just examples of cases. It is hard to measure compliance by prosecutions because there are a lot of factors. In an extreme case you could have a more vigilant regulator getting higher prosecutions than others, you can have - it is difficult to measure compliance is what I'm saying and prosecutions aren't a reliable indicator of it, but we certainly can give you case studies of prosecutions of landfills.

MR WEICKHARDT: Okay thank you. Do you support the recommendation that we've made that enforcement in this area could be improved?

MR ROGERS: I think our answer would have to be that given you haven't found any statistics of it, that we actually do have a rigorous enforcement campaign, you can always spend more on it, but - - -

MR WEICKHARDT: Do you think enough is being spent at the moment in New South Wales?

MR GORTA: Yes, we do. Do we think that our regulatory framework is perfect,

no, that's why we're improving it and we're also beefing it up as part of that city and country package that you'd be aware of.

MR WEICKHARDT: Well, it's interesting, you might read the transcript from the New South Wales Waste Management Association this morning who interestingly, I think they said, and they didn't attempt to say this was an accurate number, but I think they said they probably represented something like 90 per cent of the landfills in New South Wales, but they said there was a collective feeling among their members that compliance with - and we're talking about two different things to a degree here, what they saw is a best-practice sort of landfill, compliance was poor and they thought there was a lot of room for improvement.

MR GORTA: Yes, okay.

MR WEICKHARDT: When they were talking about this practice they were talking about landfills that had liners, landfills that had suitable buffer zones and weighbridges and a number of things that might in some of the landfills you're talking about not be part of their licences, but they felt there was considerable room to improve, which I guess gave me comfort that maybe there's some desire within the industry itself to improve.

MR GORTA: Yes. We are working with the industry on reworking the guidelines that we've got out on managing landfills. We see that there's room for improvement there. We're also increasing our enforcement effort, not just for landfills but for waste regulation because everything is interrelated in waste, and we're upgrading our regulations and trying to make them clearer and simpler.

MR WEICKHARDT: Okay. Well, thank you for those comments, and if you can provide us any additional data in that area - - -

MR GORTA: Case studies, yes.

MR ROGERS: Happy to.

MR WEICKHARDT: --- that would be very useful. Okay. Now, there are a few other areas. Did you want to make any other general comments or are you happy just to take questions now?

MR ROGERS: No, thanks, commissioner, happy to take questions.

MR WEICKHARDT: Okay, thank you. One area that you'll note we had referred to in our draft report was that not only was compliance of landfills according to, you know, sort of both their licence and also some best-practice principles important if externalities were to be internalised, but that councils should be sending a price

signal to waste disposers that was consistent with those costs, and that would be a proxy in our mind for removing the need for a levy. Now, I don't want to - - -

MR GORTA: In terms of - you're just talking about households.

MR WEICKHARDT: Any user of a landfill should see the full cost of using that landfill including complying with the best-practice processes for removing any of the externalities - to internalise the externalities. That was our proposition in our draft report. Now, some people put it to us at the first tranche of hearings that councils were inhibited by New South Wales government regulations from increasing their costs of landfill above a certain component.

Now, this has been contested. In fact, the City of Ryde appeared this morning and they said that the rate capping requirement in New South Wales didn't include the waste charge, but that the waste charge did have to be separately agreed by the minister. They said they weren't aware of any cases where the minister hadn't agreed to the increases proposed, but I'd be grateful if you could just elaborate on whether or not you think there are any constraints by the minister's approval process that inhibit councils, perhaps particularly in a rural regional area, from charging full costs for their waste disposal and recovering the full cost of waste disposal.

MR ROGERS: Can I start this from the bottom up, because it is a different situation in New South Wales to that which occurs in other states. In the metropolitan area there are very few waste disposal facilities owned by councils. Once you move outside the Sydney metropolitan area, councils probably own the primary disposal sites. There are private ones outside the metropolitan area but by and large they are council ones. Councils are not constrained on the prices they charge at a landfill for disposal fees at all. They are, in fact, a business operation of council and council is entitled to manage and charge as they wish.

MR WEICKHARDT: With no oversight by the minister.

MR ROGERS: No oversight by the minister. The charge which a council levies on householders for the disposal of domestic waste is required by the Local Government Act to reflect the full cost to the council for collection and disposal of that waste. There is a provision in the legislation for the minister to be able to put a cap on that; however, to my knowledge it has never been applied. So it's if you like a reserve power, but it has never been used and, in fact, the Department of Local Government has been encouraging councils to take into account the full cost of disposal, including where it's a council facility, the closure and post remediation of the facility.

MR WEICKHARDT: Okay, all right.

MR ROGERS: Councils are not required to collect waste from commercial and industrial premises, but if they do so, they are in no way constrained about the charges which they can impose.

MR WEICKHARDT: Okay. Thank you, that's helpful. Insofar as the household is concerned, you will have seen one of the recommendations that we made in the draft report was that it would be useful, as much as is practicable, to send a price signal to householders with some form of pay-as-you-throw charge. I guess the most sophisticated version of that is some weight-based charge. Indeed, we understand some councils, the City of Ryde, talked about this and SITA talked about that this morning, have started to introduce technology which would allow a weight-based charge. It has been put to us separately by others that there is a constraint on councils actually charging householders a weight-based charge. Do you understand that - they pointed to some constraint in the Local Government Act which has been drawn to my attention and probably means about as much to you, or it might mean as much to you as me, but section 507 and 510, they claim would provide some inhibition on the ability to charge by weight.

MR ROGERS: Commissioner, forgive me but I do have some familiarity with it. Can I just borrow your copy? I will make a confession. I was one of the drivers behind rewriting it.

MR WEICKHARDT: Sorry for making such a rash assumption that this was perhaps - - -

MR ROGERS: No, you're quite right. The issue is in terms of whether it's an annual charge or whether you can have a combination of an annual charge plus a by-weight component. I think it's arguable but I have to say that there are some other issues around weight-based collection from individual premises which are more about the weights and measures implications of doing it on relatively small bins and the issue of, "I didn't put it in the bin. My neighbour filled my bin up." For that reason most councils have resorted instead to a capacity charge where they provide a minimal sized bin and then generally charge a higher amount for additional capacity and many councils provide a quite large recycling bin and will provide a second at either minimal or no cost. So if you like there are the two compensations that if you can't fit it in an 80-litre bin you'll pay more, but if you have more recyclables you'll probably get it for less.

MR WEICKHARDT: Yes.

MR ROGERS: I think there is more of a reluctance to actually have to be certifying and the overheads of pay-as-you-throw on relatively small bins. There is a complication between the standing charge and a pay-for-use in addition but I'm not sure it's not overcomable.

MR WEICKHARDT: All right. Well, again any more information you had on that. I think somebody this morning did allude to the fact that there was a federal weights and measures issue which again I'm afraid I don't understand but if you can shed any light on - - -

MR ROGERS: I don't either but I do understand that there are issues about being able to certify that the amount was validly picked up and constant re-engaging but, yes, the technology is obviously there because it's used for large loads.

MR WEICKHARDT: Yes. I understand it's starting to be used overseas albeit I can understand fully the difficulties of other people depositing bricks in your bin and you being charged for them.

MR ROGERS: And indeed in unit blocks where you have a row of bins and things like that.

