

CORRECTED VERSION

ENVIRONMENT AND NATURAL RESOURCES COMMITTEE

Inquiry into the production and/or use of biofuels in Victoria

Melbourne — 11 September 2006

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Mr J. Spragg, executive officer; and
Mr R. Parkes, national president, Stock Feed Manufacturers Council of Australia.

The CHAIR — I declare open this hearing of the Environment and Natural Resources Committee's inquiry into the production and use of biofuels in Victoria. I welcome Mr Robert Parkes, who is the national president, and Mr John Spragg who is the executive officer of the Stock Feed Manufacturers Council of Australia. Thank you for your time today, gentlemen. All evidence taken by the committee is taken under the provisions of the Parliamentary Committees Act and is protected from judicial review. However, any comments made outside the precincts of the hearing are not covered by parliamentary privilege. All evidence is being recorded, and Hansard will provide you with a proof version of the transcript in the next couple of weeks. I know you have a slide show for us, so I will hand over to you. As we discussed, we would like some time at the end for questions from the committee.

Overheads shown.

Mr SPRAGG — Thank you for the opportunity to be here this afternoon to give a presentation. Certainly the stockfeed industry and the stockfeed manufacturers have some input they would like to provide to the committee. By way of introduction I am the executive officer of our national organisation, the Stock Feed Manufacturers Council of Australia, which represents the major milling companies in Australia. Our total volume of feed manufactured in Australia is about 4.6 million tonnes, so it is large volumes of feed, and it is a relatively large industry in terms of dollar turnover. Robert Parkes is our national president. Robert also works for Ridley AgriProducts, which is the largest stockfeed manufacturing company in Australia, so he is obviously in a position to respond to some of the practical issues we are talking about this afternoon on biofuels.

By way of introduction and to put in context where stockfeed manufacturing fits in terms of the supply chain, on the left-hand side of the diagram you will see the various raw materials which our industry utilises. At the top there are grains and by-products, protein meals, fats and oils. All three are involved in this question of biofuels in terms of either competing for raw material use or supply of by-products which the feed industry can utilise. The feed industry and the stockfeed manufacturers utilise those raw materials. They manufacture feed for various industries including dairy, pigs and poultry and basically any livestock animals that are fed apart from pet feed because a separate industry revolves around pet feed manufacture. A combination of those raw materials are utilised and value add. One of the things particularly in Victoria is the value adding of raw materials; they are value added into livestock products whether it be dairy, meat or eggs — those products which are passed through to the human food chain

Victoria is the largest state in terms of feed volumes. There are more dairy cattle in Victoria which drives the stockfeed industry in Victoria. Australia-wide Victoria produces almost one-third of the volume of stockfeed in the country. In terms of dollar value the commercial feed which stockfeed manufacturers sell is about \$600 million with around 2 million tonnes of commercial feeds. That does not include what farmers mix on farm themselves — what we call home mix. It does not include some of the larger feed lots which make their own feeds. It is only what is commercially sold through the industry.

In terms of the location of the industry the red triangles on the graph indicate commercial feed mills located across Victoria. You can see there is a concentration in the northern part of the state as well as in western Victoria and to a lesser extent in Gippsland and the south-east where quite a large part of that area is supplied out of mills located in the Melbourne or Melbourne-fringe areas. So feed mills are scattered across the country. I think something like 40-odd mills are shown on the diagram, so it is a very competitive industry with lots of individual manufacturers as well as some larger corporate entities competing for feed supply.

In the last 10 to 15 years the industry has grown quite significantly. The volume of commercial feed has been growing at around 15 per cent per annum over that 10 to 15-year period which is a quite significant and rapid growth. That has largely been driven by the dairy industry. The growth in dairy production and the growth of the stockfeed industry which supplies the dairy industry has pretty much happened at the same time, as well as increasing volumes of poultry and pig-feeding activity. Because of that growth in the industry there has been significant expenditure in new milling operations. A number of new feed mills have been built in Victoria in the last decade. The most advanced and newest feed mills are located in Victoria. There are a number of other older mills which have been upgraded to cater for the increased demand in stockfeed.

