



**TRANSCRIPT
OF PROCEEDINGS**

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PRODUCTIVITY COMMISSION

INQUIRY INTO WASTE GENERATION AND RESOURCE EFFICIENCY

MR P. WEICKHARDT, Presiding Commissioner

TRANSCRIPT OF PROCEEDINGS

AT MELBOURNE ON WEDNESDAY, 22 FEBRUARY 2006, AT 9.03 AM

Continued from 20/2/06 in Canberra

MR WEICKHARDT: Good morning, ladies and gentlemen, and welcome to the public hearings for the Productivity Commission inquiry into waste generation and resource efficiency. My name is Phillip Weickhardt and I'm the presiding commissioner of 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 and industrial and construction and demolition wastes.

We have already talked to a range of organisations and individuals with an interest in the issues, and submissions have been coming into the inquiry following the release of an issues paper in December. We are extremely 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.

On Monday we had hearings in Canberra and today, tomorrow, Thursday and next Monday we have hearings in Melbourne. We also have hearings in Adelaide, Brisbane, Sydney and Perth. We will be then working towards completing a draft report for the government by the end of May, having considered all the evidence presented at the hearings and in submissions, as well as other relevant information.

Participants in the inquiry will automatically receive a copy of the draft report. We like to conduct all hearings in a reasonably informal manner, but I remind participants that a full transcript is being taken. For this reason, comments from the floor cannot be taken, but at the end of the proceedings for the day I will provide an opportunity for anyone wishing to do so to make a brief presentation. Participants are not required to take an oath but are required under the 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.

A transcript will be made available to participants and will be available from the commission's web site following the hearings. Copies may also be purchased using an order form available from staff here today. Submissions are also available on the web site or by order form.

To comply with requirements in the Commonwealth Occupational Health and Safety Legislation and to comply with normal commonsense, I wish to draw your attention to the fire exits, evacuation procedures and assembly points. First of all, the evacuation and alert alarms, you will hear "beep beep beep" alarms which are an alert, or "whoop whoop whoop" alarms which are evacuation alarms. We are privileged to have two fire wardens in this room right now, so you can follow their

directions, but you assemble near a fire exit which is adjacent to the reception area and the lifts, and follow the wardens' instructions and evacuate using the fire stairs, do not use the lifts. Our assembly area is out the other side of Collins Street in the park. I trust we won't need to use any of that.

Can I please ask anyone in the audience to turn off their mobile phones or turn them to silent, and I now want to welcome our first participants, Mr Charlie Lenegan, Ms Geraldine Gentle and Mr Paul Howlett from the Business Roundtable for Sustainable Development. If I could just get you to say your names and your positions please so they can go on the record correctly.

MR LENEGAN: Thank you. Charlie Lenegan, a member of the Business Roundtable for Sustainable Development, chairing the task force that is looking at the national waste management strategy, and also managing director of Rio Tinto Australia.

MR HOWLETT: Paul Howlett as project manager for the Business Roundtable's task force.

DR GENTLE: Geraldine Gentle, consultant to the project on waste policy framework, and from URS.

MR WEICKHARDT: Thank you. Now, you should assume that we have read a very comprehensive and, may I say, an excellent submission, but I understand you have some introductory remarks and we have some questions. I think in total we have allocated 45 minutes, so we don't have a lot of time.

MR LENEGAN: Thanks very much, commissioner. I think I can move fairly quickly through some of the background and talk about the framework, and then obviously move on to questions and any discussion, and certainly just noting that I have with me today Paul Howlett and Geraldine Gentle who have a lot of experience in this area and have brought some significant knowledge to the exercise. I might start by just giving you a look at the outline for the fairly short presentation. We give you some background to the Business Roundtable and then talk about the key findings, and then talk about aspects of business and its role in waste policy management, moving on then - just touching on the proposed framework, talking about elements of effect of policy implementation, outlining our recommendations and then just moving on for discussion.

As of course you are aware we have recently submitted our presentation on this. It has three components. The first one is the Productivity Commission submission itself. Attached to that we actually provided the detailed framework and that actually remains confidential until it has been submitted and endorsed by the

ministers for industry, tourism and resources, and environment and heritage, who actually commissioned this work initially with the Roundtable. The third element of that set of documents is in fact a suite of support documents that provide quite a lot of detail behind our thinking and conclusions and also provide a number of case studies.

MR WEICKHARDT: Can I just clarify when you anticipate, forecast or hope that the confidential material may no longer be confidential?

MR LENEGAN: We expect to be presenting this late next week to the ministers, and my expectation is within a week of that. So very early March we would expect that it would be public.

MR WEICKHARDT: Right. The case studies are also in confidence at the moment.

MR LENEGAN: Yes.

MR WEICKHARDT: I understand. Thank you.

MR LENEGAN: Starting with some background to the Business Roundtable for Sustainable Development formed in 2003 by the ministers of industry, tourism and resources, and environment and heritage, to provide a high level of advice to the Australian government on sustainable development. The Business Roundtable is comprised of industry leaders representing a wide range of sectors and it seeks to contribute to the development of a sustainable Australia.

The Business Roundtable provides advice on what Australian industry is currently doing to achieve sustainable development and how government can best promote greater business sustainability. The Roundtable has provided advice to government on topics ranging from water strategy and changing demographics, through to energy policy and business regulation. In 2005, the ministers requested that the Business Roundtable make recommendations to the government in respect of a national waste management strategy framework. The committee comprised of member companies and waste management industry experts was established to actually review waste management experience in Australia and to develop the proposed framework, and that has actually formed the basis for the submission to the Productivity Commission.

Moving on now - and this is very much a snapshot, there is a lot of detail within the submission and the supporting documents - what we identified through our work were that there are significant shortcomings in the current approach to waste management policy in Australia. These extend to, in the first instance,

objectives where what has emerged is a very strong focus on minimisation rather than an approach that focuses on risk and value. In addition, when one looks at process, our analysis had indicated at times a failure to adhere to good practice policy principles which have already been agreed via the COAG process.

Then finally when one looks at outcomes, a number of policies are imposing significant costs on the economy for tenuous benefits. So in looking at the shortcomings, we have certainly identified areas in objectives, process and outcome that indicate opportunities for improvement. In addition, further significant interventions are currently being considered that have the potential to inflict net costs on the economy. Many of these, such as producer stewardship schemes, will need to be implemented at the national level and the Commonwealth government will need to closely critique their merits. Obviously we would support through that process the implementation of best practice policy development.

We have also identified, I guess, some initiatives driven primarily by resource efficiency objectives, rather than the management of waste disposal externalities, need to be led by the appropriate portfolios of government, ie, the industry and resource agencies rather than perhaps the environmental area focused on waste management disposal. If we take a look, I've given something there that just indicates the size of the industry back in 2001, around 2.8 billion. Interestingly, of that, waste associated with business activity accounts for some 54 per cent, gives a clear indication of the role of business in the industry going forward. Our analysis has also noted - and I mention that for interest - that the recent increase in the New South Wales waste levies will in fact look like incurring an additional economic loss of 1.4 billion over the next 30 years.

Moving on to the waste management policy itself, our task force initially started by focusing on the question, what is waste. It's clear from the work and the discussions that we carried out, waste is not an absolute, it's actually a matter of value, place and time. Material becomes waste when it ceases to have value or purpose for its current owner, but obviously options to extract further value must consider associated costs and further value that can be derived from processing or other opportunities.

Waste policy is very definitely an area where appropriate government intervention can help markets operate more effectively, by targeting market failures, such as environmental externalities and information failures. But we also believe and have identified instances where inappropriate intervention can have perverse consequences that need to be avoided. The development of the waste management policy in Australia in recent years has reflected a focus on reducing volume. We have already made reference to this. That focus on reducing volume doesn't appear to pay sufficient attention to the evaluation of economic, environmental and social

impacts. It has also reflected greater attention to upstream resource impacts, rather than waste disposal externalities and, as already indicated, this can drive some unintended consequences. The other area, I guess, is a move to the increased involvement of business which is quite appropriate, but obviously then requires that good practice policy development principles be followed in terms of consultation and involvement.

Certainly from the Roundtable's perspective, business is very keen to see effective policy developed and implemented in a nationally consistent manner and in a way that contributes to economic efficiency and sustainability. What I have put up there is just, I guess, some thought prompters in terms of existing waste policy misconceptions. Further detail for all of this information is actually provided in our submission, but we would submit that perceptions, for example, waste creation is wasteful; Australia is running out of landfill space; ultimate policy should be zero waste; the community dislikes landfills and incinerators, and producers should be responsible for products from cradle to grave, in fact do not give an appropriate representation of where the waste management policy debate should be headed in Australia.

I'll move on now to just briefly talk about the proposed framework and would note at the outset that sustainable resource management covers resources over their full lifecycle. Here we're looking obviously, in the first instance, at sustainable resource conservation focused on exportation. There are examples of where this has been done successfully in Australia. The next component relates to sustainable resource use which is focused on the allocation and use of resources. The third element relates to sustainable waste management, and this is indeed where we have focused our attention and, really, that's very much about the safe and effective disposal and management of waste.

We would note in our view that the most effective approach is to focus on the downstream waste disposal impacts, rather than seeking to achieve upstream impacts through the waste management disposal approach. We have identified within our submission, and the supporting documents, instances where waste policies can usefully supplement resource conservation policies - are likely to be limited. For example, New South Wales landfill levies have had little impact on resource conservation, and you will see elsewhere where there have been attempts to influence resource conservation policies through waste management policy. The reasons for that come back to, for example, import and export leakages and the influence of other inputs, for example, energy and alternative resource consumption options.

Our framework is general in its application in that the ministers were requesting a framework that covered national waste management strategy without limitation really. What we have done with the Productivity Commission's

submission is that we have sought to apply that framework in the area of solid waste. I think what it has done is actually confirm that the framework has worked in a material solid waste area and our submission contains quite detailed information that demonstrates that.

One of the things that did emerge as we worked through and developed the framework is the concept of the use of policy dimensions and these aim to drive value and risk based solutions. We believe this shift would be promoted by policies which reduce barriers to efficient markets and allow business to identify opportunities to value recovery. So in the instance what we're trying to say is as you develop policy, rather than focus, for example, just on the concept of waste minimisation or zero waste, what you should be doing is actually applying a set of dimensions to any particular set of circumstances to actually drive solutions that make the most sense in a sustainable way for that set of circumstances.

The dimensions that we have identified for consideration in that process, I have actually identified on that overhead. They relate to environment, economic, social, political, time, geographic and technology. We have tested that in a number of cases and what we have found is that for some of the approaches that have been applied in Australia, for example, picking up initiatives from Europe, a review and development of policy based on good policy development principles and on the use of dimensions would probably have driven quite different outcomes, and outcomes that are more suited to the needs of Australia.

So I think in terms of the framework we see the role for those dimensions, plus existing policy development guidelines applied effectively. We believe also that one would see emerging from that process the shift from volume to risk and value, and of course, as I mentioned earlier on, as you proceed down that path you would be looking for greater business and stakeholder involvement. I've also mentioned our view that policy should focus particularly on downstream waste disposal impacts. Now, in that area we have identified perhaps some options where there may be a need to go upstream, but we would caution that that needs to be done with extreme care, with real consideration of potential downstream unintended consequences and with the very careful application of good policy development. Certainly our view is that, for the majority of time, effective waste management policy is best focused on the downstream waste disposal impacts.

