

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 C. Gillam, chief executive officer;

Mr B. Louey-Gung, managing director; and

Ms C. Chey, marketing manager, Alternative Fuels and Energy.

The CHAIR — I welcome Mr Colin Gillam, Mr Brian Louey-Gung and Ms Chantha Chey, all from Alternative Fuels and Energy. 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 protected by parliamentary privilege. Hansard will record all evidence given today, and you will receive a proof version of the transcript within a couple of weeks.

I will hand over to you, Colin, to make the presentation, and ask you to leave us a few minutes for some questions at the end, thank you.

Mr GILLAM — I will keep it short because I am aware you are more interested in asking questions than hearing things you have probably heard before. Just a quick question, though: how many of you have actually seen biodiesel?

Mrs COOTE — Never.

Mr GILLAM — Made biodiesel?

Mrs COOTE — Never.

Mr GILLAM — Driven in a car running on biodiesel?

Mrs COOTE — Never.

Ms DUNCAN — Diesel, yes.

Mr GILLAM — This jar — no, it is not a specimen, despite what it may look like — contains biodiesel. If anybody wants to have a look, I am happy to pass it around. I thought that would be interesting for you to see.

Mr LOUEY-GUNG — You can open it if you want to, but it is at your risk.

Mr GILLAM — And you can drink it if you want to, as well.

Mrs COOTE — It is made out of what — McDonald's fat?

Mr GILLAM — That was chicken fat, I believe. It is chicken fat biodiesel, and when it burns, the smell is a little different from every other source of feedstock. You can usually tell from the exhaust fumes where the original feedstock came from — not always, but you have a fair idea.

Ms DUNCAN — We heard a joke about that earlier.

Mr GILLAM — Yes. I suspect that a number of other people have made some comments about that. To that end, I will not waste any time describing what biodiesel is, the benefits of the fuel and all those other things. Again, I suspect that other people have presented that information, so I will not waste any time on that.

We have sent in our submission, which I believe you have. We have also made submissions previously to the Victorian greenhouse strategy and a number of federal government strategies as well. I will concentrate on issues 1 and 4 of the list you sent us, because I believe they were the key things you wanted to hear about.

I will give a quick background on Alternative Fuels and Energy. Our company goal is to develop and promote technologies and products that reduce our impact on the planet. We have been making biodiesel for eight years. We have been involved in setting up or running quite a number of small-scale plants. We are committed to a business model that develops regional facilities rather than larger centralised plants, although I have no issue with the larger plants either, but we see that as a particular model that we would prefer to support.

We have a contact list of several thousand people who are making biodiesel, using biodiesel or wanting to make or use biodiesel. We have made presentations to the Victorian Automobile Chamber of Commerce, and it has asked us to be involved in developing a policy on its alternative fuels. The Australian Tax Office also asks us on a regular basis about issues surrounding biodiesel and its use in the community. That gives you a bit of our background.

Why biodiesel? Basically we see biodiesel as an ideal interim fuel. When I say an 'interim fuel' I do not mean something that will be here and gone in a few years. I am saying that biodiesel is an ideal fuel for a whole range of reasons, including to help us extend the life of petroleum diesel and to give us a bit of breathing space — yes, the punch is intended there. It can be manufactured on both a small scale and a large scale, so it is ideal for small regional facilities as well as larger centralised facilities. It uses local raw materials, and they can be from a range of sustainable industries as well. It can generate local and regional employment and economic growth. They are good reasons why it is an alternative fuel.

You have in front of you a map which shows the biodiesel producers who are currently manufacturing or who are in the process of building plants and should be operating within the next two to three years. Essentially that shows you that we will be close to a capacity of 700 million litres per year within the next two to three years, all things being equal. Of course they never are, but all things being equal, that is what will happen. That is effectively twice the capacity of the target the federal government has set. The industry itself has gone ahead, despite many of the other outstanding issues.

I am trying to skip through this quickly and allow you to get on to questions. The main drive to develop an industry has in fact come from the grassroots. I recognise a couple of the people in the audience here, who I assume have made presentations. A number of people have been actively involved at the backyard production level and the small-scale commercial production level probably for the last 8 to 10 years.