In terms of looking at biofuels and the question of converting cereal grains to ethanol, one of the questions is who that grain is going to compete for in terms of where it is going to come from. In Victoria we do have a relatively limited supply of grain.

That bottom graph from ABARE on the slide shows the winter cereal crops, which are basically wheat, oats and barley — the traditional winter grains — and you see it indicates that in the poorest year, around about 2 million tonnes of grain were produced; in those bumper years it gets to a bit over 6 million tonnes, but you can see it is quite variable depending on season. That 2002–03 year, members will recall, was the drought year, and that is the year when grain was actually imported into Melbourne from overseas simply because there was not enough grain available within the state. So you can see there is a limitation in terms of the supply of grain.

As to the area that is planted to winter cereal crops, there has been some increase over the last 10 years or so, or it has gone from around 2 million hectares up to around 3 million hectares. The thing that has not happened, though, is that we have not seen any significant increases in yield. Crop yield is relatively steady, between that 1 to 2 tonnes, so we are not getting significant jumps in yield. I guess the reason is partly season, agronomy and soil types.

That is one of the points we do want to make: there is a limited supply of feed grains within Victoria. It is not like Queensland, which has a surplus of grain; it is not like Western Australia and South Australia, which have surpluses of grain which go into export markets. In a typical year, in an average year there is grain coming in from those states. We bring grain from South Australia and New South Wales into Victoria to feed our animals and the stockfeed industry is bringing those grains into the state. That is really one of the points we are putting forward: the stockfeed and livestock industries will need to compete for sources of feed grains, and the production of ethanol obviously has to compete for those same sources of grain. It is the same quality and the same grain that we are actually talking about; it is not an additional pool of grain that is going to become available.

In terms of converting cereal grain to ethanol, as I was saying, we see it competing directly with the stockfeed industry for grain use. We may well have to pay more, but in most cases grain will have to be moved from further afield to Victoria to meet the requirements. That will increase grain costs. Based on what has happened in the United States, as corn stocks have been going more and more into ethanol production, we have seen the US and the global price for feed grains being pushed up; and as potentially more grain goes into ethanol production our expectation is that there will be an increase in grain costs. Particularly poor seasonal years will have an impact on Victoria. We will more often be looking at having to import grain.

At the moment we only import grain as really a last resort to meet grain requirements, but if our usage of grain increases, the expectation is that we will be seeing a more frequent issue of having to import grains. That grain could be imported from, say, Western Australia, or it could be imported from Queensland, or it could come from somewhere like the United States and the UK, as it did in the last drought.

In terms of what impact that may have, our expectation is that higher grain costs will push up the price of stockfeed, and it will place the livestock industries in a situation where their viability is eroded, so pressure will be placed on particularly our intensive livestock industries that rely upon the supply of stockfeed. So we see it as a threat. It is a threat to our industry and to the livestock industries, and I guess further along the chain there is the question of what impact that may have on further processing — the milk processors, the abattoirs and the meat exporters and just where they sit in this particular equation.

On the other side of the equation, one of the things that does occur with the production of ethanol is there are some by-products. With the fermentation process that takes place the starch from the grain is converted through to ethanol, as I think we are all aware. The initial by-product itself is what the industry calls wet distillers grains, so it is a wet product. In that product — I might just jump to the next slide — there is a concentration really of the fibre component of the grain, the fat that is in the grain is passed through on the by-product, and then there are the proteins, ash and any minerals in there, and also some of the yeast cells from the original fermentation end up in the wet distillers grains.

Those grains can be used either as a wet product, or they can be further dried through to what we call dried distillers grains. Some of that product is already in use in Australia, particularly out of the ethanol plant at Nowra. The product does come into Victoria at the present time as dried distillers grains and used within stockfeed.

The issue of wet distillers grains is that it has a relatively short shelf life. You can imagine this wet product coming out of the fermentation process. At that point in time it does not have a bad aroma — it smells okay — but the longer it is left, there is some secondary fermentation, so it actually does go off after a while, and it has a relatively short shelf life. There is a relatively high cost to transport that wet product because you are transporting water. It is

50 to 75 per cent water, so you cannot take it too far, or it becomes cost prohibitive, and it does have a low energy content because of the high amount of water in it.