Something else that emerged from our process is recognition of the need for more informed public debate. Clearly the broader community are key stakeholders in long-term waste management. There is a need to ensure that they are better informed and better able to participate in the development of appropriate policy.

I'll move fairly quickly through this one. In terms of effective policy

implementation, our view is, based on the work, that there is a need in the first instance to understand and focus on market failures, obviously then engage with business and indeed other stakeholders to develop appropriate policy responses, and within the body of our work we have actually identified a number of areas where there have been policy successes. The two ones raised there specifically are tyres and used oil, and I think what both of those reflect is certainly industry involvement and leadership in the process, also clear evidence of the disposal externalities and an understanding of those, engagement of all of the major players, and the adoption of a policy instrument that has focused on creation of value in resource recovery and allows business then to identify the viable recovery levels. Of course, also within those what we have got is a nationally consistent policy response.

We also noted a couple of examples of policy failures. I might refer initially to the National Packaging Covenant, and perhaps characteristics as we analysed that would be as follows: the ideas were imported from overseas without considering the Australian dimensions. The focus was not on downstream disposal externalities but on assumed upstream benefits; it hooks into comments I made earlier. Voluntary schemes previously, for example, the dairy scheme, had failed in New South Wales and the NPC relied on mandatory legislation for noncompliance, obviously not a way to constructively engage and involve industry in finding solutions. The environmental benefits associated with the policy were tenuous. Interventions drove increased costs and therefore there was a clear reluctance from industry to participate.

The other example of a policy failure relates to organic wastes, and there, if we look at the characteristics, again the initiative was actually driven by a landfill volume reduction objective rather than a focus on risk and value. It didn't really recognise the impact of recycled organics competing with products from other sources and the impact of price competitiveness on relevant market shares and viability. We also have environmental regulations on compost facilities that are not synchronised with regulation on other areas, for example, waste water, plant or animal manures, causing inconsistencies in the treatment of essentially products that ultimately completed. Also planning and land use regulations for waste-related facilities are different from those for other manufacturing processes, introducing some barriers to I guess viable enterprises.

Perhaps another area of significance is the market failure relating to soil degradation, but there was a view you could just address this by banning organic wastes from landfill. One really needs to look at solutions that reflect the market, reflect the opportunities and chase appropriate solutions based on value and risk.

Moving on then just to recommendations, as we've already indicated, the waste management policy focus, we believe, should shift from volume to value and risk.

We believe that waste policy should focus on disposal impacts. Industry policy should focus on resource use efficiency. As we've indicated, waste is not an absolute. It is a matter of value, place and time, and the policy should encourage extracting of remaining value. The pursuit of technical efficiency in itself cannot ensure sustainable resource management. You really need to look at that by reference to the dimensions that we referred to earlier. Also the recognition that imported policies are no substitute for good practice policy development suited to Australian circumstances - Australia cannot afford to focus environmental efforts on second order issues - and finally effective stakeholder consultation and education is key to effective policy development and implementation.

That in a nutshell I guess takes you through the work that we've done and some of the key findings, and if I may now open it or hand it back to you for questions.

MR WEICKHARDT: Thank you very much indeed, Charlie and, again, thank you for your thoughtful submission. You had a list of misconceptions in waste management and one of them looked a bit of a non sequitur - the misconception you listed that the community dislikes incineration and landfill. Are you saying that you don't think the community dislikes incineration and landfill, or are you saying that the fact that the community dislikes incineration and landfill is in itself a misconception?

MR LENEGAN: That misconception is read as an absolute. What we would be saying is if you go back to the dimensions and you look for appropriate policy development considering those dimensions, there will be circumstances where incinerator and landfill are quite inappropriate, for example, I guess very close to capital cities, where you've got population and other pressures. But equally, if you then go back to the dimensions, you will find circumstances where incineration and landfill provide the most economic and sustainable solution. So our comment there would be that sits there as an absolute. In fact, if you go back to good practice policy development and you use the dimensions, you will find that it holds true in some circumstances; it does not hold true in other circumstances.

MR WEICKHARDT: Okay. Now, you describe and used oil as a success story. On Monday we had the Cement Industry Association in Canberra present to us a rather different twist on that, with a lot of frustrations being expressed by them about a couple of issues where tyres and used oil both are involved. On used oil, which is of course outside the scope of this but nonetheless an interesting sort of example, they said there is a product stewardship scheme which raises a levy on oil that's sold to handle used oil and its disposal. But apparently as part of this product stewardship scheme a credit is assigned depending upon the use to which this used oil is placed. Used oil that is synthesised back to lube oil apparently gains a credit of 50 cents a litre, whereas waste oil that is used for energy recovery in a cement kiln gets 3 cents

a litre.

According to the Cement Industry Association, this has meant that the volume of waste oil for cement kilns has significantly dried up, which has meant in turn that they cannot use a lot of other waste which has calorific value which has to be shandied together with waste oil to be used effectively in their incinerators. They're not aware of why these differentials of 50 cents versus 3 cents a litre were applied, but it does appear that this is a product stewardship scheme which is interfering if you like with markets and value and is a sign perhaps of some sort of artificial value on the benefit of recycling waste oil all the way back to lube oil. Do you have any comment to make on that?

MR LENEGAN: Yes. Definitely as that was developed, there is actually - a benefits table is arranged in a descending hierarchy, and that hierarchy broadly seeks to reflect the recycling effort and investment required to make products a better quality. So there is a linkage there between the credit and the costs associated with bringing through the relevant products, but I might ask my colleagues to comment further on that.

MR HOWLETT: In the documentation that we submitted as part of the confidential material we did put a caveat on the discussion of the case studies in that we talked about the case studies as being broadly representative of what we felt were successes or failures rather than suggesting that 100 per cent of everything included in those policy initiatives was necessarily to Roundtable's liking. In respect of oil, there would be some concern associated with the use of a hierarchical benefit scale that does in some regards represent a traditional waste hierarchy.

However, we do emphasise in that case study that the aspects about that process for developing that policy intervention were very exemplary in terms of clearly identifying disposal externalities associated with used oil being badly managed and having huge environmental degradation effects, very good engagement of stakeholders, and I think a very important issue - and we've seen this with the used oil initiative - is that it was subject to an ongoing review. Even the benefit scale has been reviewed and there are indications from independent bodies whose advice has been sought that the benefit scale could be reviewed again. So, whilst there may not be 100 per cent agreement that the benefit scale is right, the concept is there but the opportunity for review is there and there has been advice received to reconsider those.

MR WEICKHARDT: I guess if you follow our admonition of value and risk it would seem to me that, provided two disposal methods are equal in terms of risk, trying to tilt the playing field simply because one costs more or requires more capital investment versus another is not really letting value and risk play their way out.

MR LENEGAN: It might be useful to add that I guess you're looking at transitional assistance funding that runs through to 2007. So it is providing for a transitional period to settle down those competitive components.

MR WEICKHARDT: There's another area where I just note on tyres the same industry association said that, for similar sorts of reasons, there's a perception that using tyres to make some crumbed rubber or some sort of playing surface or something like that is of higher value than, again, waste recovery. Again, they can't access the tyres they want and indeed, along the lines you've talked about, incineration is being used as a mantra by some state planning authorities to make it very difficult for them to recover energy from tyres, particularly in New South Wales.

MR HOWLETT: I think the reflection in the organics case study, which is one about trying to remove organics from the disposal stream and get them into some sort of recycled market - the issue there is that if there is going to be an intervention it really should be looking at development of markets and information into the markets as to what are the opportunities rather than an intervention which involves banning. Therefore I have to say - and Charlie mentioned this - that whilst the view is that the focus of waste policy should be on disposal externalities, there will be circumstances when decisions are taken that aren't entirely based around that, and this applies with tyres to some degree and also organics to some degree. If there is going to be intervention, for whatever reasons are decided as being politically appropriate, then the most effective intervention might be one related to information or market development and market stimulation rather than just throwing the materials into a market that's not conditioned or ready or capable of handling them.

MR WEICKHARDT: Yes.

DR GENTLE: I was just going to add that in the tyre case they've been working to develop the markets and overcome these information issues and to have a program that sunsets after 10 years. So it isn't meant to be a permanent infant industry approach to supporting using the levy to support these other activities. On the other hand, certainly industries such as the cement industry have in the past been able to encourage people to pay them to take their materials like tyres for use as well. So this turns the tables on that and changes their economic relationships substantially. So you can understand why they would feel about it the way they do.

MR WEICKHARDT: Can I move on from tyres, please. A lot of people have picked up the comment that you've made that perhaps intervention at the waste disposal area, if you're trying to tackle resource conservation, is inappropriate, but they struggle in looking at potentially sensible interventions in the resource

conservation and natural resources area. Do you have any views? You've said that these industries would be better tackled by industry departments, not environmental departments, but do you have any views as to some interventions in those areas that might actually be seen people to be attacking the problem that they're at the moment proposing second-best solutions for and tackling by waste disposal?

MR HOWLETT: What we've suggested is that quite often decisions are going to be made in respect of waste for other than pure disposal externality issues. It's a very topical and politically sensitive area, and the view that we've put forward is that those decisions will be made by the decision-makers and that's their role and prerogative. However, that does not excuse the policy developers from going through the thorough process of understanding what will be the impacts of the policy and clearly understanding what will be the consequences of that. So the reality is there will be some decisions made in the waste policy area that are targeting some resource-related issues that one might term second-best objectives. That will happen, but at least if they're going to happen there should be an investigation of what are the impacts so that everyone has their eyes open when it happens.

MR WEICKHARDT: I don't disagree with that, but I'm asking you: give me an example of what you'd prefer to see the industry department doing - tackling the resource conservation problem versus your second best of tackling this, or attempting to tackle it, at waste disposal. Where are some of these examples that might I guess satisfy those who have concerns that resource conservation is not being adequately handled?

DR GENTLE: I think, commissioner, that one example is the idea that you can overcome the excessive cutting of native forests by increasing paper recycling. That's basically a misconception given that the forest resource management policies bear very little relationship to paper consumption or paper manufacture in this country.

MR WEICKHARDT: I buy that one. Any other for instances?

DR GENTLE: We're not saying that the environmental agencies shouldn't be involved at all. What we're saying is that they shouldn't necessarily be the drivers for resource conservation.

MR WEICKHARDT: I'm not arguing with that; I'm asking are there some instances of resource conservation interventions that you think ought to be advocated that might cause those who are concerned about sustainability issues to say, "Well, yeah, that sounds like a much better solution."

DR GENTLE: I think we give a case study about used lead acid batteries which

probably is of that category, where you've got significant disposal externalities with the disposal of these materials in landfill or illegal dumping both from the lead sulphates and the acid. But there is a good market case for the recycling of the lead itself and the recovery of the acid. Market forces do drive a recovery of these materials anyway, so you can actually develop a better policy than we've got at the minute by bringing those two aspects together in a way that they're not being brought together at the moment.

MR WEICKHARDT: Okay, thank you. A lot of work by consultants, formerly Nolan-ITU and now I think called Hyder Consulting, has been cited in this industry to substantiate, justify or demonstrate certain benefits from kerbside recycling or from resource conservation or lots of other things. A lot of their work, the assessment of kerbside recycling in Australia, cites benefits which are almost all upstream, associated with the avoidance of resource extraction and manufacture using virgin materials, and they also are cited in terms of some case study of the UR-3R process to demonstrate the benefits of this alternative waste treatment technology. Have you made any study of the Nolan-ITU figures that are cited in these various reports and do you have any views as to their accuracy or relevance?