I know that Paul, who is sitting back there, has been involved for quite a number of years. The interest and growth in the industry did not come about because of the large commercial operators; it came about through people like Paul and myself and a number of other people who have actively gone out there and made the fuel, lobbied for the use of the fuel and promoted it for a whole range of reasons. The commercial industry is now in effect piggybacking off that, which is great. I have no issue with that, and in the end that is what we are aiming to do.

To the best of my knowledge there are somewhere between about 500 and 1000 smaller backyard biodiesel producers around Australia. We know that because we get emails on a regular basis from these people, who either want to go ahead and build their own plants, want information about what to do next, want training or other things like that. Most of these people collect their local waste oil. They are doing it for economic reasons but they are in fact offering a service to local businesses by taking away waste oil that would go to landfill. That is not a huge part of the biodiesel production side of things, but it is a significant part, especially in regional and rural areas.

It was in fact the grassroots manufacturers who successfully lobbied the federal government after it introduced the excise a few years ago. We made a successful campaign. Paul was actively involved in that, and we managed to force the federal government to change the excise and introduce a rebate until 2011, which at least gave us a sort of level playing field until that time.

As to distribution and consumption, most of the biodiesel produced in Australia is currently used by these backyard producers and/or by fleet operators. Most of it is blended. South Australian Farmers Fuel blends biodiesel into its fuel, up to 20 per cent. I believe it currently has around 40 outlets. Australia-wide there are around 72 outlets that I am aware of. These are retail outlets where you can drive up and fill up with biodiesel. Unfortunately in Victoria there are two, so we are lagging behind. However, I am hoping that sometime in the next month or two that will change quite dramatically.

We have managed to broker some deals with some independent fuel outlets so that they will in fact be supplying B20, or a similar blend, through their outlets, starting sometime in the next couple of months. That will expand quite rapidly once a distribution facility is actually set up here.

I refer to the barriers to and incentives for increasing the use of biofuels. The main barrier was the introduction of the excise, which is a federal government issue, and I know there is nothing much you can do about that. What it has meant, though, is that there have been basically three years where there has been a lot of uncertainty in a fledgling commercial industry. This has meant that investment was difficult because, of course, investors like certainty. They like policy that does not say, 'In the next year or two we might change our minds', but says, 'For the next 15 years this is what is going to happen.' And that did not happen. Every time we turned around, the federal government and the tax office were changing their minds.

The oil companies, obviously for their own vested interests, were not encouraging the use of biodiesel, and in fact there were many untruths about biodiesel, in much the same way as there was with ethanol. Of course now the petroleum companies are making ethanol and introducing it into their fuel. How the tide has turned!

The Victorian government should lead by example. I have to say that I am a tiny bit disappointed that it has not. We have, again, put a number of requests or submissions to various ministers and various departments about the use of biofuels and biodiesel — in particular, recently when we had the issue with Southern Cross station; you all remember the big fuss about people feeling ill from the diesel fumes.

The response I got back from the Southern Cross Station Authority and from the energy minister was basically that the trains were not tuned correctly. That, in fact, is not quite correct, but I cannot say any more other than that by introducing a blend of biodiesel into the diesel fuel used in the trains they probably could have eliminated the worst of that problem. It was a relatively inexpensive way of solving the problem. I do not know how they are going about solving the problem, but tuning the engines is not the issue. There was a perfect opportunity to do something, and it has not been done.

It would be kind of nice if government agencies, such as the EPA, helped to streamline the process of setting up some of the commercial plants. I believe they are aware of the issues and are trying, but I am not convinced that they are trying hard enough.

Going back to the issue of making submissions, I recently sent in another submission. The response I got back was again disappointing. To quote, and I will remove the minister's name out of this to protect them, it states:

Thank you for your recent email to —

the minister —

supporting biodiesel and diesel fuel blends for use in public rail and bus fleets. I am replying on behalf of the minister and apologise for the delay in responding. Your comments have been noted and I appreciate the time you have taken to express your views.