The option is either to feed cattle — either dairy or beef cattle — in close proximity to the ethanol plant, and either that product goes to specialist feedlots that may be built or set up close to ethanol plants, or it has to go further afield to get to dairy farmers or beef producers that would like to use the product.

The alternative is to dry the product. The difficulty with drying is that it is actually an energy-expensive process to dry. In terms of ethanol production, to turn around and then use energy to dry the by-product back out again actually makes the process less efficient, so the primary desire is to use it as a wet product, rather than having to go to the cost of drying it. However, the question then becomes whether there is enough use of wet product around the vicinity of the ethanol plant, as is the case in Nowra. To get the product to Victoria you actually have to dry it, and it is a question of the cost of drying versus the cost of freight and reselling the product back into the feed industry.

There is a question in terms of the energy value of these by-products, and nutritionists will debate what value the product actually has. Certainly in terms of cattle feeding, the product is digestible, it provides a reasonable source of energy, but it is not as high an energy source as the original grain. We are converting the starch into ethanol; that is where the energy has gone. What we end up with is a by-product that can be digested by cattle and can be digested by dairy cows, but in terms of trying to use that in pig or poultry feeding it certainly has a much lower value, certainly not as a wet product. It has to be dried for pig and poultry feeding, and it is only as a small portion of the total diet of those particular animals.

The other issue is that distillers grains, particularly dried distillers grains, supply quite a nice amount of protein — it can be up to 30 per cent protein — so it is actually a replacement for protein, as opposed to a replacement for grain. So the availability of distillers grains means it is an alternative raw material that will largely replace things like canola meal and lupins in animal feeding and not really replace the grain component as such. So we will still be needing grain, this will just provide another alternative raw material source that can be used.

In terms of our position, the stockfeed industry is quite agreeable to competing with ethanol manufacturers in the supply of grain. We believe that we have an industry that is quite open and competitive, and if there are other industries, as there historically have been, whether that be converting grain into flour or starch or converting grain to ethanol, we do not have any problem with that taking place. That is the commercial reality of the world. However, we do have issues with any steps that may favour one industry over another industry. The stockfeed industry has to compete for grain, and we would hope that it is a level playing field in terms of how our industry is treated commercially as opposed to another industry.

We certainly do take exception to issues such as mandating ethanol usage in motor fuel, whether it be capital incentives or any assistance provided in the start-up of companies — we would question that. In the last 10 or 15 years the stockfeed industry built new plants. It costs \$15 million to \$20 million to build a new feed mill. No-one has mandated that anyone has to buy their end products and no-one has provided any capital or commercial assistance to those commercial enterprises.

The stockfeed industry has never asked for it and never wanted it, but we really question when we are competing in the market for raw materials whether one industry should be treated more favourably than another. That particularly applies in our view in terms of distorting the raw material market, in that potentially the ethanol industry can push up the prices of feed grains, and it certainly has the potential to distort the price that is paid for those feed grains and the consequence that may well have for our industry and the livestock industries.

We see our industry, as I said earlier, as value adding cereal grains. We already value add cereal grain, and Victoria is the largest exporter of dairy products. I am not sure but I have been told that the dairy industry is the largest exporter of product through the port of Melbourne, so that is feed grains particularly being value added into dairy products.

The question is whether or not it is feasible or practical to really divert these feed grains into ethanol to produce fuel for cars as opposed to using feed grains to feed people. That is largely the way we see the picture. Whether or not it is feasible is a moral or an ethical question, but from a commercial position I guess we would say we think we should be value adding feed grains to feed people in domestic and export markets as opposed to feeding motor vehicles.

We do have the view that there will be some adverse effects in converting feed grains into ethanol. Victoria will be impacted more than any other state, and you need to be aware of that. Victoria is the largest user of feed grains. We have the largest stockfeed industry, and we are also the smallest producer of feed grains, so the tightening squeeze in the supply of feed grains will be felt more by Victoria than any other state.