MR HOWLETT: I think there's a very interesting role that we would like to see the commission undertake because there are a number of approaches to benefit-cost analysis and economic analysis in our view, and we cite the New South Wales landfill levy case study in that. We believe that there's a lack of understanding of what proper benefit-cost analysis is and in fact that there's a confusion with revenue-related issues as opposed to economic issues, and we would feel that there are some questions that need to be asked of some of these methods of evaluating benefit and that the Productivity Commission is well placed to reflect on what you would consider to be an appropriate method of evaluation. With due respect, we believe that one of the failings of the environment agencies is that there is a lack of that economic discipline and capacity to undertake some of those studies, and the opportunity for the Productivity Commission to look at these analyses we believe would be most fortuitous and very timely.

MR WEICKHARDT: That sounded like a handpass to me.

MR LENEGAN: Certainly we did look at some aspects, and what it demonstrated to us was some of the assumptions that say you can drive upstream impacts through waste management policy to us just didn't seem to hold. If we come back to the area earlier on of forestry and resource conservation and resource management, the concept that increasing the recycling of paper will have any impact on that is clearly at best, and with a very long bow, tenuous. Because of the import-exports, because of the other factors in the production, what you do at that disposal end has absolutely no impact. If you want to drive it, clearly policies that drive improved resource

conservation and improved resource management can have downstream benefits in the waste management area, but it's a fallacy to assume that initiatives down in the waste management disposal will actually have upstream benefits that flow all the way up.

It's quite interesting, I guess, if you have a look at the New South Wales levies examples. In the New South Wales government case - back in about 2001, I think - it was noted that the objective of the landfill levy was to provide an incentive for waste avoidance and resource recovery by increasing the cost of waste disposal. I can give you, I guess, the references for that. That was from the regulatory impact statement back in, sorry, 2005 . But interestingly enough, when announcing the intention to proceed to almost treble the levy, the New South Wales government made no mention of those landfill externality impacts, and it actually stated that the levy will:

drive further reductions in waste disposal to landfill to recover, reuse and recycle our valuable resources, provide funding for new environmental programs and provide rebates to support councils who meet waste collection and resource recovery standards.

We look at that, and that for us does not represent good practice policy development focused really an effective waste management framework.

MR WEICKHARDT: You made the comment that I think you have no argument with waste disposal to landfill costs representing the full costs, including externalities. However, I think you say that you believe in New South Wales you've already probably exceeded those levels; in some states they may still be lower than those full costs. In business, which perhaps is more sensitive to some volumetric costs and therefore variable as sort of costs associated with "more waste equals more cost", have you seen the impact of additional landfill costs actually drive some of the attention to alternative values and recycling opportunities?

MR HOWLETT: I think the classic area is in C and D waste, construction and demolition waste, and that's because of its specific gravity. It's very sensitive to weight-based disposal fees. But by and large waste generators are not price sensitive. If you look at the majority of waste that's disposed on a commercial basis, it's very bulky, light-specific gravity, and the impact on the average business of increasing waste disposal by levies is very slight. The consequence then is that if you go down the path of using price based instrument to try and drive change and it's not happening and you ratchet it up further, suddenly you've got a situation where you've got a huge unintended impact on the economy, and you're only just starting too minuscule performance change.

You have to say that we've driven a lot of C and D waste out of the landfills now very successfully, and you could say that's a successful application of a price instrument at the disposal point, but continuing it to try and get some of the other materials probably is going well beyond what's likely to be a benefit that's going to be achieved.

DR GENTLE: There may well in fact be some dangers in doing it if it increases the amount of illegal dumping that occurs to avoid it. We understand that there are significant cases now where there are operators who will offer their services for less than the actual amount of the New South Wales levy right now, and so they cannot be disposing of this material legally.

MR WEICKHARDT: I know this is I guess a second order impact on business, but the other 46 per cent of waste disposed by households, I guess in general there is no direct price signal to a householder based on whether they completely fill their bin or whether they half fill their bin. Do you have any view as to whether or not a more direct volumetric price signal to householders would have any beneficial impact?

MR HOWLETT: The concept of user pays has been canvassed and tested in various places. At the municipal waste level, the biggest issue is to look at equity and on a user-pays basis, you're probably going to get better equity than you have now which is based on a service basis. It becomes a political decision more than I think a pragmatic decision about what's the best economic outcome.

DR GENTLE: Commissioner, there do seem to be some issues relating to a tension between what is good for councils, what is good for the market, say, for recyclables and household behaviour, the co-mingling of waste, to have a signal then reduces collection costs for the councils but it increases contamination and increases costs, so it reduces the value of the recycle and increases costs of managing it, thereby reducing the value of it in the marketplace. So there are some price-related issues that go beyond the household as well.

MR WEICKHARDT: It's quite complicated, isn't it, because I think the convenience of co-mingling in one bin has increased the total volume of recycles collected, presumably because it's more convenient for householders but as you say has also complicated separation and contamination issues.

MR LENEGAN: Commissioner, I think it comes back to our recommendations. On the one hand, you're looking for an outcome that delivers value, so the level of co-mingling should be very much a value and risk based decision, but I think - and you've seen it demonstrated within Australia - having worked out that solution, the importance of education, information and communication back to the community, what we will find is I think that they are very responsive to doing the right thing in

terms of waste disposal; it's just sometimes they don't actually understand what the right thing is in terms of driving value based solutions.

MR WEICKHARDT: I think that's the holy grail we're all searching for. Look, thank you very much indeed for your time. We could go on for a great deal longer. I'm sure we'll want to talk to you again once you release the confidential part of this submission. Thank you for your input.

DR GENTLE: Thank you.

MR WEICKHARDT: Our next participant is Mr Gross from the City of Port Phillip; welcome. If you could just give your name and your position please for the record.

MR GROSS: Sure. Commissioner, my name is Councillor Dick Gross. I'm a councillor with the City of Port Phillip, although I'm just speaking as an individual who is concerned about waste management. I'm also a director of the Municipal Association of Victoria which is the peak body. I'm also a director, deputy chair and I think acting chair now of the Western Region Waste Management Group.

MR WEICKHARDT: But you're appearing - - -

MR GROSS: I'm just bringing those collective experiences just to give evidence to the commission on my own behalf.

MR WEICKHARDT: Thank you. I look forward to your presentation. You should assume I have read your slides. I think you introduce some concepts of the seven deadly sins that are outside our terms of reference, but nonetheless, I'm interested in what you have to say and please make some introductory remarks.

MR GROSS: I suppose the intellectual and academic content of my submission isn't earth shattering; I'm here really at the pointy end of decision-making around waste at municipal level. The journey that I've been on commenced a few years ago when we had presentations from two companies over two meetings at the Western Region Waste Management Group and both said the same thing, that, "We can't do anything with you of any changed technology unless you start operating as a regional group rather than as individual councils," so that's where this journey started.

Let me start with the Western Region Waste Management Group. It's a statutory authority. It's funded by the landfill levy. Essentially it is to act on behalf of the member councils to assist with both education and the provision of infrastructure for waste management. The region is a significant number of people. It's as big as the city of Brisbane. It deals with almost 60,000 tonnes of recyclables and almost a quarter of a million tonnes of waste. So we have a critical mass in the western region that is important. The western region goes from where we're sitting now, really, out west. It includes the City of Melbourne and then goes out as far as Melton and Werribee and beyond Sunshine which is in the City of Brimbank.

So we're obliged to have a regional waste management plan. The plan is developed every five years and is approved by the EPA. Whilst it's not relevant for these inquiries, I suppose, the developing of these plans is tortuous. We put them in with state government agencies; they don't emerge for a year or two years, so that's an area of grievance, a sort of battle between local and state government.

I think it's fair to say that in the past, state government agencies have assumed a master-servant relationship with local government and the regional groups. I understand why this is but I think in the end, it has made change difficult to achieve because the relationships between the two tiers of government is often fraught. So we have the normal portfolio menu of policies, about sustainability, greenhouse, landfill and recyclables.

The integrated waste management project has been going for about three years and essentially it's trying to integrate the waste management practices within the nine councils of the region. This is an attempt to consolidate all of our waste activities. This would seem like a relatively simple process; it is not. It has been a long, protracted and difficult process. Part of the difficulties have been firstly, that councils are already signed up to seven-year contracts, so there's obviously the difficulty of rolling these or novating these contracts into one consolidated contract; secondly, there are incredibly change-resistant parochial tendencies. We all hate to give up territory and the municipal world is no exception. There are real and perceived differences between the councils. The real differences are that the western region has some municipalities that are virtually urban/rural interface councils and some that are the most densely populated with narrow winding lanes and streets in Australia. So as a region, it's very, very diverse.

So really, integrated waste management is about economies of scale. Economies of scale is a very simple concept. We all hear about it in first-year economics but the pursuit of it has been, as I say, difficult. Some of the economies that we hope to reap are the pre-sale of recyclables, purchase of landfill capacity, a consolidated, 24 hours seven day a week call centre, and more sophisticated contract management and higher compliance with our regulatory requirements.

So the current scenario is as pictured; there's all the councils which have a director, one director each on the management group, and at present, all the group does is dispose, but the councils collect, sort, recycle and they inevitably have a worthy but often very expensive green waste system, much loved by everyone, the people who created it and the householders who use it, but expensive. That was the situation. The integrated waste management approach, which would be a regional solution, would be the council still having a stake in the management group but the group would do the lot.

Now, I'm sure you're aware about the Towards Zero Waste strategy. With our current diversion rates from landfill at about 25 per cent, our ultimate diversion rates are to be 65 per cent and in 2012, under the policy as it's currently framed, we're not allowed to go straight from home to landfill, we have to go via a MRF. So clearly, current practices are noncompliant, although it is true to say that in some

municipalities, there has been diversion from landfill approaching 50 per cent but that is not the norm and even 50 per cent is still not going to comply with the requirements of the policy by 2013. So we need some fairly radical stuff. This is pretty obvious stuff; there's the council collections, the process stream, it's sorted and then disposed.

At the moment, it's a patchwork. The disposal is done by the region, the sorting is half and half, and the collection is done by the individual councils. If you're trying to find suboptimal inefficient practices, they really exist at the collection level. I can't do, but it is problematic that we don't have regional collection. So with a regional sorting tender, it would look something like this; sorting is the process in the middle, of course. We have the recycling going to a dry MRF. The general waste stream would go to a wet MRF and the residue to landfill. The green waste stream, that's actually problematic. It could go to an organic processor but of course it could go to a wet MRF and ultimately, I assume, will.

MR WEICKHARDT: Will ultimately go where?

MR GROSS: To a wet MRF.

MR WEICKHARDT: Sorry to interrupt your presentation but you've talked about green waste being expensive to collect; if it goes to a wet MRF, one of your arrows in organic processing doesn't have a box coming out of it. What do you actually see happening with the material that's been collected or separated out of your wet MRF?