Full stop — end of the email! That was it. Nothing more has happened. That is typically what has happened whenever we have done something, spoken to somebody, emailed. Again, it was a little bit disappointing.

Without being critical of this particular inquiry I would suggest that in fact we did not really need another inquiry. In fact, we do not need any more consultants' reports, I do not think we need any reviews, and we do not need any more scientific research. Again, I am not being critical but just making the comment that all the information is there. The information has been there for years. Look at Europe and at the United States; they have been using biodiesel for many, many years. There is no issue with, 'Will it work? Won't it work? Is it good? Is it good economically?' — and all those other issues. It has all been done. A friend of mine recently said that the problem with government is that it tends to make obese silverfish by generating all the paper reports that just get locked away and silverfish eat. We do not need that.

Mrs COOTE — Ours are great, though.

Mr GILLAM — Sorry?

Mrs COOTE — Ours are really good.

Mr GILLAM — We just need to get on with it. We are lagging behind once again. We keep saying that Australia is the clever country, but in fact we are a very conservative country, and we tend to lag behind on many of these sorts of things. That is it; I am open to questions.

The CHAIR — Thank you very much.

Mr HILTON — I do not take your comments about the government personally. What capacity do Australia's natural resources have? What size of a biofuel and biodiesel industry could Australia's natural resources support? And what impacts would that have on our traditional, natural agricultural and horticultural produce?

Mr GILLAM — The short answer is that I will not speak about ethanol because I do not have enough experience, but I will talk about biodiesel. The 700 million litres, which is about the capacity that hopefully will be

on line in the next couple of years, is probably going close to the capacity that we have, given the current levels of feedstocks without impinging on other food oils and other resources. That said, we could divert a lot of the used oils which are currently collected and sent overseas.

Again, Australia being a very clever country, oil is collected from companies like McDonald's, KFC and others and put on a ship and sent over to India or China or somewhere like that and turned into soaps, shampoos et cetera and imported back into Australia. We are very clever. If we were to divert much of that into biodiesel we could increase our capacity by perhaps another 100 million litres a year; I cannot give you the exact numbers because it is hard to get those numbers from people. Much of the waste collection is discreet; it is not always obvious, but that is where much of it goes. The same with much of the poorer grade animal fats. They tend to go overseas. Not long ago I was at a facility and basically that place takes fats and oils of any standard — —

Mr HILTON — So if we are looking at, say, a top of 1 billion litres per annum as production from our own resources, how does that translate into what blend of diesel fuels would be available if everybody in Australia decided to invest in a diesel car?

Mr GILLAM — Again, we are lagging behind. The short answer is that you could probably get a 5 per cent blend.

Mr HILTON — So that is the maximum you could get?

Mr GILLAM — If you were to mandate for a 5 per cent blend then eventually we would get to that, but that will not happen. I would not be happy about it anyway because I think the market forces should determine that issue. I would like to see 20 per cent; I think that is a much better option for your average user.

Mr HILTON — But that is not feasible given — —

Mr GILLAM — Not with our current feedstocks. But that does not necessarily mean there are not other potential sources out there.

Mr HILTON — Sorry, I do not want to stress the point, but I thought you had qualified your 750 by saying that if we were a bit more innovative, we could maybe add another 100 — —

Mr GILLAM — No.

Mr HILTON — Now you are saying that would be equivalent to a 5 per cent blend. Are you now saying we could go beyond that with 1 billion being the top limit of production?

Mr GILLAM — Yes, once it becomes commercially viable. To clarify it, there are a range of other potential options. For example, we can grow algae. I do not know if anybody has mentioned it but we can grow algae in sewage treatment plants. The algae have up to 40 per cent by weight in oil. You take the algae and process it and a whole heap of oil can come out of the sewage treatment plants. So as well as the methane from the plants, you get the oil.