If you were going to produce ethanol I am not sure why you would not do it in Western Australia, which is where the big surplus of feed grain is rather than in Victoria. New South Wales and Queensland may be a little bit better suited than Victoria, but we certainly will feel the worst of it here. As I was saying earlier, we are already importing feed grains, so we really do not have a surplus of feed grains in a typical year, so it will have to come from somewhere if we are going to continue to feed animals and produce ethanol.

Lastly, you can see on that slide a comment that we do have limitations on importing grain. Grain can only be imported from overseas and used within the vicinity of ports, so if as an industry we import grain, it can only be used by four or five feed mills in Melbourne, you cannot take the grain up the country to use in the manufacture of stockfeed, and that is because the quarantine issues of importing weeds and other plants diseases. We can talk about importing grain, but it is not a total solution either, so there are some limitations on that side.

This is the last slide. If it is feasible and economically viable to produce ethanol, then we think that is fair enough, we are happy to go ahead as an industry, but if the commercial advantage is there and there is an economic feasibility, then why does anyone need to step in and mandate use or have to provide any incentives to the industry. As an industry ourselves — livestock producers, meat, milk processors — we really see that there is a commercial risk in terms of some impact on the long-term viability of these industries with the diversion of grains to ethanol production.

I have mainly been talking about ethanol. We are happy to answer questions. We have not spoken about biodiesel in terms of tallow and other vegetable oils, but we are happy to talk about that if you would like us to.

The CHAIR — If members have questions about biodiesel, they can raise them now.

Mr DRUM — Thank you. That was an interesting side to the debate that we have not previously heard. For how many years have cereal grains been viable to feed to stock?

Mr SPRAGG — In the early 1960s there was a group in Australia called Barastoc. I think they were one of the initial companies that started manufacturing stockfeed in Victoria. Prior to that, grain had been fed, but in terms of commercial production it was really the 1960s. The driver was particularly the chicken meat industry when we all started to consume frozen Ingham chickens and other brands through the 1970s. From that point on it really took off. The big driver has been the dairy industry in the last 10 to 15 years. It has moved away from pasture production, and it is feeding cows more grain to increase milk production and drive milk efficiency.

Mr DRUM — Historically and relatively speaking, the price of wheat has possibly been worth three times what it is at the minute.

Mr SPRAGG — The Australian price of wheat is typically governed by export parity. We have a surplus of wheat and that surplus goes into the international market and the domestic price is then really set by what it is worth in the export market, so it is what we call export parity. When we have a shortage of grain, such as in drought, our export parity price actually moves up to what we call import parity because suppliers can hold the grain and wait for the price to move up, so it then goes up to a ceiling where it is actually a cost to import it. So we have between import and export parity this pricing depending upon supply and demand. The market is driven by whoever has got the grain, whoever wants the grain and how it fluctuates through any period of time.

Mr DRUM — Does the restriction that you spoke about in relation to the importing of grain being used only around the port area apply only for grain imported from overseas or does it also apply to grain imported from interstate?

Mr SPRAGG — No. Apart from some pest and disease-type quarantine issues, typically grain from interstate can freely move into Victoria. The difficulty we have, though, as an industry is that the infrastructure to move grain tends to go out of the ports rather than into the ports, so it is actually cheaper to freight grain from the west coast of the USA to Melbourne than it is from Perth to Melbourne simply because the cost of shipping in Australia is far more expensive than across the Pacific.

Mr DRUM — Is that right?

Mr SPRAGG — Yes, in terms of freight. Freight costs are normally cheaper for imports from overseas. The limitation is that you cannot actually get an import permit without — it is shipment by shipment. If you want to import grain, you have to go to AQIS, and it is individual shipments that you have to get approval for. Unless there is a defined shortage, you normally would not get an import permit.

Mr DRUM — So with what is happening at Barnawartha and what is proposed to happen at Swan Hill with — —

Mr SPRAGG — Ethanol plants?

Mr DRUM — Yes. Do you consider them competing for the same grain?

Mr SPRAGG — Yes, absolutely, because that will draw grain from the Riverina and southern New South Wales. That same grain is already moving into Victoria, so if they will pay a higher price, then the feed industry is going to have to bid up a higher price, but there is only so much grain that can actually be used. We already have on the east coast of Australia a deficiency of grain. In a typical year we are pretty well balanced, and there are a few reports that define that. In a drought we are short of grain. If we have a bumper harvest, everyone is happy — no problem; and I am sure there is enough grain to satisfy ethanol producers and the stockfeed industry. A typical and a below-average year will be the problem years.