MR WEICKHARDT: Yes. Thank you. One of the other areas that you will be aware we made some recommendations in our draft report was about the ability of local government in large urban areas to be able to manage successfully and efficiently all the complexities of modern waste collection and disposal issues. This was interestingly an issue that a whole range of people who have so far submitted to us and participated in hearings who are at the waste management end, the private contractors who deal with councils, have all, I think, applauded and said it would be much better from their point of view to deal with a properly constituted regional group than to deal with individual councils. Not surprisingly a lot of individual councils have said, "No, it wouldn't be better. We would prefer to be left to our own devices." The City of Ryde certainly made that point this morning.

We did have people point to a Western Australian experience of a regional grouping over there in the Perth hearings they said they thought worked particularly well and we have had other people, I think yesterday, saying that the Melbourne experimentation with some sort of regional grouping that's overseen by the state government with the sort of centre of expertise at the state government level would be very helpful for those dealing with this councils in terms of providing contracting, advice and technical advice, where major contracts like AWTs came up. Do you have any comments on this whole area and what you think might be a useful way forward?

MR ROGERS: New South Wales went to regional organisations in 1995-96 and abandoned them in 2001. Now, they weren't just dealing with municipal waste and there was a range of reasons why they were abandoned but they didn't take over the collection responsibilities of local councils, although they did organise some regional contracting arrangements. There are a number of voluntary approaches within New

South Wales, and particularly within Sydney, for looking at contracting for waste collection. It is a complex area. I have no doubt that the collectors and disposers of waste would prefer to deal with fewer people. Our aim is to try and provide some guidance to councils about what is good practice and provide them with some tools to actually standardise the approach based on what we have learnt.

If you look at how a good regional grouping can work it helps bulk up those councils which don't have either the expertise or the tonnage to make it worthwhile actually dealing with an individual contract. On the other hand if you have a council of 250,000 people then it's a contract of significant size and I think a council that size can probably do as good a deal as four councils of 60,000 banding together.

MR WEICKHARDT: Yes.

MR ROGERS: I don't have any great view that the collection responsibility should be taken away from councils in that sense, given the experience we have gone through of moving to groupings and then going on, but it is certainly an area which councils would value their sovereignty as I have no doubt they have told you.

MR WEICKHARDT: Yes.

MR ROGERS: There are some poor experiences of regional contracting where councils haven't been bound and haven't worked together and have basically tried to say, "Well, yes, we have a regional contract but we'll decide at the end whether we go in or out."

MR WEICKHARDT: Yes.

MR ROGERS: That's not a particularly satisfactory outcome.

MR WEICKHARDT: Not certainly for the other party writing the contract.

MR ROGERS: In my experience it hasn't been a good outcome for those who tendered and it hasn't been a good outcome for the councils that went into it. I mean, I think if you're going to have a regional operation you have a regional operation and you go in on that basis and you should offer certainty to the tenderers.

MR WEICKHARDT: Yes.

MR ROGERS: But it is logical to have council come together for ones which are like in the sense of they have a similar type of service need. Having one contract for the whole of Sydney would not be what I would think would be a particularly sensible outcome.

MR WEICKHARDT: I doubt whether you would do that.

MR ROGERS: I'm not suggesting you would but, I mean, there are sort of logical minimum sizes and maximum sizes that you would want to think about but there's no reason why councils can't do that between themselves.

MR WEICKHARDT: Yes, all right. The other issue that was drawn to our attention in the first round of hearings was that local councils could get together in informal groups and they might be able to agree on lots of things but when it came to agreeing on where a transfer station might be or whether a MRF might be or, God forbid where a landfill might be, that was all too difficult so they would point to the state government. Now, do you think the overall workings of the way planning for waste disposal in New South Wales are working as effectively as they could do? Again Waste Management Association said it was a nightmare, not just in New South Wales, but nationally in terms of trying to get approval for some of these facilities.

MR ROGERS: I mean, they're right, trying to get approval for a waste facility is always difficult. The New South Wales legislation has been streamlined in the last year or so to allow a simpler process for significant waste facilities and, indeed, significant facilities which should offer a greater degree of certainty. We certainly have some experiences with, say, the former Rethmans approvals which were particularly difficult for those people involved and we hope that the changes will get around those issues and we know that

MR WEICKHARDT: Yes.

MR ROGERS: I think it's not just a council deciding it's going to have a waste - I mean, councils have actually had waste facilities in their areas for some time. Most councils which run a waste facility realise the need for it and even when it's in their own area they often have trouble convincing their residents that the tip should be expanded or moved or replaced, but I think that's a problem of many industries. The waste industry is only one.

MR WEICKHARDT: Yes. Now, just on enforcement, we talked about landfills. Another issue that received a good deal of debate around the issue of the draft report was associated with plastic bags and plastic bags and their impact on litter and the best way of tackling that particular issue. I think the transcript will show that the Clean Up Australia people who appeared yesterday agreed that a cost benefit analysis, if it could be done quickly, around tackling the plastic bag area was an acceptable thing to do and if there were better ways of reducing litter and marine entanglement by plastic bags then the community could reasonably expect governments to look at those other than a ban.

MR ROGERS: Yes.

MR WEICKHARDT: Can you make any comments about the sort of actions that New South Wales government have thought about in terms of reducing the impact that clearly people feel is very important, the impact of plastic bag litter and marine entanglement by plastic bags. Are there any actions that you have been working on as possible options or alternates that might be useful in terms of this area?

MR ROGERS: New South Wales has been participating as part of the National Environment Protection and Heritage Council members action on those particular areas. You may want to ask my Commonwealth colleagues for a more detailed exposition on it but, I mean, we have been doing a lot of work with local organisations and the like to, you know, introduce plastic bag-free areas voluntarily and support actions in those areas as well as looking at what the regulatory alternatives are. In addition, New South Wales, as I think the commission has previously noted, is actually active in the litter area of trying to reduce litter; both by enforcement and public education. We have run extensive public education campaigns about all sorts of litter including plastic bags and we continue to support councils, and indeed other organisations, in providing public education to reduce the amount of litter.

MR WEICKHARDT: Have you found any particular sort of models, best practice areas, or examples that are worth studying?

MR ROGERS: I think there is no one point at which you intervene. We have in the past used quite extensive public advertising. We have now moved back from that into community support and local advertising and public awareness-type advertising and supported community groups to do the same so it is, if you like, moving at all levels about waste and littering but we do not exclusively concentrate in the litter area on plastic bags. I mean, you have got cigarette butts and everything else that's thrown or blows around.

MR WEICKHARDT: Sure. Do you have any sort of statistics or data that gives you any measure of where particular action is working or not working or whether particular policy or enforcement actions have been successful?

MR ROGERS: Speaking generally in terms about litter, we know that iconic sites tend to be cleaner. We know that transport interchanges tend to be dirtier because that's where people obviously get out of cars or off trains or off buses, have a cigarette, so we can say, "Yes, we can define where the likely littering behaviour is."

MR WEICKHARDT: Yes.

MR ROGERS: And we know that places like the Opera House or the Art Gallery

which are kept in reasonably good condition tend to be clean so if there is a lot of litter in a place it will attract more because people just think it's a place to throw litter. If a place is kept clean then it tends not to.

