

CORRECTED VERSION

ENVIRONMENT AND NATURAL RESOURCES COMMITTEE

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

Melbourne — 4 September 2006

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Mr P. Scott, general manager, external affairs, Shell Australia.

The CHAIR — I welcome Peter Scott, who is the general manager, external affairs, from Shell Australia. Thank you very much for your time today. All evidence taken by the committee is taken under the provisions of the Parliamentary Committees Act and is protected from judicial review. However, if you make comments outside the precincts of the hearing they are not protected by parliamentary privilege. Hansard is recording all evidence today and you will receive a proof version of the transcript within a couple of weeks. We have until about 4.40 p.m., so if you would like to make your presentation to us, then we will have an orderly series of questions for about 10 or 15 minutes.

Mr SCOTT — Thank you very much. First of all, can I apologise on behalf of my colleague Helen Morgner who is our biofuels project manager. She was to be here but she had a minor domestic emergency to do with her six-month-old baby. Humble apologies for that. I think she has her priorities right.

The CHAIR — Absolutely.

Mr SCOTT — Thank you also for the opportunity to be heard today. I am very happy to be here to discuss this with you. I would like to make a couple of comments which I will try to keep very brief because I know you would have already heard a bunch of this stuff already. It is about what questions you have.

Shell is supportive of the federal government's 350 megalitres target by 2010. We have been working closely with the Prime Minister and his department to that end and we are confident that we will exceed the commitment, albeit a fairly small commitment, we made for 2006. We are on target to exceed that commitment for biofuels for this year. I must say that Victoria is the place at this point where we produce all of the biofuels that we make. The biofuel product we have in the market is called Shell Optimax Extreme. I hope you have all heard of it. It is Australia's only super-premium fuel — it is 100 octane and it has 5 per cent ethanol in it. It is slightly different from an E10 in that it is not just a regular fuel with some ethanol added — it is in fact a niche product that has been tailor-made, if you like. The reason we did this was to address the issue of consumer confidence which was, and perhaps still is, one of the big challenges for biofuels. That is why we have taken that route as our first biofuel product into the market.

The economics of biofuels we believe are highly dependent on commodity prices. I just came in at the end of the last session and I understand you are getting towards some of that. We think that certainly any pricing for ethanol blends needs to keep in mind what ethanol, for instance, is going to do as well as what petrol does. The economics and pricing also incorporate considerations around infrastructure costs, regulatory costs, which I will touch on a little bit later, particularly volatility specifications here in Victoria, and also ethanol blend efficiencies. Again, I heard that briefly touched on. Shell would say there is about a 3 per cent reduction in the amount of energy content of an E10 ethanol blend compared to a regular fuel blend. That needs to be taken into account when pricing.

In terms of environmental benefits, I certainly do not claim to be an expert, but I and Shell would point to the Prime Minister's biofuels task force last year which outlined that there are some pros and cons when you are looking at specifically vehicle emissions. You also need to take into account that there are potential greenhouse gas benefits from biofuels, particularly ethanol blends. Those benefits would depend on how you produce the biofuels. We use expressions like crop to wheels or oil wells to wheels, looking at the whole cycle. We would also say fairly topically that when considering biofuels things like water resources need to be taken into the mix when considering environmental impacts.

Moving forward, one of the key things we see to moving the biofuels industry forward is the primary distribution infrastructure required — that is, terminals, retail sites and the whole chain of getting the components together, blending and distributing them. There are significant costs associated with all of that — distribution, blending and retailing — and they need to be taken into account.

Specific barriers and incentives, touching on some wording from the terms of reference, are appropriate regulation. The volatility specifications here in Victoria do not allow ethanol blends in summer. Companies, if they want to be legal, have to apply for a variation to the present fuel standards. That is a barrier. Enforced compliance with those regulations would be a good thing because that then gives a level playing field and avoids the potential that we go back to the events of 2002 where there was scaremongering about what ethanol blends can do to your car and what non-compliance with fuel legislation can do. Shell will always comply with legislation and it is important that we make sure that any legislation that exists is enforced. We also think moving forward that infrastructure support

programs are a very good idea. Queensland has one in place and the federal government has just announced one. They are very helpful in moving forward.