MR GROSS: We have had two tenders. In the wet MRF tender, we're trying to get the councils to sign heads of agreement with GRL. GRL has a facility in Sydney in Eastern Creek and essentially, it's my understanding that it's both a wet and dry MRF. Everything goes there. They can sort paper, cardboard, plastic and then aluminium prior to the wet MRF treatment. The putrescible waste goes into the wet MRF and comes out as a soil conditioner. In Victoria, the talk is of combining soil conditioner with a form of brown coal that is too wet to ignite but the combined product would be a soil conditioner/fertiliser that would complete the virtuous circle of taking waste, making it into a useful product which would replace less sustainable practices like superphosphate.

This is a huge contract for the region. It's a 20-year, \$400 million contract. The rule of thumb is that you have to spend about 1 per cent of the value of a contract assessing a contract and we are completely out of our league. It's incredibly exciting for us, but it is very challenging. Assessing the technology is beyond us. The state government is assisting with the lawyers. Typically, our executive officer, who is very competent, would go into a meeting where there would be the usual phalanx of lawyers representing bankers, company and government, and there'd be

Bruce by himself or perhaps with his lawyer mate. So we've had terrific support from the state government and we have needed it. It has been this experience that has led the government to embark on a process of reform which means that the western region has only a couple of months left to live because it's going to be amalgamated into a Melbourne metro waste group.

This story doesn't have far to go really, but just while we're on this line, the wet MRF is at heads of agreement stage with GRL. The dry MRF, that's all been signed up. Six out of the nine are signed and there's capacity for the other three to sign on. This is a very exciting contract for me because for the first time now, we're being paid \$20 per tonne, \$10 a tonne if we need some cartage. The City of Port Phillip isn't near the dry MRF, so we lose 10 dollars of that 20 in cartage. We've turned the corner. We've gone from paying for people to take away our stuff to making money from it.

MR WEICKHARDT: Right. Is that product delivered to the MRF? It's not at the householder's bin, the \$20 a tonne?

MR GROSS: That's right. \$20 a tonne at the MRF.

MR WEICKHARDT: At the MRF, yes.

MR GROSS: Sorry, no, \$20 a tonne at a transfer station in Dynon Road. I might have to check up on that. But in the end, it's been a process which has led to an expensive line item in our budget becoming a positive. Recycling started in the local communities which convinced municipalities about a quarter of a century ago to start recycling and now it's finally turned the corner, so it's very exciting, I think.

That's essentially what we try to do at the start. These were cost comparisons that were for a mythical council, so if the current cost was about 1.2 million, it would cost about 900,000, with a percentage saving of about 25.9 per cent. I'll get on to the figures. We have saved in our budget 22 per cent, so it's the first time I've been in local government where I've seen a line item in a budget go down 22 per cent.

MR WEICKHARDT: This is from getting together as a group?

MR GROSS: That's right. So basically economies of scale, we all know it's true, but I suppose I thought it was important for me to come here to say, "Here's the empirical evidence that things can change." So we hope there is also service improvements; the management of the contracts would be centralised so we'd be more sophisticated at that. We were ripped off. I mean, we stood to save the most because of the timing of the contract and perhaps because we were less able at our management of the contract. We did poorly, so as a council, the City of Port Phillip

had the most to save of all of the councils in the group. But we hope for a centralised and sophisticated management of contracts, the single call centre and also management of risk. We would want the risk transferred up the chain from the council to the region.

These are some case studies that our executive officer got together, pretty obvious really, about integrated waste management savings; a major telecommunications company reduced waste costs by 70 per cent, a supermarket chain. All these are non-municipal examples but we drag them out to try and persuade our councils that we are offering them serious savings by reform.

MR WEICKHARDT: Again, are these savings as a result of forming the western region group or are these savings that - - -

MR GROSS: No, these are private enterprise case studies where large corporates, rather than having their waste management done on a decentralised basis, centralised it and made it - - -

MR WEICKHARDT: Okay.

MR GROSS: I don't quite know how to get on to the next one, sorry. Whilst I'm waiting for that, I have to say - - -

MR WEICKHARDT: You need to be conscious of the time too. I don't know how much longer this is - - -

MR GROSS: With this journey, for the City of Port Phillip, we saved 22 per cent on our integrated waste management, so I just thought I'd show you the budget because people don't believe it unless they see it in black and white. We tried to get integrated waste management over the whole region for all contracts. Now, in collection, we got two out of nine; the City of Port Phillip and Maribyrnong. As I say, you can offer some councils extraordinary savings and for political reasons, it's unacceptable.

MR WEICKHARDT: What are those reasons? Can you help me understand? If councils are desperate to try and get better value for money, is it just people not wanting to give up their own empires?

MR GROSS: It's that, it's reluctance to contract out for political reasons; it's aversion to change; it's being told not what to do; it's lethargy, inertia. I'm disappointed in the two out of nine, but as I say, these contracts can be - we novated contracts to start it but people can then log in. Everyone tells me not to be depressed, that we will get all nine in the end. We only got six out of nine for the dry MRF.

With the wet MRF, we have to offer critical mass so we have to get nine out of nine or eight out of nine. In fact if we don't get eight out of nine, it is open to us to drag in councils from outside the region, because these regions are only arbitrary and are just about to go the way of all flesh, which brings me to an observation generally, that these regional projects in local government are very difficult because you're trying to unwind and re-engineer practices that have been going on for time immemorial. I argue that people only have one regional project in them. We've got, say, a regional meals kitchen and we're trying to get 20 councils together to get Meals on Wheels cooked, and I know that will take seven years when it should take one.

The MAV has a future of local government project, one of whose main ideas is the rationalisation of back-of-house functions. I understand that political entities will want to control front of house, but back of house surely is an area for reform. We have to change attitudes and I've suggested - and I have to say this is only a personal suggestion - that one thing Australian peak bodies could do is have the carriage of back-of-house rationalisation and they could make an order called a regional contract order if there's sufficient consensus that people want to go ahead and that if there are some laggards, then you could have a disclosure of that either to the minister which would be reported in an annual report, or publicly.

MR WEICKHARDT: When you say "Australian peak bodies", are you talking about the state government?

MR GROSS: No, I'm talking about the MAV, the Municipal Association of Victoria or the Local Government Association of Queensland, the LGAQ or whatever. In each state, there's a peak body. In each state, we know that there are economies of scale to be reaped, particularly in areas such as large, capital-intensive industrial-type programs of councils, particularly in the regional areas where the pool of skilled employment is small.

MR WEICKHARDT: This might be falling into the trap of extrapolating, you know, "If some is good, more is better," but if you followed your argument, would it make any sense in your mind to say, "Look, local government, stop squabbling about this. We, state governments, are going to take over all responsibility for waste management and we'll get critical mass and scale that way"?

MR GROSS: Yes. There's two arguments about that. The first is that regional groups are state government authorities but are answerable to councils who pay the bills, so there is a taxation without representation argument. Local government pays the bills. So if the state government were to take it over - which I can assure you they will never do because of the risks involved and the costs involved - it is a huge enterprise which is distributed among the councils, and politically there seem to be impenetrable barriers to a state takeover, not impossible barriers, but they are

significant. I think also that people want to have a local relationship with their council about waste so that they can be involved in education and complaint. People tend to argue about this on a local level. So it is possible, but in the Victorian scene, the state government has shown a reluctance to take on risk and local government would fight to the death to keep it, even though it's problematic.

MR WEICKHARDT: Why?

MR GROSS: This is a time when local government is looking at significant change. Local government is roads, rates and rubbish, but now it's looking at a whole lot of human services, advocacy and traditional state areas like drug policy, transport policy, and in the midst of all that change, I still think they're unlikely to easily give up one of the three Rs. It's just a guess. I have no empirical evidence. But the empirical evidence I would say is that if you look at that final tally, there's a lot of change aversion out there.

MR WEICKHARDT: Can I just turn to the work that you're doing at the moment with GRL on an alternative waste treatment facility. I'm just interested in what is driving that. A number of people, admittedly who have probably some conflict of interest in making an impartial observation about this, have said to us already that they think the only way that the AWT system works is by being made economic by New South Wales making very, very high levies and that compared to sensible separation and sensible treatment and sensible landfill, that a wet MRF of this sort can't actually be financially viable. What's your view on that?

MR GROSS: These things aren't driven, where I sit in local government land, by those sort of market forces. We're interested in it because (a) the Towards Zero Waste policy tells us that we have to and (b) other tiers of government are interested in subsidising it.

MR WEICKHARDT: Which tiers of government are they?

MR GROSS: I might have to go back and check on what I can disclose and what I can't, but we are getting assistance, so because of that assistance I can then go to councils and say that it actually makes economic sense, financial sense, from the local government perspective. In the west, we've got hundreds of years of landfill space. It is ironic because in Melbourne the geography has worked its way so that there's no landfill in the east and there's hundreds of years of landfill in the west, yet the west, just by an accident of history, is now leading the charge into alternative waste treatment. I think it's just an accident of history and it defies the geography of Melbourne. It may defy economics, but I'm actually not qualified to say that. It doesn't defy local government financing because over the longer term, with increased levies which are justified in the light of the externalities of greenhouse gas and

groundwater problems, the financing stacks up because (a) the levies are rising; they're low in Victoria but they're rising around the world so I assume they'll rise in Victoria; secondly, because of the groundwater problems, new cells of landfill have to be lined with plastic and clay and whatever, so that's pushing up the cost of landfill. I mean, I tell people when I was growing up, there was a landfill 300 metres from where I lived and then another kilometre beyond that, and all of that has changed.

MR WEICKHARDT: Sure. Have you actually looked at the major landfill in New South Wales that Collex run at Woodlawn and sort of looked at that as an alternate technology to the - - -

MR GROSS: Capturing the methane?

MR WEICKHARDT: Yes.

MR GROSS: There's a lot of interest in that, particularly with those councils that own landfills. I haven't looked at the technology but I have received a presentation from Boral and I've been advised that the way Towards Zero Waste is currently written that capturing methane from landfill doesn't comply because it's all about diversion from landfill. Now, you could change the policy and say the policy is wrong, but at the moment, in Victoria, it would not comply with Towards Zero Waste. Now, of course Towards Zero Waste has an uncertain legal consequence because it's policy, not law. Councils don't deny policy though; they might whinge about it but they generally comply because we're a tier of government and we're expected to, and we will. So I suppose the local government reaction would be that those local governments that own landfill, including one of our members of the western region, will be in favour of it, but it doesn't comply with the requirement to avert from landfill, so there's this legal uncertainty.

MR WEICKHARDT: Okay. Bearing in mind the time, it's been extremely helpful and thank you very much indeed for your contribution. We're very grateful for it.

MR GROSS: Thanks very much.

MR WEICKHARDT: If we just adjourn briefly.

MR WEICKHARDT: Our next participant at these hearings is Carbon Partners and we have Andrew Helps and David Paice. If I could just get you to say your name for the record and give your position, then I understand you have a presentation.

MR HELPS: My name is Andrew Helps. I'm the technology director of Carbon Partners.

MR PAICE: David Paice, I'm managing director of Carbon Partners. Thank you.

MR WEICKHARDT: Thank you very much indeed for your submission which you should assume we've read with interest and look forward to your presentation and some discussion.

MR HELPS: Commissioner, thank you for giving us the opportunity to appear in person before your valuable, long overdue inquiry. I don't want to run you through the full tome that I gave you this morning, I just want to hit a couple of important points to explain to you who we are and where we are focused within the waste spectrum.