Mr HILTON — I believe in your submission to the biofuels task force you indicated that if ethanol plants are not established, it could result in the closure of stock mills?

Mr SPRAGG — Yes.

Mr HILTON — And the loss of jobs and other investment? Can you show the committee the modelling that you used to make those conclusions?

Mr SPRAGG — We did not use any modelling. It was based on feedback from our members. It is a perception of where we believe things could end up.

Mr HILTON — So there is no economic case then to justify that conclusion?

Mr SPRAGG — No modelling case, no.

Mr HILTON — Or economic case?

Mr SPRAGG — No. It is based on the view or opinion of members — stockfeed manufacturers.

Mr PARKES — Should the grain price go up.

Mr SPRAGG — We do have a very competitive industry. In Victoria you saw the number of sites there. They are all competing for share of market. Whilst the industry has been growing it has allowed these new sites to get up and running and become functional. What will, I guess, be the telling thing is at a point when growth stops and we see a decline, then obviously that level of competition in pursuit of market share will put pressure on the industry. The example interstate is that when you do get that level of competition there is pressure applied on those that are less efficient manufacturers.

Mr SEITZ — Does stockfeeding currently receive any direct state or commonwealth government support or benefits — that is, tax write-offs on plant and equipment and things like that?

Mr SPRAGG — Nothing as an industry, no. There is no government assistance at all.

Mr PARKES — Not that I am aware of.

Mr SPRAGG — No government programs, no.

Mrs COOTE — I have two questions. What is your understanding of the stockfeeders who are now actually growing grain who use ethanol plants for their own purposes? What sort of proportion would you say that was at the moment?

Mr SPRAGG — I think I can understand the question. The proportion of farmers who mix their own feed is probably a third, Robert?

Mr PARKES — Yes.

Mr SPRAGG — A quarter to a third of feed usage. But most of those do not grow grain. Most of them particularly will be dairy farmers or poultry producers who mix their own feed, so they will be buying in grain.

Mrs COOTE — Okay. So they are not going to get into producing?

Mr SPRAGG — No. Actual grain growers who also produce livestock would be very minimal. I would think most might have cattle, but they will tend to be grazing out on cropping land or pasture land. In terms of numbers who may utilise what you are referring to I think it would be very minimal.

Mrs COOTE — You have spoken before about the tension between the stockfeeds, the availability of stockfeeds and the ethanol production. What about the people who are growing the grain in the first place, using their own grain instead of selling it on to you as the stock feeders to actually using their own grain for their ethanol production; is that growing in your understanding?

Mr SPRAGG — I think it would be declining in that agriculture has become more specialised, so we have cropping farmers with that as their core focus. We have dairy farmers, poultry farmers, pig farmers. They have tended to become more specialised. They are larger entities. We do not have as many mixed farming-type operations as we may have had in years gone by. If anything, it has gone the other way.

Mrs COOTE — What about these large organisations at the moment — they are huge. They have got timber and they have got cattle and they have got grain and they have got everything, so at the moment — —

Mr SEITZ — The corporate bodies.

Mrs COOTE — Presumably some of that grain is going to your organisations. What happens if those people start to use that grain for ethanol production for themselves; is that happening?

Mr SPRAGG — I do not think for ethanol production.

Mr PARKES — I am certainly aware of one group, one fairly significant grain-growing group in southern New South Wales that is proposing looking at ethanol as an option to value add their grain. If that is the case — and there are more and more of them out there looking at it — that would strip out in that supply-and-demand scenario a significant proportion of grain.

Mrs COOTE — I have heard of some large organisations that are in fact going to use ethanol for themselves, so that is exactly that case — Victorian companies that are doing it. Can I ask my question about the tallow and the biodiesel?

Mr SPRAGG — Yes.

Mrs COOTE — What is your understanding of the depth of the use of biodiesel with the people you deal with?

Mr PARKES — The actual production of biodiesel?

Mrs COOTE — Yes.