MR WEICKHARDT: Yes. One of the issues we talked to Clean Up Australia about was that - I think the statistics they have are that despite the reduction of, I think by 45 per cent in the number of plastic supermarket bags that have been issued so far, they haven't seen any impact on the numbers in the litter stream which is a bit of a worry. You would have hoped that the numbers would have at least gone down by the 45 per cent reduction in the number of bags issued.

MR ROGERS: You would, but of course it's not only supermarkets that issue plastic bags so you need to look at the sites in which it's occurring and how they're actually escaping.

MR WEICKHARDT: So in New South Wales government's participation, the EPHC that are looking at these issues, has there been any resolution to try to get a better handle on how that issue might be tackled?

MR ROGERS: There is a lot of work being done on plastic bags and there is further work being done as we speak in terms of coming back to ministers with a series of options.

MR WEICKHARDT: All right. Can I turn quickly then to product stewardship and extended producer responsibility schemes. It has been put to us, and perhaps by those in some cases with a vested interest, that in some cases product stewardship schemes or extended producer responsibility schemes are put in place and are claimed as being voluntary schemes but they only take place because certain governments coerce, threaten or at the point of a gun, suggest that, "Unless you get your act together we'll put some regulation here which will be draconian and terrible."

The concern I guess is that when a voluntary scheme is put in place there isn't necessarily a regulation impact statement that sort of adds up all the costs and the benefits and so it's difficult for the community in a sense as to whether or not the cost benefit equation is actually one that's in the interests of the whole community. Do you have any comment as to whether or not you feel there is a risk that I guess feelgood schemes are being implemented without a rigorous analysis of all the costs and the benefits?

MR ROGERS: I would take issue with whether the feelgood schemes have actually been implemented. I think the issue for most product stewardship is that there isn't a scheme and that's one of the issues around it. There are very few formal product stewardship schemes in Australia.

MR WEICKHARDT: But some are being actively worked on.

MR ROGERS: And indeed pursued although I wouldn't agree with your draconian end point to the statement before. I would agree that governments generally are saying that, "You ought to have a scheme in place to reduce some of that stuff." I mean, if you go back to your previous example of litter, would anyone suggest that somebody shouldn't be taking responsibility for the number of cigarette butts that are appearing in the litter stream. Now, I - - -

MR WEICKHARDT: God forbid if I was a grand dictator I would fix that by banning cigarettes but we won't move there.

MR ROGERS: An even more draconian regulatory option. But, I mean, the issue is not just - I mean, I don't think a lot of this stuff is out of necessarily step with public expectation. You are right that if there is a voluntary scheme put in place and there isn't necessarily a rigorous cost benefit analysis of it. However, using the point that you made, if companies actually go down that track, then they have done so, you know, in a form which avoids being regulated and the rest of it, there is presumably an option.

MR WEICKHARDT: Well, there are other activities where, you know, sort of coercing people to do things is a criminal activity. Even if finally they're not shot they can be coerced into doing something against their better judgment. The concern about things like the computer waste area is that people have submitted to this inquiry that some of the environmental concerns and damage that some of this electronic waste might do in, you know, landfill disposal, is really being exaggerated significantly and that the costs of the sort of schemes that are being proposed are very high.

Now, if those assertions are true, and I don't know whether they're true, but if those assertions are true then if the industry is being, I guess, coerced into putting a scheme in place then it might end up costing consumers a lot of money for not very good reasons.

MR ROGERS: As you say everybody has a position in this which tends to depend on where you come from. If you want to argue extended producer responsibility entirely from the point of view of damage by putting something in a landfill then that's the sole point from which you argue it. If you want to argue it from the point of view of resource recovery, resource depletion arguments, and upstream management which means you end up with something which is easier to recover and those sort of things, you're actually arguing from a different perspective. Now, I know that the commission in its draft report has taken a fairly dry and disposal end review of that but that's not where government policy actually comes from. It's not

purely the disposal issue.

MR WEICKHARDT: I understand that issue but all those things would come out if a full cost benefit analysis were done surely.

MR ROGERS: But even with the computer-type ones that we're moving down the track of, you will have supporting regulation which will have to have a full regulatory impact statement around it.

MR WEICKHARDT: All right. So you're anticipating there will be a full RIS done - - -

MR ROGERS: We are anticipating for computers, televisions, tyres and that sort of product stewardship, that there would need to be a regulatory impact statement on the national environment protection measure which would form the underpinning of the regulatory framework so they do not avoid it. It's only where an industry goes off and completely sets up a voluntary outcome which has no government underpinning that you avoid it.

MR WEICKHARDT: All right. Thank you. That's helpful. I'm conscious of your time commitments and you have been generous with your time so I think we had probably better call it a day there but thank you for your submission and thank you for the information you have provided.

MR ROGERS: Thank you.

MR WEICKHARDT: All right. We're going to adjourn now and we'll be resuming at 1 o'clock.

(Luncheon adjournment)

MR WEICKHARDT: All right. We are now going to resume the hearings and our first participant are the Product Stewardship Council and if you could give your name and the capacity in which you're appearing please.

MR MARTIN: Thank you. My name is Russ Martin and I appear today in my role as president of the Product Stewardship Council. The PSC appreciates the opportunity to comment on the draft report and thank you for the invitation to testify. I have some introductory comments to help address issues and then I'm happy to answer questions.

MR WEICKHARDT: Thank you.

MR MARTIN: First about the PSC. PSC is an independent non-profit organisation dedicated to understanding and advancing the principles of product stewardship. We established the PSC to help industries and governments work more effectively together in the implementation of product stewardship programs where such programs are warranted. Our members are based in Australia, the US and Europe, our advisory board consists of senior professionals from each of these regions and fields covering consulting law, industry and NGO representation. Advisory board members have been employed or engaged by over 300 companies and governments based in at least 27 countries and our collective experience covers a broad range of products and primary industries.

Although we've been conducting stakeholder consultations in Australia, the US and UK over the past few years we've only recently become formally established. In the short-term the PSC will be focussed on finalising our business plan, developing sponsorship packages and expanding our membership base, then we intend to establish a web-based clearing house of resources on product stewardship and eventually offer help in facilitating progress. The PSC does not advocate particular product stewardship approaches although I'm happy to discuss some of our general feelings on these approaches in questioning. We have no intention of becoming a formal producer responsibility organisation or a PRO, instead we support certain product stewardship principles and recommendations for translating those principles into action. This morning I provided the commission with a supplementary submission containing these principles which we endorsed after the commission's deadline for comment.

As a consultant I have assisted in a number of submissions to the inquiry and provided testimony. In the interests of transparency and independence I believe it's important to advise the commission that our submission and my testimony have been developed without any funding or other input from my commercial clients or those of any of the PSC senior advisers in Australia or oversees. Although a broad range of policy approaches are consistent with EPR, product stewardship and polluter pays principles they do not impose the same societal costs and only a handful might be

efficient socially, economically and environmentally; it is therefore desirable to seek an efficient level of the environmental externality in question in a cost effective manner.

As highlighted in the commissions draft report and our submission distinctions between product stewardship and EPR can become blurred and the development of these schemes in Australia has been flawed in a number of instances; the New South Wales EPR priority statements are a case in point. We have advised New South Wales that we see their EPR priority statements as reflecting neither EPR nor prioritisation, this is especially problematic in that New South Wales is seen as a leader on EPR and has been copied directly by Western Australia.