On the policy side of things we would certainly advocate that efficient markets are the best way to deliver low costs. We would also suggest that government policy should look at supporting low carbon and low cost manufacturing technologies and not just subsidising biofuels. Also, in that vein, policies should be looking at rewarding any biofuel technology that gives greater greenhouse gas benefits which should get greater support. Shell International is doing some research with, for example, a company called Iogen, which is looking at using the stalk or waste product of crops rather than the actual crops to produce ethanol. That technology of course is great from an environmental perspective because it uses less water to produce both crop and fuel. It is also very good from a greenhouse gas perspective because when you harvest the crop the energy and greenhouse gases that are used go into both food and fuel. There are significant advantages there. I will leave it there and thank you again for the opportunity. Are there any questions?

Mr HILTON — In the absence of government subsidies to encourage biofuels, is the retailing of biofuels an economic proposition as far as Shell is concerned?

Mr SCOTT — It is very difficult. No. Having said that, there are already a range of subsidies that are available. Let me give a qualified no to that. If we look at a scenario where oil prices were extremely high — let us quote a ridiculous example of \$200 a barrel — and ethanol prices were at the sort of price that people at the moment are offering to oil companies, then there is clearly a fair bit of margin there to be able to invest in infrastructure. The challenge with the whole pricing question though is for how long that happens. I say no in the environment now. That is an economic no. But if we are rolling this out because there is a federal government subsidy, there is assistance in Queensland and hypothetically it gets mandated somewhere else, then there starts to become a critical mass where the barrier to entry is lower. There are a lot of factors in answering the question.

Ms LOVELL — Do you see the use of biofuels such as ethanol as a significant way of reducing our environmental footprint?

Mr SCOTT — If we talk about first-generation technology — and I hope I have made that distinction clear between using a crop that is currently used like cane or grain — I do not think it is a significant reduction. The Shell position is that there is basically no reduction in vehicle tailpipe emission, no difference particularly if you look at Australia where we have reduced our sulphur in diesel for instance or even sulphur in petrol down to levels that means the delta is very small. Then you start looking at the real benefit being potentially greenhouse gas benefits. If I can just walk you through some of my limited understanding of the chemistry, the Prime Minister's biofuel task force report said that when you use an ethanol blend the carbon monoxide coming out of the vehicle is likely to decrease; volatile organic compounds stay about the same; and nitrogen oxides can increase. Each of those things has different CO₂ equivalents, I guess. So it can depend on the vehicle and a whole number of things as to whether or not there is a significant greenhouse benefit out of the car. As I mentioned earlier, there is also the greenhouse benefit from harvesting and it depends on how it is produced. If you talk about second-generation technologies, then we are a lot more confident that there are significant benefits. What I do not know is how that impacts on the water story. I do not know whether it is neutral or not. Certainly from a carbon dioxide perspective, moving in that direction of the second-generation technologies would be an improvement.

Ms LOVELL — If I can just ask another question, why is it harder and harder to find Shell service stations in Victoria?

Mr SCOTT — Really! We will have to rectify that. I am terribly sorry. That should not be the case. What area particularly?

Ms LOVELL — They are all turning into independents all over the place.

Mr SCOTT — Is that right? That is interesting.

Ms LOVELL — We have a Shell card so we look for them.

Mr SCOTT — I see. I am very glad that is on the Hansard record because one of the things we get attacked about regularly of course is trying to put the independents out of business, which is completely false and obviously vindicated by the fact that you are seeing more independents.

Mr DRUM — You sell Shell Optimax at a considerable premium to the others and obviously only you guys know what goes into it. Have you got any plans to enter into the basic E10 blended fuel market?

Mr SCOTT — I have to be careful here because of course that is commercially very sensitive, but the short answer is yes, we do. We are looking at a blend that is not a premium product and being competitive in that area as well. That is certainly part of our plans. I said earlier that we are confident we will exceed our present 2006 targets that we have committed to the government. Of course those targets increase and in order to expand, while Shell Optimax Extreme is a very popular product, it is really a niche product. We need another grade, or string to the bow if you like to meet the volumes we want to get up to.

Mr DRUM — You spoke about the second-generation technologies. Are we using that at the minute, and if not are we far away from using it in a sustained way?

Mr SCOTT — A good question. The information I have, and I only know about the Shell partnerships — BP has also announced some recent investigation into this area — in particular with the Iogen group we work with in Canada there is currently a prototype plant. I cannot remember how big it is. It is not a pilot; it is a prototype and is quite large. They are looking for their first commercial-scale plant by 2009. I would argue that if you look at the way technology tends to progress, it is still about five years off before it becomes proven commercial and least that long before you would see it in Australia.