Mr PARKES — As it stands today, there is not a great depth there, but there is a lot of review under way and people looking at it. We certainly have suppliers of both animal fats, so tallow, and also vegetable products, that are looking at putting up their own biodiesel plants and seeing it as a very real opportunity for them moving forward. But again it would not be impacting on our supply in the market at the moment.

Mrs COOTE — Do you have any idea when you think that meeting point is going to come?

Mr PARKES — There is one particular group on the vegetable side that is looking to get itself set up as of January 2007 to be able to produce an oil that would be able to go straight into the biodiesel.

Ms DUNCAN — A lot of the stuff that you have said about grain, how would biodiesel impact on any of that?

Mr SPRAGG — The biodiesel competes for tallow. That is one source. Our industry utilises tallow. Tallow goes into — the lower grades tend to go into stockfeed, the higher grades go into your — —

Mr PARKES — Foods, cosmetics.

Mr SPRAGG — Soaps, foods and those sorts of things. The lower value product, as I said, goes to stockfeed. They are the first types of materials that actually have potential to go into biofuel production, so there will be direct competition there with — —

Ms DUNCAN — Sorry, would there?

Mr SPRAGG — There will be direct competition for the source of those particular tallows. I guess, similar to grains, the price of those by-products will rise. On the vegetable oil side, where something like a canola crop is crushed and the oil goes into biodiesel, that provides another by-product, canola meal, and the canola meal can be used in stockfeeds, so that does provide an additional protein source. I guess in some ways we are not terribly short on proteins; we are actually short on grains, so extra protein to the industry probably does not do a great deal.

Mr PARKES — No. Actually the US scenario at the moment would be that they have got excess protein available to the animal industries in the US.

Ms DUNCAN — Just if I can clarify, the production of biodiesel would not have the impact on your industry as — —

Mr PARKES — Not as great as ethanol.

Ms DUNCAN — As ethanol.

Mr SPRAGG — Correct. We see ethanol as having a much more significant impact than conversion of, say, tallow, simply because a typical feed ration will be 65, 70 or 75 per cent grain, whereas tallow will only be 1 or 2 per cent. It is proportionally just a small amount. The biggest cost in stockfeed is grain.

Ms LOVELL — Can you just explain to us what would be the difference in the nutritional value of the raw grains going to stockfeed and the by-products?

Mr SPRAGG — The energy content of the grain and much of the energy contents comes out of the starch component, so we are principally using grain as an energy source. It does supply some protein which is of value, but the majority of energy that is feeding animals is coming from grain, and that energy is what is going into ethanol production. With the by-product, basically you are losing that starch component.

On the other side, though, you do gain some value from some of the yeast cells, so in the whole fermentation you get this biomass, and there is quite a concentration of dead yeast cells, so that provides some microbial protein which is of added value, particularly for cattle feeding. So it partly depends on where you are going to use it. For cattle feeding the energy content of the by-product — dried distillers grains — is probably not all that different to the grain that you start with, but for pigs and poultry it is considerably less, because they cannot digest the fibre component terribly well, whereas cattle can ferment and digest fibre.

The CHAIR — If I can just go back to — I think it was — Mr Hilton's question about your submission to the biofuels task force and the potential for feed mill closures, do you think there is a potential to offset those closures and the job losses and investment by the introduction of ethanol plants into the same regional communities?

Mr SPRAGG — There would have to be. If you are going to have employment out of ethanol, you lose on one side, and you would hope there may be some offset.

The CHAIR — Would it simply come down, then, to the industry readjustment driven by the most efficient use of the raw material?

Mr SPRAGG — Correct.

Mr PARKES — Yes.

Mr SPRAGG — And we do not have a problem with that. That is pure commerce coming into reality. Our only issue is that we do not think the other industry should gain any favour through the expansion relative to our industry. So if a feed manufacturer goes out of business because all the dairy farmers cannot afford to feed their cows, that's life; but if he is forced out of business because the ethanol plant has been built based on some government subsidy or incentive, then that is what we would view as being unfavourable.

The CHAIR — Thank you very much for your time.

Mr SPRAGG — Thank you.

Witnesses withdrew.