We believe that many of the difficulties in New South Wales result from a clear lack of objectives and the underpinning legislation, a lack of independent objective information on products and impacts as well as an apparent lack of resources to effectively evaluate and develop product stewardship schemes has resulted in politics exerting undue influence in New South Wales calls for EPR on a broad range of products. These facts also make the program especially difficult to implement for government and for effected industries. We are not however interested in seeing the baby thrown out with the bath water, instead full consideration of costs benefits and risks should be used to evaluation or re-evaluate these schemes and determine the extent to which they should be implemented and enforced, it is necessary to find a more appropriate balance and allocation of resources.

Whilst we intend to provide independent analysis of various product stewardship scheme proposals internationally we have not completed endorsed analyses of Australian schemes such as those proposed for TVs and computers. This somewhat limits my ability to discuss specifics of those programs today. In general though the PSC sees product stewardship schemes and EPR as more appropriate and cost effective for truly hazardous or expensive demanaged products than for relatively benign or inert products where externalities are minimal or where such products do not impose net costs on the community to manage.

We concur with the commissioner's comments in Perth recently that in most OECD countries governments have accepted that whilst markets are not perfect in terms of allocating resources and may have their own distortions they've generally been shown to be better than governments making guesses as to what's in the community's best interest. As you're aware, reliable information and robust analytical frameworks enhance the value of those market decisions and offer additional value to governments. Our discussions with key stakeholders have highlighted the need to evaluate and promote product stewardship through independent and transparent analysis, information exchange and facilitation; this includes independently examining the merits of such schemes and seeking better

informed decision-making including the relative cost benefits and risks of such schemes.

Many product stewardship schemes have been supported by industry despite clear financial benefits, we suggest there are a range of reasons for this support that are difficult to incorporate into basic cost benefit assessments. Examples include the ability of targeted industry sectors to develop consistent response strategies and deflect NGO and jurisdictional criticism by demonstrating participation in a particular product stewardship scheme or PRO, value of regulatory certainty coupled with flexibility and responding to regulatory frameworks as evidenced by the industry support the commission has seen for the national packaging covenant, reduced regulatory and compliance costs through consistency with de facto international standards such as the restriction of hazardous substances standards for electrical and electronic products in Europe, China and other locations, computer manufacturers have instituted a number of take back schemes to enhance their market positions, especially with large commercial clients and, finally, minimising dumping of non-compliant products on the Australian market whether regulatory regimes are implemented overseas and not in Australia. Government should engage with stakeholders to help value and incorporate such factors when evaluating and developing product stewardship schemes.

As mentioned previously, we have not completed endorsed analyses of Australian schemes but I can discuss these although I wouldn't be able to provide and endorsed opinion. In general though we believe the responsibility for reducing product impacts should be shared across the supplier value chain, industry, government and consumers. There are a range of environmental impacts across the life of a product, this varies from product to product. The greater an entity's ability to minimise a product's lifecycle impacts the greater its degree of responsibility and opportunity for addressing those impacts. Second, all product lifecycle costs from using resources to reducing health and environmental impacts throughout the production process to managing products at the end of life should be included in the total product cost. The environmental costs of product manufacture, use, consumption and disposal should be minimised to the greatest extent possible for local and state governments.

We believe that approaches requiring greater levels of regulation should be pursued only after market based, voluntary and co-regulatory approaches have been clearly shown to not be effective in achieving desired outcomes, policy envy of another jurisdiction is not sufficient cause to introduce EPR on a given product. A comprehensive carefully considered product stewardship approach is also necessary as no single policy approach can deliver all desired outcomes nor reflect the full diversity of products. Viable product stewardship programs have been developed internationally for products such as used oil, tyres, paints, computers and mercury containing products, these have all required thorough consideration of local needs

and the used of a suite of program activities to achieve their objectives.

We note that a variety of market based instruments and advanced disposal or recycling fees have been used in these programs and that these programs can be effective in the absence of recycling targets. Whilst these instruments are not perfect in internalising environmental costs they can effectively compliment a range of program activities if developed in close collaboration. Regulatory and compliance costs of ongoing refinement would be excessive so it's important to strike a reasonable balance. With that, I'm happy to answer any questions you may have.

MR WEICKHARDT: Thank you very much indeed. Some useful comments there. Just one of the issues that appears to be problematic in this field is that politicians react to either direct or perceived consumer concerns about particular areas and I guess firms are also influenced by those same concerns. As you said in your introductory remarks, sometimes firms agree to be involved in some of these schemes so they can point at the fact that they're attending to an issue that's causing concern and the politicians like to be able to do the same thing. By the time these schemes get developed to a sufficient stage that they might go through some form of regulatory impact statement or costs benefit analysis it's almost too late, the scheme has got a head of steam up, it appears in many cases that a single option has been pursued rather than clearly identifying what the issue is and looking at a whole range of alternatives and then being able to compare the costs and benefits of all those alternatives.

I guess therefore if we're trying to look at changing that behaviour so that we get outcomes that we're confident have been robustly pursued, do pass, you know, cost benefit analyses, it seems that educating the community about some of these issues early on is an important issue because the community concerns are the things that sort of drive both the companies and the politicians. So when you think through some of these product stewardship schemes that you're concerned might be heading down the track is there anything that industry could have done or should have done or should be doing now that might better educate the wider community about the risks and the areas that might be pursued to give a better outcome?

MR MARTIN: I would agree with those comments and having previously been a senior economist with the New South Wales EPA at the time I felt that often we were seeing a program after it has already been worked up to a certain extent and was near finalisation whereas we could have provided additional input further along the process and helped to guide those decisions. I think often the options are not fully explored nor understood, that's one of the reasons that we've established the PSC is to provide some independent, objective understanding of these programs and the relative strengths and weaknesses.

The information that's out there is usually strongly biased in favour of a

program or strongly negative and if an industry sector is tasked with going away and coming back with a report understanding some of the options and issues it's immediately called into question simply because it was an industry report. Governments task industry with going away, coming up with product proposals, for example, or scheme proposals and then when the industry comes back those questions are automatically called into question and that's really inappropriate.

One of the things that we seek to do is have accountability on all side for industry, government and the NGOs to get better information in hand and have a more solid base to start with so that then if there are further discussions on product stewardship and EPR they can be focussed on truly understanding what those impact would be in an Australia context, understanding the options that could be considered, the relative costs benefits and risks of those options and then collaboratively working together on implementing something that is far more viable. We feel that that's a preferable approach to the discussions that can take years arguing about what a target should be or what level of accountability there should be, often those are based on political imperatives more so than reasonable data.

For example, the electrical and electronics manufacturers have highlighted that a lot of the impacts, as you mentioned earlier, of landfilling heavy metals are overstated and this is because in a modern landfill, a stabilised landfill they're generally pH neutral, somewhere in that ball park. Heavy metals tend to leach at high pH values or very low pH values but not in the middle and a 10-year study on brominated flame retardants in the EU found that these items posed no identifiable risk and yet there was a political imperative to doing something to address these materials because there were reports that they're showing up in polar bears, where you shouldn't have consumer products with these items in them or have a minimal amount of them the polar bears are getting exposed to this of finding levels in breast milk, for example, in mothers. So there was a political imperative.