Mr HILTON — Is the cost of production from those more exotic sources competitive with — —

Mr GILLAM — Probably not yet but that is only because it is a new technology that is still evolving. In New Zealand a trial has recently been run at a sewage treatment plant and as far as they are concerned it is commercially viable. But that is not the only one. We recently had a meeting with another company which has a technology which is likely to be able to remove virtually all of the hydrocarbons, and in particular oils and fats from all of the stormwater, waste water and sewage coming from virtually every business and every home in Australia. We are talking about hundreds of millions of tonnes every year.

Mr HILTON — Just one final question: these are all blue sky ideas.

Mr GILLAM — Yes.

Mr HILTON — There are lots of blue sky ideas that remain just that. They never stack up in terms of economic feasibility. Is what you are talking about an example of that?

Mr GILLAM — Yes, and in the example I have just given the issue is that the current way of disposing of it is very expensive. What they are talking about cuts the cost dramatically and has a by-product which can be turned into a fuel, so it does in fact make it a better option economically. The main stumbling block for biodiesel has been the price of oil. When the price of oil was \$30 to \$40 a barrel, biodiesel was marginal. At \$60 or \$70 a barrel biodiesel looks good. At \$100 a barrel a whole range of technologies suddenly become very viable.

Mr HILTON — Thank you.

Mrs COOTE — I would like to talk about standards. On page 3 of the document you gave us you show the barriers to production use being misapplication of Australian standards for diesel fuel. I would like you to tease that out a little for me. Also, would you give me your opinion on the separate Australian standards for biodiesel? Could you look at those two please?

Mr GILLAM — When the government introduced the excise and then introduced the rebate the deal was that if you met the Australian standard then — at the whim of the Department of Environment and Heritage because if you read the legislation it says the department does not have to give you the rebate; it will give it to you if it wants — you will get a rebate. But you have to meet the Australian standard.

The Australian standard was developed rather quickly. The government took the diesel standard and then looked at some of the biodiesel standards around the world and basically threw them all together and came up with this mish-mash of things. I do not have an issue with having a high standard for fuel because traditionally Australia has had a poor standard for fuel.

Our diesel fuel standard has been a shocker. I do not have an issue with setting the standard higher. But if you are going to have a standard, then you need to apply the standard to the fuel. The problem is that initially — and I do not know how much it has changed recently — the question asked was whether it met the same standard as diesel. It does not because it is a different fuel. All we are saying is that they are two different fuels, so apply different standards to those.

Mrs COOTE — Okay.

Mr GILLAM — Some of the standards test for particular contaminants or other things, but biodiesel simply does not have them, so why bother to test? You are having to test for something that will not exist. There is a cost involved, and all I am saying is, set the standard but choose the things that are important in that standard to apply to that fuel and then do not make the commercial producers — or even the backyard producers — test for something that is silly and costly.

Mrs COOTE — Thanks very much indeed.

Ms DUNCAN — You had a biodiesel trial involving the Yarra Ranges and — —

Mr GILLAM — Somebody has been doing their research — but it did not happen.

Ms DUNCAN — It did not happen?

Mr GILLAM — No.

Ms DUNCAN — You were funded to do it.

Mr GILLAM — We were, and we gave the money back, which was really hard — trust me! Giving money back to government after it has given it to you, especially when Steve Bracks gave us the money. He sat in my car and pumped it full of biodiesel. What happened was that it took six months to go through the process and then we got the grant. Steve Bracks came out in April and handed over a cheque. Out of the blue in May the federal government said, 'We are introducing a 38 cents-a-litre excise'. What we were going to do in April was going to work economically. You whack a 38 cents-a-litre excise on it and all of a sudden you have gone from being able to produce biodiesel at 80 cents a litre when diesel was 85 cents a litre, to producing biodiesel which you would have to sell for \$1.10 or \$1.15 a litre just to cover your costs.

That is when a lot of the lobbying started because we knew we were losing and there was just no way around it. The government said, 'Excise is in'. There was no discussion about rebates or anything else at that stage. So after

going backwards and forwards for 12 months we thought we were going to lose. I could not fund the shortfall, so I simply gave the money back, which was very disappointing.