We were established in 2001 specifically to work towards the introduction of European style, anaerobic large-scale digestion technology in Australia. We're part of the Szencorp group of companies which is a number of companies, one of them is Energy Conservation Systems that works in the energy conservation area, one of the market leaders in demand side management in Australia. Carbon Partners, of course, which is basically anaerobic digestion, another company which is water conservation systems, and Szencorp has some rather large-scale property development interests in the commercial market.

MR WEICKHARDT: Are you able to say who the owners of this group are?

MR HELPS: The owner of Szencorp is a gentleman called Peter Szentel and he's been a long-term property developer, but Peter has got a particular interest in energy efficiency. He's currently chairman of the BCSE, the Business Council for Sustainable Energy, amongst other things. He's also chairman of a range of other industry associations.

MR PAICE: Actually he's president, but he sits on a number of industry boards. He has a long-term commitment to sustainability and essentially providing venture capital into Carbon Partners and other vehicles.

MR WEICKHARDT: Thank you.

MR HELPS: So we ourselves as a developer of renewable baseload power and the emphasis in what we do is that we are baseload. We are not intermittent generators into the grid, we are a renewable baseload power company and we do that by the anaerobic digestion of organic waste streams.

We use German-designed, well-tested, well-proven biogas technology. We have and deliver significant greenhouse gas reduction benefits through the use of our technology. We also, for the first time, have introduced an ability to control nutrient management in organic waste streams and we have fully sustainable outcomes for what we do in our projects. Of course one of the things that's very pivotal across the east coast, our projects also create significant amounts of regional investment, normally in the major development hubs in regional areas.

This is a plant that in the next couple of weeks we hope to have all the permits for to build at Dandenong. It's the first fifth-generation anaerobic digestion plant in Australia. It's interesting to note that when we did our Victorian EPA permitting late last year through the 30-day public notification period, we did not get a single objection or comment on the development. It will be a \$65 million development and we're hoping to have it up and running late in 2007, the first project of its type actually in the Southern Hemisphere.

In waste management at the moment, there are no silver bullets, Mr Commissioner, and I think you'll be starting to understand that, but we'd just like to reinforce the point. The key points I just want to make to you this morning are fully sustainable organic waste management can be established in Australia. This change requires the introduction of proper price signals to the marketplace. At the moment the market has a range of inappropriate, I would say, price signals in a whole range of things that it's doing and we need to move away from the lowest, first cost option approach because quite often in Australia, more commonly than not we see the first cost option approach being adopted for waste management across the board: what's the cheapest option to get rid of this product? That means that a whole lot of the externalities associated with that product just aren't costed.

The key issues: hidden externalities in landfill are not reflected in disposal costs and I think over the next 50 years in Australia, we're going to see significant issues in hidden externalities coming out from previous landfill practices. Hidden externalities in power generation are not reflected in power pricing. Hidden externalities in fertiliser usage are not reflected in the cost of production. Landfill externalities: there's environmental impacts, as you would be well aware by now of emissions to air and water. There's an issue with the cost of long-term maintenance of closed sites. There's a cost of long-term leachate treatment. There are, Mr Commissioner, around Melbourne landfill sites that were closed in the 60s that are still pumping leachate with electricity costs and that leads to some disamenity

impacts on the surrounding landowners because they have these big sites that really can't be used for anything significant in the community.

Power generation externalities: the national pool is actually designed to hold power prices down. Plants often run at a loss in off-peak times and at the moment, black coal is not fully costed, given its alternative export value and general adverse environmental impacts. It's interesting to note that in Australia at the moment if you use gas, diesel, bunker, ADO or naphtha to generate electricity, you pay export parity pricing for your fuel. You don't pay it for steaming coal.

MR WEICKHARDT: I don't think that's correct, but we won't go into that. There's no export parity on naphtha at all. All naphtha is imported into Australia but anyway, let's go somewhere else.

MR HELPS: Okay. Most power plants are fully depreciated with no sinking funds for replacement, except I must make the point, Mr Commissioner, that the Victorian ones of course have been sold and rebought, so I would imagine there's depreciation going on there, but certainly in New South Wales - - -

MR WEICKHARDT: And some pretty significant depreciation as they go from the first to the second to the third owner.

MR HELPS: Yes. There's no market based pricing for large water consumption. Power stations are big users of water and at the moment, most of them are not paying local area market pricing for that water that they use. I am unable to find - and other people have been looking too - accruals for mine rehabilitation at the moment, which may well become a significant issue.

MR WEICKHARDT: Are you talking about mines or landfill there?

MR HELPS: No, the mines where they dig the coal out. In the fertiliser sector, there's some hidden externalities. Industry is driven by the volume sale of nutrients. No incentive to recycle nutrients and carbon, particularly for soil rehabilitation and we've been mining our carbon content in our soil in Australia now for a hundred-odd years and there's no penalties for pollution of the rivers and the air.

Farmers are advised by the fertiliser companies, not by independent parties generally about their fertiliser use, and there's limited, if any, quality controls on imports. We're seeing especially phosphorus coming into the country with very high heavy metal contents at the moment from mines overseas.

Green waste issues: governments have correctly encouraged this stream to be diverted from landfill. The compost processing and end markets have not been able

to cope with the volumes. Large volumes accumulate in stockpiles and are used as daily cover in landfill, thus defeating the original purpose of diversion. If you look at Melbourne at the moment, these are the numbers from Ecorecycle: the recovery is about 281,000 tonnes a year and you've got close on 1.5 million tonnes of stuff in the system at the moment.

MR WEICKHARDT: Can you just explain what these figures are?

MR HELPS: This is Ecorecycle numbers for Melbourne, organic wastes, and they're saying that in the garden area, there's 450,000 tonne a year in the municipal system; there's 98,000 tonne in the commercial system, and of that, 175,000 is recovered and reused. In the food waste area, there's 620,000 tonnes in MSW. There's 155,000 tonnes in the commercial and industrial sector. We recover about 14,000 tonnes. In the other organics, there's 59,000 in municipal waste and there's 115,000 in commercial and industrial and we recover 92,000 which means we're recovering 281,000 out of the other two numbers. It's a very small recovery amount at the moment.

Our benefits are very different to some of the others that you'll be hearing about. We can accept a broad range of organic feeds. We have a high-value end product with a volume market and that's particularly important in comparison to, say, composting. We have a fully controlled environment. We have sterilisation through pre-treatment. Our product, when it goes in the front end of the plant, is processed at around about 200 degrees Centigrade and 25 bar, so it's fully hydrolysed. It's EU certified for TSE, BSE, the prime diseases, those sort of things.

We can take a range of wastes and indeed we need to take a range of wastes. We can take green waste, food waste, animal mortality, abattoir waste, agricultural waste, waste water sludge, animal manures and grease trap wastes. It's quite a large range, and indeed the plants need a mix of the wastes through them to maintain the process. They actually can't run very well on a single particular type of waste stream. In the end, you get a pelletised or granulated fertiliser that doesn't need outdoor maturation. It comes straight out of the plant. It goes through a low temperature drying process and you can make a pallet or a granule.

MR WEICKHARDT: What sort of water content is there in them?

MR HELPS: In that product, it comes out granulated or pelletised at about 12 per cent, so the comparison with compost is that if you put 100,000 tonne of compost through a composting process, you're probably going to wind up with, depending on the process, 75,000 tonne of compost. In our process, you wind up with 15,000 tonne of pellets, a very, very different output, which dramatically impacts the transport issues with the product; the same amount of nutrients in it, but

you wind up with 15 per cent rather than 70, 75 per cent. There is a fly-through embedded in that. How do we trigger that? You do have it, Mr Commissioner, in the CD-ROM I gave you with my presentation as a separate fly-through of each file.

MR WEICKHARDT: Okay, all right.

MR PAICE: It's not critical to the discussion today. All it really does is give you a visual image of what - - -

MR HELPS: What a plant looks like and how the trucks come in.

MR WEICKHARDT: Right, okay. Thank you.

MR HELPS: So those are the key points I just wanted to make to you this morning.

MR WEICKHARDT: Thank you for your presentation. Is this sort of technology being used anywhere in Australia at this stage?

MR PAICE: Yes, it is. There's a small facility in Camellia in Sydney.

MR WEICKHARDT: Where?

MR PAICE: Camellia. It's in the eastern - sorry, getting more to the southern suburbs of Sydney. It's run by Babcock and Brown through one of their infrastructure trusts, but it's not as sophisticated as the technology that we're introducing out of Germany. It has some limitations but it's a good working example now, that style of project.

MR WEICKHARDT: One of the issues that many people have commented on and you've commented on is this issue of a lot of compost supply has been generated and yet there's not a lot of compost demand. To what degree are you confident that there will be a market for the product that you're going to make from this plant?

MR PAICE: The product that we're making is quite a different product to the end composted product. Andrew touched on it briefly in his presentation. Basically the nutrient content of the input streams are concentrated in the final product, so you have a relatively strong nutrient content. You have a high quality product, in that the contamination is eliminated from the product through our process. You have relatively small tonnages of a very high quality product compared to a composting operation. I think the example Andrew gave was 100,000 tonnes of, say, green waste input, and by way of example, we'd probably suggest that it's not as high as 75,000 tonnes, it's probably 60, 65 thousand tonnes of composted material, whereas we'll end up with, for a similar amount of input, about 15,000 tonnes of a very high

quality, easily transportable product. It seems to have some good market acceptance in terms of - - -

MR WEICKHARDT: Which applications are you intending to target this product to?

MR PAICE: It can be targeted into either the retail market or into the wholesale area. It just very much depends on what the regional market is. I suspect that's probably where it's going to go at the end of the day. We're looking to build a number of these facilities in regional areas and the ideal outcome would be to recycle nutrients from an area and carbon from an area back into the local market.

MR WEICKHARDT: But do you have a particular agronomic application in mind?

MR PAICE: We have done research and development using wheat, through the Department of Primary Industries in Victoria which showed two very promising outcomes; one was both in terms of growth medium and the second one was in water use efficiency. That seems to be a feature of the way that the product is created in the first place and dried down; it has a tendency to retain water very well in the soil structure. So they are a couple of fairly key advantages.

The other advantage that this product has, which is one of the areas that we understand composting suffers from, is the front-end hydrolysis process actually eliminates weeds, seeds and a lot of contamination. That's, as we understand, one of the shortcomings of the composting industry - is that it is the problem of pathogen transfer, but more particularly the problem of weed transfer in end applications which will be eliminated by the process here.

MR HELPS: The product, Mr Commissioner, is capable of going through the normal farmer's conventional seed drill which you can't do with compost.

MR WEICKHARDT: Say again?

MR HELPS: The product is capable of going through a normal farmer's air drill which you can't - so it's got row crop applications, very clearly.

MR WEICKHARDT: You say in your submission that fifth generation anaerobic digestion plants are expensive to build - that require a gate fee for incoming wastes. What size of gate fee and is this commercially viable in the context we're operating in here in Australia?

MR PAICE: That's a very good question and I'm not sure what the commercial

context is because it seems to be shifting ground. By comparison to say the price burden for your old process, it's not in that area. We rely on a number of different income streams going into a project, not just gate fees, whereas I understand the GRL process looks to cover its income risk against just simple front-end gate fee. So by comparison to that sort of technology we would suggest that we're much more competitive on the gate fee front. Having said that, we obviously require gate fees that are higher than a low technology, low capital outlay processing operation.