It take a while to understand some of these issues and understand some of the options and potential impacts, that's just part of scientific approach. We often don't know the full range of impacts in the early stages, that's part of why we feel that all too often there's a particular path that's laid out, then a lot of subsequent discussions are how best to respond to those, for example the EPR priority statements. It was basically decided that EPR would be applied to a range of products and then if you read the selection criteria in subsequent priority statements there wasn't a clear match of how those selection criteria applied to each of those products in question, some were obviously politicly motivated and if you look at Western Australia seeking to introduce container deposit legislation for example. The political decision was made that they would pursue CDL as an option and then the discussions have been on how to implement a better CDL scheme rather than questioning, "Do we really need this scheme?" Or, "Would it be appropriate for our circumstances?"

MR WEICKHARDT: So, recognising those difficulties, how do you suggest breaking this loop as it looks like we're going to have Greek tragedy after Greek tragedy here?

MR MARTIN: Well, that's one of the reasons that we've established the council is to have ultimately a clearing house of information on these schemes relative strengths, weaknesses, benefits, costs et cetera and open discussion about these to help address the information gap that's currently out there. One of the issues that we see politically is this policy envy that I referred to earlier, a jurisdiction says - they do a search on the web and discuss with a few people what options might be and then they say, "Well, this program worked well in Demark, let's just do it here," without understanding whether it in fact worked with in Denmark or how a program might be applied to Australia, whether there were circumstances that were unique to Denmark for example that might cause that to be successful but would cause it to fail miserably in Australia or have a cost blow out if it were applied.

What we're looking at is questioning those underlying assumptions, getting a common base of information and ultimately facilitating schemes with consistent principles that I've provided the staff. That's basically saying there are a number of products and primary industries where it makes sense to have some kind of product stewardship, in many cases industries are more supportive of those programs than you - would often indicate. A lot of the discussion would be around the merits of particular approaches that governments are pursuing and industry arguing about the merits of a particular program, they might agree overall that it makes sense to have some kind of scheme, they're actively developing such a scheme but it's in response to pressure that's often politically motivated by the jurisdictions and a lot of the fundamental assumptions for these schemes can be called into question. So we hope to provide a balanced perspective on views.

MR WEICKHARDT: Is the industry perhaps sometimes partly the culprit here in that when schemes have been developed elsewhere it's not just politicians that might have policy envy but companies saying, "Well, there is community concern about disposal of old electronic gear, we've got a scheme we've developed in the US to respond to legislation there and one in Europe so to comply with our product stewardship and good corporate citizenship behaviour we ought to have a scheme like that in Australia too." Do the companies concerned sometimes perhaps protest a bit too much but are obviously part of the, sort of, momentum behind getting these schemes going?

MR MARTIN: In general, yes, in that a number of the more proactive companies tend to - if they're not fully aware of what their counterparts are doing overseas they're mindful to some extent - or they're trying to get discussion going. My personal experience is that often times different sections of, say, a large multinational don't communicate very effectively and so I wouldn't put too much faith in that or

call it a policy envy issue, it's more perhaps somebody in corporate headquarters saying, "This has now become a de facto international standard, we need to work on making our products consistent with that and if we're proactive in doing that then we can head off some of these arguments in other locations and improve our efficiencies overall." For example, the RoHS legislation, restriction of hazardous substances legislation. The European Union issued a directive on what needed to be done to reduce certain items in electrical or electronics products and that has since become a de facto international standard so many multinationals have said, "Well, we need to make our products RoHS compliant in Europe, let's roll that out in other stages."

Now, that does lead to some transitional issues. For example, if products are compliant with legislation that's in place and is about to take effect such as RoHS legislation took effect at the beginning of July, products that are in the pipeline that are not compliant with those standards will end up going somewhere. The issue for Australia would be since RoHS legislation isn't in place in Australia are not compliant products going to get dumped in Australia as a transitional issue over, say, you know, a year or two while this is taking effect?

One of the things that we also see a lot of concern about is the allocation of costs and if you look at a number of product stewardship and EPR schemes, the levies that would be paid for managing the waste in different locations can vary significantly and are often based primarily on the ability of the local representative to negotiate a more favourable fee. So if you take two packaged items for example, what they would pay on a levy in Ontario is completely different than what they might pay in England or Germany - Germany is probably a better example. They will be completely different and they will have been negotiated, in theory they should have been based on the externalities in question, the costs of having the scheme but that's not the case, it's often an issue of negotiation, varying information, varying influence and different locations.

MR WEICKHARDT: Now, probably stewardship, I guess, originally came into to being with the sort belief that the company should have a total, sort of, commitment to looking at a product's lifecycle and take responsibility for designing products and providing mechanisms for them to be safely disposed of. A number of people have put to us that we have been negligent in suggesting that waste management policies should really focus on waste disposal issues and waste externalities and that we have ignored our terms of reference is the allegation by saying that upstream policies should focus on upstream issues but it's quite correct that good visibility by a product designer and marketer of the product's use, its packaging, its disposal does enable a responsible manufacturer to take into consideration issues that might arise during either use or disposal and to design the product more thoughtfully so that those issues don't become a problem and I guess there's a question of how well those, sort of, signals go up and down the line at the moment. Is this an issue that your Product Stewardship Council has a view on and do you have a view as to how those sort of

signals and that communication might work more effectively?

MR MARTIN: Yes. If you look at EPR in particular, it was intended to send a signal to a product manufacturer where the toxic or hazardous nature of the product and its potential entry into the waste management stream would impose additional costs on a local government or a jurisdictional government, that's the intent of EPR and that if your product has an impact and it could end up in the stream then you need to be accountable for that, you need to be sent a signal to design it more appropriately to reduce those impacts. So therefore EPR is more appropriate on toxic and hazardous products that could enter the stream.

It would be inappropriate to apply them to materials like packaging for example where often the materials have a beneficial value to the recycling programs through their material values. Certainly there's a political imperative in that people support recycling programs, they want to be able to recycle so there's a political component there but these items such as packaging generally add value to the recycling stream, that would make requiring EPR on packaging inconsistent with OECD and EPR principles.

One of the things that we see is there are a range of products whose costs should be internalised more effectively, in many cases those are being addressed through a range of schemes internationally, to some extent those are being understood by the decision-makers in Australia but certainly not fully. It's actually quite rare to have the jurisdictions with a real understanding of what these impacts are, they're just as reliant as anybody else on what they can read online, their discussions with key people, you know, there's limited information generally available on a range of these items, much of the information that is available tends to be biased one way or another or is put - for example, a producer responsibility organisation put in place to address a given item in Europe their web site will highlight the value that they provide to their members in exchange for paying a fee on their products to cover the costs of this producer responsibility organisation. That won't necessarily give you an accurate reflection of what the real costs are of implementing it, what the drivers were for putting it in place or the value in taking that measure and applying it in some other location.

MR WEICKHARDT: Yes. I was thinking of signals that might work in the absence of formal schemes but which in fact might obviate the need for formal schemes. An example that was quoted to us during the first round of hearings was that at one stage a packaging company here in Australia started to put a clear PVC sleeve on a PET bottle because the marketer thought that that looked cute. The problem with that was I understand that PVC is very undesirable in the PET recycling process and so eventually some signal went back from the recyclers back to the manufacturer of this bottle saying, "Don't put a PVC sleeve on this because you're screwing up our entire recycling program and you do have options that would

work instead."