Since then I have been making biodiesel. There is not anybody here from the tax office, is there? Lots of people are making biodiesel in their backyard for their own use. The tax office recognises that. Officially they all pay excise to the government. Unofficially the tax office is not interested because it costs too much to try and chase it down. It recognises that. We told it but it did not listen until it realised it cost too much to chase it all down.

One of the things that we continue to lobby on is this issue of getting the federal government to simply recognise that and to say, 'Okay, that is a reality. That is what is going on out there at the grassroots', and to a certain point, whether it is 5000 litres or 10 000 litres a year, leave them alone — just forget about them. It picks up excise and taxes and stuff with the methanol and with the other things that are used in that, so it should just leave them be. Mostly they are doing a service, and they are trying to do the right thing. All the federal government has managed to do in many cases is to drive these people into closed sheds, making fuel in enclosed spaces, not safely, and creating problems. It should just let them be.

Ms LOVELL — In your presentation you said both small and large-scale plants were viable. We heard earlier today that smaller-scale plants were not viable because of the cost of testing.

Mr GILLAM — Partly.

Ms LOVELL — At what point do they become viable, and how expensive is the testing?

Mr GILLAM — This is another one of those things where the legislation about the testing, especially about receiving the rebate, is a little unclear, because it does not specify how the testing is supposed to be done; it simply makes this the Australian standard, and there has to be some quality control system there to allow that to happen. But it does not say, 'You must test every litre of fuel to meet the Australian standard; it simply says you have to prove that it meets the Australian standards. I know most of the smaller commercial places that are out there basically throw it all into their holding tanks and they will take samples and test them, and so long as on average it is meeting the Australian standards, that is fine. Nobody is really going to challenge that, I suspect. But again the legislation was unclear.

Again going back to what I said about standards and the things you have to test for, if we eliminate some of those and if we define how you have to go about the testing to meet the Australian standards to the satisfaction of the commonwealth Department of the Environment and Heritage, then we can actually bring down some of those costs. I personally think that a small commercial plant of any size is viable, but it depends again on cost of the feedstock and a whole range of other things, such as the cost of setting up the plant, amortising those costs, labour et cetera.

The CHAIR — Can I go back to the example of Southern Cross station that you raised? Can you outline for me the pollutant savings by adding the biodiesel, what sort of percentage biodiesel you were talking about, and the cost implications for government?

Mr GILLAM — Okay. I just have to be a little bit careful about what I say, that's all, but I will give you a general example, if I may. A lot of large diesel engines can run on poorer quality fuels. Suffice it to say they will run on fuel oil, which is not diesel — but it is, sort of, in that it is what you get when you do not quite make better quality fuel. The oil companies have to get rid of this and so they sell it to people who want to burn this where it is not as critical.

If you have one of these new diesel vehicles with the common-rail direct injection and all sorts of fancy stuff, you cannot stick just anything in those engines — you have to put in high-quality fuel, which is good standard fuel. But these bigger engines are much more flexible about the fuel you put in. The problem is that this poorer quality fuel tends to produce a lot more emissions. One of the reasons is that diesel and most of those fuels are not an oxygenated fuel. By adding biodiesel to it you are adding an oxygen component to the fuel, which not only helps to burn the biodiesel, but it also helps the diesel, fuel oil or whatever it is to burn cleaner.

Again, you can read all sorts of scientific information, but the general rule of thumb is that you will get a greater improvement in the reduction in emissions than the percentage of biodiesel that you are actually adding in. The general rule of thumb that most people work on is that if you have a blend of 20 per cent biodiesel in your diesel,

then you will get a 25 per cent improvement in emissions. So if you extrapolate that out, if you run five vehicles on a 20 per cent blend, you will get a 125 per cent improvement.

So from a cost perspective at the moment, especially with the price of fuel, biodiesel is now competitive with diesel fuel — the gate price is not that much different, except that the prices have come down recently, over the last week or two. But the gate price for biodiesel and diesel is very similar these days, so the cost to government should not be any greater. In fact, in South Australia, the South Australian trains have been running on a blend of biodiesel and diesel for the last two years. They would not have done that if it was costing more money — I know what governments are like.

The CHAIR — Thank you very much.

Committee adjourned.