MR WEICKHARDT: So are you satisfied that commercially this is going to be a competitive technology here in Australia?

MR PAICE: Absolutely.

MR WEICKHARDT: Have you been dealing, for example, with the individual who appeared at the last here - appearing as an individual, but is on the Western Region Management Group and they're talking to GRL apparently. Have you spoken to that group about your technology?

MR PAICE: In a very general sense we've spoken to most - and to the Western Region. They are very much committed to the GRL process. We have taken a strategic view that Dandenong is logistically the most sensible spot for us to build a project and that's why we focus on that particular area. We're not seeking to be all things to all people. You know, the key for us is - and I think he alluded to that as well - is being able to consolidate sufficient income streams to justify a hefty investment in such a process and project. That's probably one of the shortcomings which he didn't really touch on in terms of how local government waste streams are contracted at the moment, or tendered, is that they tend to go on relatively small tonnages and that the tender process is very scattered.

So if you're developing a large-scale project, it's very difficult for you to actually risk manage and consolidate sufficient tonnages to justify a project. It's taken us quite some time to do that.

MR WEICKHARDT: So in Dandenong do you have contracts with local government?

MR PAICE: Yes, we have, via an intermediary - we have actually ended up essentially outsourcing that function to an existing compost operator.

MR WEICKHARDT: I see. So there is somebody who at the moment is taking organics and you would take it instead of them.

MR PAICE: Yes, they regard that there are some limitations as to how much

longer they can continue to operate in the way that they do and that there needs to be shift in the technology base and it's a good strategic fit for them and it's a good strategic fit for us. Similarly, that's one of the issues that we have when it comes to putting regional projects on the ground, although sometimes there are quite different drivers. We are looking at two projects at the moment that basically complement waste or treatment facilities in regional areas, in that those waste or treatment facilities have a very heavy trade waste loadings, probably operating at or close to their design capacity routes and in some instances beyond. We are looking to enhance their existing capacity. So we'd be looking to build up essentially an infrastructure enhancement to their existing waste or treatment facilities. That's one of the features of this technology, I suppose, is it's a reasonably flexible technology, depending on the application.

MR WEICKHARDT: In the table on page 15 of your submission it rather intrigued me. You show an output from anaerobic digestion of electricity and methane gas which I've accepted as valuable - or has a value in your pelletised fertiliser. You also cite CO₂ as being an output which almost by suggestion has some value. Most people would think CO₂ is in excess supply, but if you're going to credit CO₂ as having a value, then I would have thought thermal conversion should also have a CO₂ entry there.

MR HELPS: No, because the CO₂, Mr Commissioner, comes out of our plant - is in a format where it can actually be used as an enhanced role in greenhouses, whereas the thermal conversion stuff is actually not quite clean enough to do that. In Europe they quite commonly now use the CO₂ to increase the CO₂ level in greenhouses for enhanced growing effect - and it will happen here. I mean, there's people starting to look at it already. The rose growers are starting to do it.

MR PAICE: From a project development's perspective we wouldn't place any real value on that. It might be an advantage. It might be a potential benefit. It's not something that will drive the project.

MR WEICKHARDT: Certainly commercially, CO₂ at the moment does come from some power stations. You can get CO₂ out of power stations if you're prepared to pay enough money for it but - - -

MR HELPS: Well, Mr Howard is spending a lot of money to do that at the moment.

MR WEICKHARDT: Okay. Well, I mean, it sounds particularly interesting technology. This is being used extensively in Europe now, is it? Okay.

MR PAICE: That's correct. In fact, I read a document recently that suggested there

are over 500 new biogas projects went into Europe in the last 12 months. Germany has had a particular focus on development of biogas so they have schemes in place to encourage the development of biogas. They have very high retail power prices. Farmers that utilise biogas projects get full retail and if they grow crops specifically for the use in that biogas facility, they get a premium power price so I suppose that's a form of farm subsidy, but delivered via power prices.

They also have very strong prohibition on disposal of nutrients straight to soil. So they have in place some pretty strong drivers that generate all the projects in Europe. We don't have those same drivers in Australia.

MR WEICKHARDT: No. Are you looking nationally at actually making investments in this technology or is it just Victoria alone?

MR PAICE: No, we have two projects that are in a fairly advanced stage in Victoria. A third one is coming through in Griffith from New South Wales. We have looked at a project in Brisbane but in the end, an existing landfill operator did a very attractive deal in order to keep the technology out. So the potential exists right throughout Australia. I suppose you've got to put in place the projects that are most obvious in the first instance and the ones in Victoria are a little bit easier for us to deal with in the first instance.

MR WEICKHARDT: And to what degree do you rely on very clean, you know, segregated feed into this facility?

MR PAICE: That's ideal. We do have the capacity to deal with some contamination as part of the process. In several stages of the process we will remove various types of contamination but in an ideal world we would have sort of clean, all separated waste streams.

MR WEICKHARDT: And presumably there's some output sludge that you have to eventually send to landfill from this, is there?

MR PAICE: Only if it's heavily contaminated. No, by and large, by the time it gets to the end of our process, the contamination will have been removed and the sludge that we have will be dried down and become the fertiliser output.

MR WEICKHARDT: It goes out with the fertiliser.

MR PAICE: Well, that becomes the fertiliser basically. The fertiliser is created out of two parts of the process. You have a liquid stream and a sludge stream. Basically the two are combined at the rear of the process and dried down at relatively low temperatures so you retain the nutrient values in that fertiliser.

MR WEICKHARDT: We've been told that in New South Wales - and I don't know whether this applies elsewhere - there are some regulations that have been put in place to control compost regulations relating to heavy metal contamination and also pathogens. Those regulations, are there any comparable regulations like that that you come under for this product in the state of Victoria?

MR PAICE: I'm sure that if such regulations existed, we would need to conform to them. Certainly from a process perspective, we will be testing waste streams, particularly liquid waste streams, as they come in at the front end to make sure that if there is a problem with a particular waste stream, it will not go into our process. Similarly, we won't - - -

MR WEICKHARDT: How will you segregate that problematic waste? I understand, particularly for the AWT and from GRL, that lead out of lead acid batteries that get into the waste stream is a particular issue for them.

MR PAICE: It might be more of an issue for GRL. At the end of the day, they're taking mixed solid waste streams as I understand. From the municipal collection perspective, we are looking to take separated green waste. I'd be naïve to suggest that we may not get the odd car battery or similar in an input stream but that will be removed before it even gets into our process. We have fairly expensive and stringent sorting mechanisms at the front end of the process.

MR WEICKHARDT: The Babcock and Brown facility in Camellia, do you know whether they have any issues in terms of meeting regulations up there?

MR PAICE: Not that we're aware of.

MR HELPS: No, I don't believe they do, and they are selling all the fertiliser output they can make.

MR WEICKHARDT: Where is that going specifically, do you know?

MR HELPS: It's going to Patons, I believe, Patons Fertilisers.

MR WEICKHARDT: Do you know where they sell it?

MR HELPS: They must be selling it - they're of the CKI infrastructure group out of Hong Kong.

MR WEICKHARDT: But do you know whether it goes into sort of retail-type - - -

MR HELPS: I believe it's spread across a number of their products.

MR WEICKHARDT: Thank you very much indeed for your submission and participating in the inquiry.

MR HELPS: Thanks for the opportunity.

MR WEICKHARDT: Thank you. We will now take a brief break and we will recommence hearings at about 20 past.

MR WEICKHARDT: I now reopen these hearings. Our next participant is the Waste Management Association of Australia, Tasmanian branch. Brad, perhaps I'll get you to announce yourself and your position and organisation and then I understand you have some presentation you want to give.

MR MASHMAN: Yes, my name is Brad Mashman. I'm presently the president of the Tasmanian branch of the Waste Management Association. I'm also a director of a company called Recovery (Tas) Pty Ltd. There was recently a waste inquiry held by the state down in Tasmania which was quite good and we put forward a members' summary of the sort of issues that we felt Tasmania needed to deal with. Within those issues, opportunities were identified and a number of matters that are potentially particularly unique to Tasmania with the fact that we are bordered by sea on all sides. So out of that, we've ended up with quite a lot of political debate in the state and we are concerned that that's going to and has tended to override not only business opportunities here but appropriate environmental outcomes, particularly with the regulatory body down here, the Department of Primary Industry, Water and Environment; they've changed their name again.

We've put forward, without any particular change, our submission to the parliamentary inquiry here because we don't feel that the issues that we wanted to put forward or discuss would be any different putting them forward to a federal organisation, so I don't really have a lot to add. I did want to point out that some of the members that I represent have put forward that they would have preferred the opportunity for the inquiry to visit Tasmania. It would probably have to be a forum where they could have had a greater discussion over some of the matters that we're dealing with here at the moment. So if there's any opportunity for that to occur in the future, the Waste Management Association would be a good conduit to organise that.

We predominantly represent industry but we also have most of the members down here, including some corporates, so I don't really have a lot to add. If there's any questions in regard to the submission to the parliamentary inquiry, I'd be happy to answer those, otherwise we're pretty happy to sit with those and answer any queries or questions in general that the inquiry might have about some of the matters we've put forward.

MR WEICKHARDT: Okay, thank you for that, Brad. We try very hard to get everywhere. I think we're visiting five or six states and territories in this round of visits and clearly talking to you by phone, but we will certainly, when we come to the hearings after the draft report, try and assess whether or not there is sufficient interest in the representation from Tasmania coming to the hearings and if there is, then we will bend over backwards to try and get there.

MR MASHMAN: Yes. I understand the constraints that you have to operate

under. I guess at the moment, there's quite a lot of debate going on in regard to waste and even though we only touched on it briefly within our paper, one of the issues for us - and I'm also aware from consulting on the mainland - that there are issues related to the uncompetitive nature of waste management. So one of our main concerns is that we work quite closely with council and in fact some of my contracts are held with councils, but the focus is still on disposal and the main means of managing waste material in Tasmania. Further to that, there is no levy for new schemes and innovative schemes to get up and running in Tasmania. Again, part of the debate has been about that. So we would certainly like the inquiry to consider that lack in Tasmania, considering that all other states either have a significant levy in place or a plan in place, because at the moment we have three regional bodies - that's Region North, the Cradle Coast Authority, and the Southern Waste Strategy Authority, all of whom do reasonable tasks.

For example, the Southern Waste Strategy Authority only has a budget of half a million dollars which is supposed to encompass two of the largest demographic areas in Tasmania by population and also by waste, and even though, for example, my company has a good relationship with them, it's virtually impossible for us to achieve security to access capital to grow out business activities, even though we are often consulting on the mainland to develop some of our innovations. Also, industry to a certain extent is starting to - and I'm talking about organisations like Collex and Cleanaway, and I'm sure you've papers by them - they are also starting to identify the opportunities in deferring the resources from the waste stream down here, and we're also discussing projects with them. But again there's this hiatus between a desire by council to keep landfill entry fees low in Tasmania and focus on disposal, and then a desire by the community and industry to focus on accessing recoverable material from the waste stream, and also material that needs to be dealt with an appropriate manner in controlled waste and hazardous waste areas. So that's resulted in a lot of argie-bargie and fairly poor debate in many areas and a lot of particularly governments at the local level trying to hand on to some sort of empirical sort of approach to waste management based round disposal.