Now, that's a small example but perhaps an example of where if manufacturers were more sensitive to those, sort of, total life cycle issues they might be able to take steps that would alleviate some of these concerns before the politicians and others, you know, sort of, got a head of steam up and started to try to put formal EPR or product stewardship schemes in if brominated flame retardants were such an issue. It's rather bizarre because I was in the plastics industry a long time ago in Europe when I remember the manufacturers were battered to put brominated flame retardants in plastics to remove a fire hazard.

MR MARTIN: There are a number of studies available now that show that there's a compelling benefit to consumers and to the community in having those flame retardants in the products and reducing the fire risk, as you have highlighted, that obviates that need.

MR WEICKHARDT: But what I'm saying is, do you think the mechanism of manufacture is looking downstream to, you know, sort of, disposal issues or use issues and their designers and R and D staff being as thoughtful as they could be about trying to remove some of these potential risks? Do you think those signals are working as well as they could do today?

MR MARTIN: You could probably have them working better but I think in many cases the signals are being incorporated and in Europe for example there's legislation in place that puts the responsibility for emissions, you know, appropriately on the companies involved and that is sending a signal to reduce impacts, that's a pure regulatory approach. The PVC sleeve is a good example to highlight some of the issues in Australia because - and in the interests of transparency, I was involved in redrafting the environmental code of practice for packaging in Australia. There had been a voluntary industry code in place to address these issues, it had been in place for a long time, it wasn't being taken very seriously by a number of companies and the revisions to the national packaging covenant, as part of that process we linked the code of practice much more closely with compliance under the covenant so anybody who signs the packaging covenant agrees to adopt and implement the environmental code of practice for packaging.

Now, that has a range of factors that need to be considered in the packaging decision-making process and has them at least look at options and understand what those options might be. If they rule them out because there's only one supplier and that item or that approach might cost 30 per cent more then that's a valid commercial reason for not doing that but at least they've considered what the potential ramifications would be. Now, packaging in Australia, for example, is a little different in that because you have a relatively small number of players and given the dominance of some of the packaging industries you have the large players such as

Visy and Amcor which are involved in making the packaging an in taking it back.

They've got an inherent incentive to having a reasonable approach and not contaminating what will become their own material streams. So I'd argue that an effective message going back about a PVC sleave contaminating recycling is a reasonable indication that some of the signals were in place already. Can it improved? Sure, but I think for packaging we'll see that - for other issues we've tended to see some of the general regulatory requirements involving pollution prevention, reduced admissions, taking care a number of those issues. Any company that's remotely responsible will be sending reasonable signals through their system.

MR WEICKHARDT: Okay. Thank you very much indeed for your input and I will read with interest the further information you've provided. That's very helpful.

MR MARTIN: We've always available if you have any additional questions.

MR WEICKHARDT: Okay.

MR MARTIN: Thank you.

MR WEICKHARDT: Thank you very indeed. We'll adjourn briefly and then we're going to have the Waste Contractors and Recyclers Association.

MR WEICKHARDT: Our next participant is the Waste Contractors and Recyclers Association of New South Wales and if you could just, for the transcript, give your name and the capacity in which you're appearing, please.

MR KHOURY: Thank you. Yes, my name is Tony Khoury and I'm the executive director of the Waste Contractors and Recyclers Association of New South Wales.

MR WEICKHARDT: Thank you. We've received a submission from you which I've read but if you want to elaborate on that at all, please do.

MR KHOURY: Okay, thank you. There's probably five areas that I will just elaborate on briefly and then be happy to take questions. The first is basically just to set the context of the view of our association and its members on the comparisons that are inevitably made when it comes to landfill in Australia and other parts of the world. Here in Australia we're a resource-rich country. There's a high rate of availability of quarries and old mines. The geology of those old quarries and old mines are suitable for landfilling.

We would propose to the commission, to this inquiry, that if those landfills are well run, they're well planned and they're well regulated and that the waste and the cashflow that's used from waste operations is used as part of a rehabilitation program of those disturbed or mined areas, then that's a real positive. That does make us unique in terms of comparisons with other parts of the world because the availability of those old quarries and old mines - it's just a far greater availability than there are in just about anywhere else in the world. So that's the first point we'd like to make.

The second point we'd like to make is in relation to domestic kerbside recycling and the support that our members have for that scheme. Obviously, you know, they've been actively involved in the promotion and the operational side of domestic kerbside recycling schemes across the whole of Australia and not just New South Wales and those schemes are very, very successful. You know, a recent Waste Management Association Australia study quoted that something like 90 per cent of Australian residences have access to domestic kerbside recycling and, you know, Australians are quite passionate in being involved in kerbside recycling and we as an association would like to see us build on the successes of those kerbside recycling initiatives, for example, green waste collections where applicable, and it won't always be applicable. But in areas where there's high volumes of green waste generated we believe that there should be an access for the disposal of green waste.

We also believe that we should be providing our communities with suitably located hazardous waste drop-off centres, so that we can reduce contamination rates in recycling and that we can further address O H and S issues in our industry, and I stated the last time I appeared before you. It's something that we as an industry cannot overlook in this whole environmental debate and that is the area of

occupational health and safety. I would hate to see us ever back peddle in terms of the advances, the significant advances that we've made in the last 10 years in that area.

We'd also like to see us build on the kerbside recycling successes that we've got by adopting the Australian standard for the common colours on all waste management bins across Australia so we can start to look at national issues and advertise in a uniform manner, so that it won't matter whether you've got a waste bin or a recycling bin or a green waste bin in any council area in any part of Australia; it will be the same colour.

We would also like to see the great work we've done in kerbside recycling at the domestic level extended into the commercial and industrial areas and that is a real challenge for both government and industry. The third area I'd like to just comment on is the waste levy in New South Wales and in particular here in the Sydney metropolitan area where it's now \$30.40 per tonne. Our members have some concerns that the New South Wales government seems to be showing an inability to regulate the application of the levy on waste that is generated in the Sydney metropolitan area and it being disposed of outside the Sydney metropolitan area.

There are projections that the levy will be increasing by \$7 per year every year for the next four years and in our view and the view of our members this problem needs to be fixed because there will be more waste exported outside of the Sydney metropolitan area if the government doesn't start to address those concerns. We believe that all landfills in New South Wales irrespective of whatever volume of waste they receive should have a weighbridge and they should have an EPA licence and that all licence conditions should be enforced by the New South Wales government. I could debate many other aspects of the levy but, you know, whether it has the desired effects or not, but in summary, on the levy, if we're going to have a levy let's have a level playing field. Let's ensure that it is appropriately policed.

The fourth area is that of skip waste management policies across Sydney and again I'm probably touching on an issue that I touched on in my first submission and that is that we've got 40-odd councils here in Sydney, we've got 40 different waste skip policies. There's a whole range of different aspects of those policies that cause the industry concerns. There's different deposits. There's different bonds. There's different application fees, different durations that you can leave a skip on site. There are different forms that you use. There's different size requirements.