That's also a business view of ours. Again we have good relationships with many of the councils, but we've had projects sitting in the pipeline that are only now coming on line on the mainland over 10 years ago that we could have put in place. So it is a fair amount of hindrance to profit-making businesses down in Tasmania in regard to waste, particularly in the recovery sector. So I'm planning on putting a short paper forward from my own company's viewpoint, and I'll clearly designate that different view as opposed to the association's view, because I don't necessarily agree with all of the association's views put forward in the paperwork forwarded to. But my job is to represent all the members.

MR WEICKHARDT: Brad, I gather that there's not sort of complete consensus

between the different councils in Tasmania and local governments about how best to tackle these waste management issues.

MR MASHMAN: No, there isn't t the moment. It's not fair to say that any of the parties are - how can I put it? I'll start again. There's quite good debate occurring, but it's always getting to the point where councils feel like their interests are under threat from industry and industry feels that council is not listening to them. So the debate is not really based around best practice outcomes or continuous improvement outcomes such as have occurred in Nova Scotia, where from the 1996 levels they've already reduced landfill by 50 per cent by putting in place some of the proposals we've put forward ourselves. Yet in Tasmania the debate is still centring around, "Councils feel they don't really need to do any more. They don't want another levy."

Coupled with that, of course, some of the councils, rightfully so, view it as another tax and they're also concerned with that money potentially going into consolidated revenue. But Tasmania has a very large number of landfills. Many of them aren't monitored, and we're not only pointing out that there are business opportunities going here, that there are going to be significant costs incurred by councils over the next 100 years basically, and with a lot of the landfills it's not known what the landfill content is. So there needs to be some retrospective studies done, because some of them were certainly operating with large amounts of hazardous material entering those sites over the years and, as I say, there's no monitoring.

Recently over on the eastern shore in Hobart, Clarence City Council - some community members had some issue with an old landfill which was actually on old wetlands which is flowing into the Derwent estuary, and the state government had to put up \$200 to resolve that matter. But, as the state government pointed out, it's not their responsibility. That was landfill gazetted by the council and the council didn't have any money available to deal with the problem that occurred. So we have this issue where, again, council don't want to increase any levies or introduce a levy, and they're relying on the state government and potentially federal funds to come in and resolve a matter that they are responsible for.

So that's where the debate is going and, as I pointed out earlier, a whole lot of resource recovery in Australia pretty well originated in Tasmania and yet it hasn't been able to move forward due to this sort of political debate. It's also frustrating a lot of investment. There's companies here are quite willing to invest in improved infrastructure, again based on resource recovery and appropriate deferral of controlled waste and hazardous waste, but there's no incentive for them to do so at the moment. Some councils are sort of talking about doing it themselves, but they're looking at a decade-long implementation program.

So that's where the debate sort of lies at the moment. There's also a fair bit of disinformation being put about by various parties. For example, not all members of council - because many of our members are still from council and they actually asked us to put forward a strong case for the levy, which we were surprised about. So it's actually the bigger councils who are tending to try and keep the smaller councils, who have poor funding facilities and yet can operate - for example, New Norfolk operates quite a large landfill and yet they don't have the capital base to manage it appropriately. But they're trying to and they would like to introduce resource recovery, but again there's no funding mechanism or business incentive for that to occur there.

We've also had some of the councils deliberately trying to muddy the waters in this debate and pointing out that we've had wholesale desertion and resignation from our membership, where in fact we've had one individual member from the SWSA resign and one council resign on the advice of a junior officer. So we're also dealing with that sort of inappropriate behaviour in the marketplace.

There's also possibly a case, and some industry members are considering going to the ACCC, about cross-subsidisation of waste management in Tasmania. That's not a case that I want to get too involved in, but you or may not have received a paper from another organisation. So they're the sorts of issues that we're quite concerned about. The most annoying component of it is - and it seems very hard for the councils to grasp this - is that they can still maintain the general control and revenue generation from their landfills, and yet if they have the levy in place they'll be able to implement appropriate management of those landfills at the higher standard and also defer all resources from the waste stream. That's all we talk about, and the councils seem to be locked in, as I say, in a personal and political vendetta against some areas and some members of the industry down here. I'm generally talking about the private industry, but also there is evidence to demonstrate that some of the smaller councils feel put upon by the larger councils, and there minuted notes of that sort of behaviour.

We also have DPIWE, which down here has a very small investigative section, so compliance here is left up to individual operators, which is quite a concern for industry because compliance generally is not left up to individual operators. We're generally put under quite intense scrutiny, and yet that same scrutiny isn't being applied to some of the council operators. Again, it's generally because the people involved in council who are managing waste are overworked and under-resourced, in our view. Again, that just gets back to the need for a levy.

MR WEICKHARDT: Brad, why are you so obsessed with the idea of a levy? If the councils are under-recovering their true costs, if it's true that people in Tasmania are interested in clean, green environments, why don't the councils just up the

charges they make to ratepayers and charge more for correctly administering their waste recovery streams, including correctly pricing their landfill? Why do you want the state government to put a levy on?

MR MASHMAN: Sorry, if you look at our model, the Waste Management Association's model in our paper - and I'll just quickly whip to that - we actually don't want the state government to do it. We actually want council to maintain a strong admin and ownership role. So even though I've painted a reasonably dark picture of what's been occurring, it's actually the association's view that we still have a large number of council members who've only had one council resign. We're quite keen to see their infrastructure and vested interests protected, so our view is that we have a state-wide board that is made up of community, council, industry and any other stakeholders that are identified, particularly cleaner production, improving - down here there are obviously be going to be other players moving in and becoming and interested in the industry, but we say council as maintaining the senior role. We don't see the association as precluding the council from doing that, and we also wouldn't like to see gaining the senior role, because we think that ownership of these assets by councils are important.

So we would have a board made up of the various stakeholders but with council, I suspect, having a majority of seats or a block of seats; that's up to them to really decide. Then we would see very strong parameters for funding, so basically my organisation or one of my competitors want to put up for an innovative project that's got very high capital start-up costs and very low return but meets productivity's requirements of removing valuable resources or finite resources from the waste stream and having them reused or recycled. They would be able to obtain grants, much as is happening in most other states in Australia.

We certainly don't want to see the money go to the state and end up in consolidated revenue. We've made that consistently clear to council in our propositions.

MR WEICKHARDT: But from the sound of it, you do want a levy that is hypothecated back to grants to people like yourself. Is that right?

MR MASHMAN: Absolutely. I see no reason why industry and other councils shouldn't access that levy; that's again an industry view down here and I'm aware that it's a very strong industry view on the mainland.

MR WEICKHARDT: My question to you was more if councils are uncovering the true costs of running landfills, for example, or don't have enough recovery from their rates to properly run recycling programs, why don't they simply charge ratepayers more for landfill and for recycling programs?

MR MASHMAN: Okay. That's outside my brief as president because the committee hasn't directed me there, but to be honest, in a very clear and quick way, I don't know. There's a very low pricing structure here which makes the sort of operations we undertake quite uncompetitive, where at the moment, for example, my business is actually subsidising some council activities because, for example, we predominantly have the strongest presence on the landfill in different rural areas and we only get paid to manage the green waste area, where our staff in other areas were often the only people who were there to provide assistance to customers and clients entering the landfill, or people with problems or vehicle breakdowns. Sometimes the council is available but at other times generally they're not because they're overworked and under-resourced. So we see that our business is subsidising council operations and we can demonstrate that in many ways.

To be honest, I don't understand why council don't put up their rates. I do suspect that again it's got a lot more to do with the perceived political notion that there would be a significant fall-out for sitting members if that occurs. I don't really know. I just look at it and go, "You're only just covering your costs to manage landfill or you're pricing to somehow try and make a profit in there." Again, I'm not really that interested but the association has tried to address that over the years before I became president and got nowhere. As I say, there was an inquiry down here; we were looking at the trends on the mainland with levies being implemented pretty well across the rest of the Commonwealth. We just thought that'd be the way to go for us because we've had 10 years of discussion with councils, including improving the cost basis for managing landfills.

You would also find, I suspect, the state government has a similar view because they don't have much input over waste management really here, apart from a regulator viewpoint, but also they're underfunded, so as I say, compliance is a major issue down here in the opinion of the association.

MR WEICKHARDT: Brad, what are current landfill costs typically in Tasmania and what do you think they should be?

MR MASHMAN: I think, without getting into the figures because that gets quite complicated, the association's view is that, for example, we have unmanned transfer stations, we have transfer stations with people working on them who have no toilet facilities or staff facilities, there's no first aid training and in fact on some of the landfills, there's no training at all for staff. We know that some landfills are monitored, some are unmonitored. We know, for example, that two of the larger councils down in Tasmania are planning on a state-of-the-art transfer station but they are yet to put aside any capital because it's not generating enough capital through the gate. So I can't really answer that; it's quite a complex question. I think it still comes

down to a study is required which in the association's view should look at the best possible continuous practice on the mainland and overseas where significant deferral rates have been met and there's certainly a plethora of those - I don't think we really need to be looking at reinventing the wheel - and then build a cost structure that meets those sorts of matters.

The other problem for Tasmania, for example, with a lot of material, we have to ship it offshore because we don't have any treatment systems here for hazardous waste. I'm not quite sure of the cost structures there. DPIWE is putting forward some new projects which are going to look at those matters but we, for example, put forward a lot of this material that can be reused if there's money made available to reprocess it interstate for resale as product.

MR WEICKHARDT: What happens to the recyclables that are collected in Tasmania at the moment? Are they reprocessed in Tasmania or do they come to the mainland?

MR MASHMAN: Predominantly in the south, it's being shipped offshore because it's cheaper to send the material to China, for example, than to send it to Melbourne. I don't know whether that's a good or bad thing. I suspect from an Australian industry viewpoint, it might be better to keep that material and reprocess or remanufacture it in Australia and build Australian industry, but at the moment I know a lot of it is going straight to China. We also have had - and I'm sure it could be occurring on the mainland - Chinese representatives just turning up and wanting to buy all the scrap metal, monitoring landfill and things like that, so I think we may have a stronger relationship there with countries outside of the Commonwealth than with the Commonwealth itself.

MR WEICKHARDT: Can you tell me, we've had a number of participants at this inquiry talk to us about the issues arising from green waste going to compost and whether there is or isn't an adequate market for the compost that's generated and whether there are or are not adequate controls over the quality of those materials. What's the situation in Tasmania?

MR MASHMAN: There's been a lot of work done over the last decade, and again some of the councils have done significant work and produced a reasonable product but there has been again some political interference in that, so some quite good schemes are sort of ground to a halt because there was a charge, for example, on - green waste had not attracted a charge in the past, then it did attract a charge, and then just one particular council had enough complaints to cancel that charge, so quite a good resource recovery green waste project just fell over due to that.

I know that where I'm operating at the moment in Hobart, the council is using

green waste for remediation and that's a very good outcome. I have to congratulate them for that. Again, I'm not an expert in green waste. There's other members who could potentially provide greater information. I do know there's a company called Soil First that have quite a sophisticated management facility for green waste, but they seem to be having a few problems. But again, if that's related to access to material and they're having to invest a lot of their own capital and they're not at the moment getting a good enough return on that, they will potentially not succeed. But with better access and again, better funding protocol, they could relax a bit and take less of a risk, because at the end of the day, as you know, it can be better to have green waste out of the landfill. Of course I'm aware of the argument that says that if you want to break down the material more effectively, particularly methane collection, it's good to have green waste in a landfill but that's about the extent of my interest in that. My main interest is post-consumer product and appropriate management of landfill and transfer stations and I just see green waste as an ancillary of that and I would always employ someone who is an expert in that area.

MR WEICKHARDT: Okay. You say in your submission about extended producer responsibility and the best results from EPR legislation have been achieved in Northern Europe.

MR MASHMAN: Yes.

MR WEICKHARDT: How do you define "best results" and what are those results?

MR MASHMAN: In the view of the association in Tasmania and in my own professional view, we are very much concerned with - and I'm an industrial designer and architectural designer and furniture designer - blah blah blah - so I've got a strong experience and interest in how post-industrial or consumer product is reprocessed - and one of our concerns is that there's been a big shift to recycling material that has another life. So, for example, in one of my facilities in Tasmania, we are pulling out whitegoods and repairing them and onselling them with a guarantee, whereas I know there's other schemes just recycle it all and ship it all off to China and then bring it back as new product. With our current account deficit standing at record levels and with a decrease in Australian industry industrial capacity, I find it a little bit concerning that we're willy-nilly destroying product that has a second or third or fourth life for some easier outcome than recycling. So we're keen to see the EPR schemes come in that promote not only the recycling of post-consumer product but post its useful life in the marketplace. We sell reconditioned fridges and stoves. Then coupled to that, there is a decrease in the storage of components for a lot of particularly electrical goods at the moment. So people can't repair them unless organisations like us sideline that material, carefully bar code it, and make it available maybe through eBay which is what we're planning

on doing.

But because there's this overwhelming avalanche of desire to just reprocess all that material and send it off to China, we're finding that potentially we'll put a lot of work into a project which is far more beneficial to us and to the Commonwealth in its entirety with our focus to EPR, but we may just be beaten to the punch because it's all going to be recycled anyway and remanufactured in China and shipped back here. The state government quite interested at the moment in our view of EPR because they're quite concerned and interested in the import and replacement and they see EPR in repairing material that still has a life in the marketplace as being a good way to minimise import issues and costs.

MR WEICKHARDT: So when you talk about the best results from EPR in Northern Europe, why do you say they're the best results? What are the results and why are they the best?

MR MASHMAN: I'd have to look at that one, sorry. Let me think for a moment. I wouldn't necessarily view Northern Europe results as the best. Again, that was the general forum's view. What I was outlining is Northern Europe have a distinct policy of deferring all resources from the waste stream; they have a distinct policy of ensuring that particularly electrical goods with hazardous material aren't entering the waste stream and into landfills where they eventually leach out and you can have really good leachate collection points but they don't necessarily guarantee a good outcome. If you look at the Derwent estuary, it's got a number of - mainly due to heavy industry but there's also been leachate leaking into the estuary from various landfills over the years and a lot of that has come from electrical items.

I think in Northern Europe they've got a very prohibitive regime on all that material being deferred. I don't know about their reuse component; I'm pretty sure that they still focus on a recycling component. I wasn't clear in any of the documentation that we had a look at whether they've got some sort of reuse and repair in there, so we just use that as a model because we thought it would provide the most broad spectrum and most measurable model because it's been operating for so long. But again, the one I put forward previous to that I would see as potentially a better model for Australia because we're just one country with only one state, Tasmania that has a problem with transport across borders, whereas in Europe, of course, every country has a different language and different producers of that material, so they've worked very hard to standardise their systems across Northern Europe in regard to EPR, so I suspect that must have been a monumental matter to overcome, whereas Australia should be able to do it quite easily, because I say, I think there are models in Australia that are superior to Northern Europe.

MR WEICKHARDT: You also refer to Nova Scotia as being an example of best

practice. Again, what is it about Nova Scotia?

MR MASHMAN: Okay. Nova Scotia, they have gained a better and higher achievement than anyone else in Northern Europe and Australia.

MR WEICKHARDT: For what?

MR MASHMAN: What they've done is in 1990, there was quite a bit of debate about where their waste was going - you know, they're an island and they've got a higher population base than, say, Tasmania, and that's why we looked at them because we were looking for a similar model, rather than trying to always look at the models on the mainland because they're just not applicable in some cases. So we looked at Nova Scotia and what we found in Nova Scotia was that from a five or six-year debate in about '96, a new province-wide authority was formed. They did very good audits and very effective audits and very quickly moved to a deferral system. By 2003 had reduced 50 per cent of the material entering landfill and created 4 or 5 hundred jobs that hadn't existed in the state before that. Bearing in mind that their success not only came from significantly better management practices than in Australia - and if you want to go into the web site, you can download their annual reports and they're far more sophisticated than anything I've ever seen in Australia - they are now in the black and they're starting to grow their business around the world, so they're looking at investing from a very small levy on beverage containers.

Nova Scotia is becoming a major investor in waste management in the world, particularly around resource recovery and recycling initiatives. So that's what we are interested in; they've gone from a fairly poor standard to one of the highest standards in the world and they've done it on the profit motive and that's our interest. I've worked for Resource New South Wales and I'm aware of what occurred there quite significantly.

MR WEICKHARDT: Can you just outline quickly, what is it that Nova Scotia did in terms of policies or technologies that you think have led to this desired outcome?

MR MASHMAN: Predominantly they had very clear policies based around recovering materials from the waste stream. They had very clear policies on - - -

MR WEICKHARDT: What, they're just mandated levels or - - -

MR MASHMAN: Sorry, from 1996 levels, they have reduced, from audits around the province, waste going into landfill and redirected into profit-making enterprises by 50 per cent.

MR WEICKHARDT: But I'm trying to understand what policy levers have they pulled to actually make this happen.

MR MASHMAN: They've made it mandatory. As I say, they had a board of management and they had funding coming in and basically they just had an authoritative approach, "This is what you'll do." It wasn't left up to individual councils or boroughs, whatever is in Nova Scotia, to manage their projects and they even went ahead without federal - not authority, but they ignored federal directives. They just said, "We're going to do this because it's the best outcome and we want to move forward. We don't want to be caught up in federal initiatives," or, "We don't want to be focused on the old waste management industry," which was about disposal. I don't have a detailed knowledge of their policies.

MR WEICKHARDT: It doesn't sound very surprising they achieved their objective if they made it mandatory.

MR MASHMAN: Yes, that's right. There are other mandates of course. To be fair, because I don't want to appear to be unfair to management's focus on disposal, they've done an excellent job in a lot of regards, but we're now in this grey area - sorry, in a lot of regards, it was mandatory. They had to deal with this waste in a particular way and resource recovery really - I mean, in line with your commission, it's only recently really hitting a consensus of a lot of bodies around Australia. So they went down the same road. Their main focus was disposal and then they had a transitional period which was regulated for and then the other probably kinder way to put it, they then regulated for resource recovery to be implemented, with standards to be met, with measurable outcomes to be met, and particularly looking at not just best practice but continuous improvement and business development, so not leaving it up to the regulators to have to try and drive it any more, but providing opportunities for entrepreneurial businesses to come in and get some seed funding but very heavily audited and make successful profit-making businesses obviously over a five, six or seven-year period.

But there is no doubt that if you go to their web site, as I say, they have very, very concise reports. It's fully audited. They also have good details of the different programs they've initiated and you can also, by looking at the various reports, get a good feel for which project led on to another and it will also demonstrate the regulatory approach they took. So I think that would be the best thing to do. I think you will find it quite interesting.

MR WEICKHARDT: Okay, all right.

MR MASHMAN: The best thing is, what I really like about it, it just allows you not to have to reinvent the wheel; you know, because they're a public body, all the

information is just put on the Web there and you can just sort of cruise through it.

MR WEICKHARDT: Okay, thank you. Your submission makes a comment that you think at the moment landfill costs in Tasmania are subsidised. Who do you think they're subsidised by?

MR MASHMAN: That gets back to the costing structure. We think it's subsidised but we're very unclear on how costs are met in the operation of landfill. It's often very clear to look at the gate takings and look at the costs of running landfill. I can't really answer that and to be honest, I'm quite reluctant to. Just so you know, there have been threats made against some contract holders over this waste inquiry process and I'm not willing to answer that one.

MR WEICKHARDT: Goodness gracious. Threats in relation to what?

MR MASHMAN: Comments such as, "You need to remember who your friends are, who your customers are in the business," which is a reasonable comment but what it means is, "You hold your contracts to me and if I'm not happy with some of the comments that you're leading in the inquiry, you might want to think about the contract renewal." We've also had, as I said earlier, some misinformation put around and quite abusive phone calls from vested interests in council. Most of that though, from myself, I have yet to have that directed at me. I have quite a good relationship with council, but it has been directed at other members of the association. However, at the end of the day, we're just trying to enact the responsibilities for the members in general from a forum we held about 18 months ago. The thing is, we have quite strong protocols and procedures. We actually record all our conversations, we have to minute all our conversations. Yes, there is a little bit of a fear that if we kick up too much of a stink that some businesses may pay.

MR WEICKHARDT: I'm disappointed to hear that anyone wishing to make representation to this inquiry should be subject to that sort of pressure. We encourage people to appear before us and to give us their candid views.

MR MASHMAN: Yes. To be fair, I don't want to dwell on that. As I say, some of these people I've managed to maintain a good relationship with and it's just disappointing. You may or may not hear about it in other areas. Like I say, getting back to some of these issues that I haven't been able to explain very well, I must reiterate that we don't understand why particularly councils don't want to go forward with some of these initiatives we've put forward because they will only benefit. But as I say, in what I said previously, a lot of the debate appears to become quite personal with different personalities sort of having a go at each other.

MR WEICKHARDT: Okay.

MR MASHMAN: I've managed to stay out of that, but that's where it is. I only feel inhibited on discussing issues around potential cross-subsidisation matters and I think it's in my interests to do that.

MR WEICKHARDT: Okay. Brad, thank you very much indeed for appearing before this inquiry, appearing virtually that is by phone, but thank you for your submission and thank you for your input.

MR MASHMAN: Okay. Is it possible to get a transcript of this discussion because I'll need it for my members? They'll look over it with a fine toothcomb and probably whack me around the head a bit.

MR WEICKHARDT: Yes. I think you automatically receive a transcript as a participant.

MR MASHMAN: Good, okay.

MR WEICKHARDT: But it will be on our web site and you can purchase copies from an order form that you get available from the staff but certainly you can download it from our web site.

MR MASHMAN: Excellent. Thank you for the opportunity and good luck.

MR WEICKHARDT: Okay, thanks very much. Ladies and gentlemen, that concludes today's scheduled proceedings. For the record, is there anyone else who wants to appear today before the commission? No. I adjourn these proceedings. The hearings will resume in Melbourne tomorrow morning at 8.45. Thank you.

AT 12.11 PM THE INQUIRY WAS ADJOURNED UNTIL
FRIDAY, 23 FEBRUARY 2006

INDEX

	<u>Page</u>
BUSINESS ROUNDTABLE FOR SUSTAINABLE DEVELOPMENT: CHARLIE LENEGAN PAUL HOWLETT GERALDINE GENTLE	84-97
DICK GROSS	98-105
CARBON PARTNERS PTY LTD: ANDREW HELPS DAVID PAICE	106-116
WASTE MANAGEMENT ASSOCIATION OF AUSTRALIA, TASMANIAN BRANCH: BRAD MASHMAN	117-