There are different numbers of bins you can have which have positive and negative effects on recycling. I mean if the council says you can only have one skip bin then obviously there will be very little recycling done because all that's generated there will go in one bin. That whole variety of policies and requirements and, you know, the complexity of it, it's very confusing for industry. It's an administrative

and it's a financial burden on the operators of this industry. We just reiterate our position, both from this submission and from the first submission when we appeared before you, that we would like some strong recommendations in that area that may assist the industry in seeking resolutions to those issues. From a productivity point of view I hope you feel that my recommendation makes some sort of sense.

The fifth area is that of waste management and recycling data and that we would support a national classification system for waste and for the methodologies for the collection of that data. It would just make for more meaningful comparisons across all state jurisdictions if all waste management and recycling data and comparisons were measured in a uniform manner and collected in a systematic manner including contamination rates and compaction rates and anything else that the data is there to measure.

So with that, they're the five areas that I sought to sort of highlight in what I had to say today. We make these submissions to you having canvassed the views of all of our members. We represent something like two and a half thousand trucks in New South Wales. There are four and a half thousand employees and contractors that are engaged by our members and we meet regularly to discuss these issues so we have canvassed the views of our members in appearing before you today.

MR WEICKHARDT: Thank you very much indeed, Tony. Is there any overlap between your membership and that of the WMAA folk who appeared this morning?

MR KHOURY: Absolutely, yes. We tend to represent a different view. We tend to represent the employers and the business-side of things and the Waste Management Association of which I'm a personal member and many of our members are members of, is an important part of the waste management scene here in Australia. They've got more of an educational type role and they have a lot of courses in waste management. Yes, there is some overlap.

MR WEICKHARDT: A question I asked them which I'll ask you to is how many or what percentage of the landfills in New South Wales would be members of your association?

MR KHOURY: Of our association in percentage terms?

MR WEICKHARDT: Roughly.

MR KHOURY: Goodness. Look, none of the council landfills are a member of our association but all of the privately-owned landfills would be members, you know, the likes of Collex and SITA and Enviroguard and Thiess Services. The companies that manage a lot of those landfills too across rural New South Wales tend to be members or our association.

MR WEICKHARDT: Okay. We made a recommendation in the draft report that enforcement of landfill regulations should be toughened up and that landfills rather than necessarily having a levy charged to them should thus internalise any externalities associated with leachate or amenity loss by ensuring they complied with the relevant regulations. Do you support that as a concept?

MR KHOURY: I would support that absolutely. All landfills should comply with their licence conditions and with the regulations. As I said in my earlier comments though it's probably not very well understood that here in New South Wales the EPA doesn't necessarily have jurisdiction over all landfills. If they're approved by a council and the development consent says less than 20,000 tonnes, then that landfill does not require an EPA licence; that makes it very difficult for the EPA to understand what's happening on that site and to regulate what's happening on that site. I'm not an expert in this area, but if there was a pollution occurrence I'm sure the EPA would get involved. But in terms of the day-to-day running of that site if it's under 20,000 tonnes then the council becomes the authority that regulates what happens on that site. There is no EPA licence.

MR WEICKHARDT: Yes. The DEC did appear this morning and they said that they were looking at that threshold issue.

MR KHOURY: Yes, and we've been pushing them to tighten that up because that's probably the loophole that's allowing the waste to leave Sydney at \$30.40 a tonne at the moment and for that levy to be avoided.

MR WEICKHARDT: So can you talk about that. This is waste contractors who are picking up putrescible waste in Sydney and are taking it to a regional tip of some sort?

MR KHOURY: Probably not so much putrescible waste, but probably more solid waste class 2 which is non-putrescible waste that's collected in Sydney. It is taken back to sorting and recycling facilities. Whatever recyclables can be extracted out of that, concrete, bricks, timber, metals, paper, cardboard if appropriate, are pulled out of that and whatever residues are left are consolidated and sent as backloads to some of the centres that are close to the metropolitan area but just on the fringes of the metropolitan area.

MR WEICKHARDT: So they tend to come from MRFs - - -

MR KHOURY: Not so much MRFs but transfer stations or recycling centres.

MR WEICKHARDT: I see. Who would be the typical of those manager transfer stations?

MR KHOURY: Private enterprise.

MR WEICKHARDT: Private enterprise.

MR KHOURY: Yes.

MR WEICKHARDT: All right. Is there anything per se that's illegal about their decision to send the material to a landfill that's outside their - - -

MR KHOURY: In the view of our association, and it's a question that I have posed to the DEC and we have been frustrated by them not answering this question on three occasions now and in writing. It's our view that the actual transfer of the waste outside of Sydney by private enterprise in itself is not illegal because the operator here, the transfer station operator here, has a copy of the consent from the landfill that says that they're legal and allowed to operate. However, where the problem is is that the DEC needs to have a mechanism in place to be able to charge the less than 20,000 tonne operator the levy on the waste that is generated in Sydney because irrespective of where the waste is disposed the way the legislation is written, is that if the waste is generated within the Sydney metropolitan area, irrespective of wherever it's disposed, the \$30.40 per tonne will apply. That's the loophole that needs to be closed up. As I said, we have been frustrated by the fact that we haven't had answers to what I believe are very fair and legitimate questions.

MR WEICKHARDT: What mechanism will you suggest they use to identify that?

MR KHOURY: I think the first thing they need to do is, as you said in your comment a moment ago, they need to remove the 20,000 tonne threshold and that all landfills, irrespective of whether they receive one tonne or a million tonnes should be licensed by the New South Wales DEC and that all landfills irrespective of any threshold limits should have a weighbridge in there so that you can record accurately what comes in and what goes out.

MR WEICKHARDT: I guess if all landfills - and not that we're suggesting this - either pay a levy or maybe as we suggested pay no levy, you remove the incentive for the product to be moved.

MR KHOURY: Yes, that's right, but this is where I think, you know, this inquiry is in conflict with the New South Wales government because you have recommended that there be no levy whereas the New South Wales government has gone down a completely different path. I just said that they have increased the levy by \$7.40 per tonne to 30.40. There's a plan in place to increase that by an additional \$7 per year for the next four years so we're going to be looking at a levy here in this state of something like 55 to 60 dollars per tonne depending on what CPI does in the next

couple of years so that's going to be a significant part.

I mean, at the moment putrescible waste is about \$110 per tonne at landfill in New South Wales of which the levy is \$30 so 30 on 110 as a percentage. That's what it is within the Sydney metropolitan area.

MR WEICKHARDT: Yes. You made the point that kerbside recycling is well entrenched in Australia and it's successful and Australians are passionate about kerbside recycling. We attempted to make the point in our draft report that some of the kerbside recycling that goes on is probably eminently sensible and taking into account all the costs and all the benefits it probably makes good sense but like most good things it can be pushed too far.

MR KHOURY: Sure.

MR WEICKHARDT: Others have made a comment to us, "Well, those sort of comments don't take into account the consumer's willingness to pay for recycling because Australians like recycling." Others have said, "Well, you know, they're making that sort of comment in the absence of any transparent knowledge of what that's costing them and I have asked a couple of people, and I would be interested in your views, if Australian residents were told, "Well, yes, of course you can recycle more but by the way if you recycle more of these particular products it's going to cost you more." What do you think their response would be there if they were made aware of all the costs and all the benefits?

MR KHOURY: Well, look, I don't believe that Australian residents truly understand what makes up their whole rates notice, of which their annual waste management levy is a part of that rates notice. I mean, if you asked me the question what is my waste management fee on my rates notice I couldn't answer you and I'm sure that most Australians would be in that same position so from that point of view if there was to be - and there has to be an increase here in Sydney at the moment in the rates notice or the garbage component of that rates notice because of the levy increase and I'm not sure when that happens and that's taking place because the government has said that they want to encourage the minimisation of waste at its source and for waste to be used in an alternative means to just being disposed of in landfills, but it's not a significant enough component of the rates notice for Australians to be concerned at the moment. That would be how I would answer the question; is that the fee is not up there on the radar.

MR WEICKHARDT: You have made a comment here by the way on the market power issue saying that:

The ACCC is currently investigating alleged breaches of the Trade Practices Act by WSN Environmental Solutions.

Is that public knowledge and is there any understanding of when those investigations might be completed?

MR KHOURY: It certainly is public knowledge. Our association has been interviewed formally by the ACCC. The ACCC have given me a circular that I have sent to all of our members seeking additional information which we have had members who have responded to that circular and I have referred those concerns back to the ACCC. We have a wide distribution list through our email so that email has been circulated to all of our members so it is public knowledge.

MR WEICKHARDT: Right.

MR KHOURY: In terms of where that investigation is going I couldn't tell you where it's at right now other than the ACCC have advised our association that the concerns are legitimate and that they're very serious and they're in the process of being investigated.

MR WEICKHARDT: Thank you. You talk about the - and I remembered your 40-skip different regulation comment from the first hearings - in thinking about models of where that might work better. I know your organisation represents people based in New South Wales but have you looked at any other practices outside New South Wales of whether or not, you know, there are best practice examples of this elsewhere in Australia?

MR KHOURY: The Victorian model is not bad. It's generally nice and coherent. It's difficult here in New South Wales to get the councils together. We have attempted to do so through the Local Government and Shires Associations. They don't seem to wield the authority though to get them together and to have them, you know, adopt a uniform code. We have met with the minister for local government in New South Wales. It's either not an important enough issue for him or he too doesn't have the authority to tell councils what to do but I have looked at the Victorian model and it is a good model and one that we would be prepared to consider as a starting point here in New South Wales.

MR WEICKHARDT: So what's going to break this situation? Even the gentleman from the City of Ryde acknowledged that 40 different skip policies must be problematic to the industry.

MR KHOURY: It is. Look, it's a real burden on small to medium size operators. You know, some of our members have upwards of \$70,000 in deposits with different councils to enable them to do business in the different areas. In terms of what's going to make it happen in a coordinated sense, I really don't have the answer. I mean, I take very opportunity I can in forums such as this to raise the issue. The

government here doesn't seem to have the answer to it. The Local Government and Shires Association doesn't seem to have the answer to it. We're just forced to work with it at the moment. We don't like the system. It's inefficient. It's not good for business but we work with the system but we don't like it. We would like to change it.

MR WEICKHARDT: The colour coding of bins, the common colour coding of bins, is that simply for consumer sort of education purposes?

MR KHOURY: It's for a whole range of reasons. I was the chairman of the Australian Standards Committee for Mobile Garbage Bins and that standard will be released shortly. It's across a whole range of areas. Colour is only one aspect of it. There will be a whole lot of performance requirements that go with those requirements for mobile garbage bin manufacturers. The colouring was something that was pushed by a couple of members of the committee and agreed upon that it would enable Australians across the whole of the nation to identify with a particular colour as being waste or recyclables or green waste or whatever the situation may be; even to the point where it may eliminate certain hazards from within the system.

I mean, for example, the colour all yellow should be clinical waste. There are some councils who have used the colour all yellow for recycling. I can recall back to my days in the mid-90s as an operator where that caused a whole load of recyclables to be contaminated with clinical waste because the wrong bin was picked up. So there is, you know, some public liability and occupational health and safety issues that we would gain from by having that consistency but also from the point of view of education. It would enable us to in time advertise across Australia that, "If your waste goes in a black bin with a red lid it's rubbish. If your waste goes into a green bin with a yellow lid that's commingled recycling. If your waste goes into a bin that's black with a lime green lid it's green waste" et cetera.

MR WEICKHARDT: All right. You mentioned there is an Australian standard about to come out.

MR KHOURY: That's correct, yes. It's only a matter of a month away.

MR WEICKHARDT: Hopefully that will give some sort of lead for people to - - -

MR KHOURY: It will but there will still be bins in the system that will take many years to work their way through. We don't expect that councils are going to immediately replace their whole stocks of bins. We're just hoping that in future they will adopt those coloured recommendations.

MR WEICKHARDT: Yes, all right. In mentioning, you know, Australians being passionate kerbside recycling, you talked about green waste. Now, one person put it

to me that to a degree councils now providing bins for green waste has had two effects (1) it has made our recycling numbers look better because that tonnage of waste is typically all recycled into compost, albeit the compost sometimes doesn't necessarily find a home, but they also put it that in the past most of the product that used to go into green waste bins was composted at home in lawn clippings or things of that sort and we have now transferred that responsibility somewhere else and they were questioning whether this has been to society's benefit. Do you have any reaction to that?

MR KHOURY: Well, I mean, I don't know that all green waste in the past and lawn clippings was composted. That's something that I don't know whether any studies have been done on that in particular.

MR WEICKHARDT: Probably if I go back to my youth some of it was burnt off.

MR KHOURY: Absolutely, and that's something that many of us had in the early 80s and late 70s, there were little incinerators in the backyard and that has now gone, but in terms of whether we have - by extracting it out you're at least creating a uniform product for recycling. You're taking it out of a waste bin. There's that incentive here in Sydney to do so of \$30.40 per tonne and if you don't put it in your waste bin you avoid that, or the council avoids that, so the council has got an incentive to keep it out of the waste bin.

MR WEICKHARDT: Yes.

MR KHOURY: In terms of whether it was composted in the backyard or not, I'm not an expert in that area so I wouldn't like to comment.

MR WEICKHARDT: All right. Thank you very much indeed for appearing.

MR KHOURY: Thank you.

MR WEICKHARDT: We're very grateful for your submission and your input.

MR KHOURY: Thanks very much.

MR WEICKHARDT: That closes and concludes today's scheduled proceedings. For the record is there anyone else who wants to appear before the commission? I therefore adjourn these proceedings. The hearings will resume tomorrow in Brisbane. Thank you.

AT 2.09 PM THE INQUIRY WAS ADJOURNED UNTIL THURSDAY, 27 JULY 2006

INDEX

	<u>Page</u>
SITA ENVIRONMENTAL SOLUTIONS: MIKE RITCHIE	829-846
WASTE MANAGEMENT ASSOCIATION, NEW SOUTH WALES BRANCH: MIKE RITCHIE MATTHEW WARNKEN	847-857
CITY OF RYDE: KIM WOODBURY	858-870
NATIONAL ASSOCIATION OF RETAIL GROCERS OF AUSTRALIA: GERARD VAN RIJSWIJK	871-884
NEW SOUTH WALES DEPARTMENT OF ENVIRONMENT AND CONSERVATION: TIM ROGERS MIKE GORTA	885-899
PRODUCT STEWARDSHIP COUNCIL: RUSS MARTIN	900-909
WASTE CONTRACTORS AND RECYCLERS ASSOCIATION OF NEW SOUTH WALES: TONY KHOURY	910-918