Mr DRUM — Do you know what kind of plant that is? Is it sugar or grain?

Mr SCOTT — I think it is grain. It is called a cellulose ethanol plant. When I say grain, the point about it is that it uses the waste — it is not say the wheat stalk. I do not know what crop it is, but it is — I am not very good with my agricultural terms — the straw, the biomass that is not food.

Ms LOVELL — We were given some information. I will just read this into the record:

Recently departed chairman of Shell, Tim Warren, told the New Zealand climate change and business conference in February 2006:

While we believe that there will be an ongoing role for ethanol blend petrol in Australia's fuel mix, we believe that it is biodiesel which will make the greatest contribution towards the government's 350 ML target.

You have spoken a lot about ethanol. What about biodiesel and Shell's attitude to it? What direction are you taking it?

Mr SCOTT — The first thing I will say is that right now we are in a situation where lots of things are fluid and there is lots of change. It is an emerging market. What we might have thought in February might be slightly different now in terms of the balance. But let me more specifically address biodiesel. We are also investigating biodiesel options. Biodiesel is a lot easier to handle. You have probably already heard that ethanol is a hygroscopic material so that when you are transporting it you need to be very careful about it getting into contact with water. Once you have made the ester with biodiesel it is essentially the same as diesel and is much easier to handle. There is probably slightly less cost from the distribution perspective. The challenge with biodiesel is finding the volume of material that can meet the right specifications. In particular there are specifications for something called cloud point. They are basically low temperature properties. So when you have a truck or car and are driving on diesel, if the diesel does not have the right low temperature properties, you start to get waxes forming which will clog up the engine. When you manufacture biodiesels you need to make sure you meet all of those properties. It is harder for some types of crops.

I think it is harder, for instance, if you use animal fats than if you use a crop-based material to meet those specifications. From our experience, looking around Australia, it is harder to find plants that will meet the right specification for a biodiesel component than it is for ethanol. Having said that, we are working or discussing with a number of potential suppliers and looking at that. There seems to be a much higher customer pull for biodiesels, whereas ethanol is very much a producer push. Some of the mining companies are saying, 'We would be interested in looking at biodiesel blends' et cetera. So it is a very different dynamic to ethanol and we are looking at both. I guess you could say, though, that the political pressure seems to be a lot more around ethanol. The other thing to let you know is that while Shell is a big company it also has finite resources, so sometimes it needs to pick and choose which part of this thing it is going to do first and which part it is going to do second. I hope that is a broad answer with lots of factors.

Mrs COOTE — That is excellent, thank you.

Ms DUNCAN — With your Optimax Extreme petrol, did you have the consumer resistance with the 5 per cent ethanol content that we have seen generally with ethanol mixes?

Mr SCOTT — No, we did not. Why not? As I said, the whole point of doing that particular product was to try to address the perception. So we designed a product that our technical guys knew was a fantastic fuel, and we then went and roadshowed it to a bunch of car experts and, for want of a better term, revheads and those sorts of groups of people, and said, 'Here's a fuel that is a really good handling fuel'. We had a group called Motech, which is a very reputable body, test it. We basically demonstrated to the satisfaction of everyone who was interested that this is an extremely good fuel. The people who were interested were not people looking for a cost discount because they want cheap fuel, but people looking for a very high-quality fuel and therefore the market that we pitched it at thought it was fabulous. It did not run into the sort of hysteria of, 'Oh, it's got ethanol'. Once we walked people through it they understood it and accepted it and now we have dedicated users who drive all over Melbourne to find the 20 service stations that we sell it at.

Mr SEITZ — We have been talking about ethanol quite a lot because the increasing price of fuel has become an issue. Is it your opinion that for both biodiesel and ethanol to get going in the market — apart from for the private consumer — it is encouraging that government instrumentalities and fleets and the industry itself use it and that biodiesel is now used for bus services and routes and things like that, or should there be more encouragement by the government that it be used so that the more it is consumed and the more volume there is, the cheaper it becomes to the market? I would like your views on that.

Mr SCOTT — So your question essentially is: should governments encourage their own fleets and other fleets to use these fuels?

Mr SEITZ — Yes.

Mr SCOTT — If there are consumer groups who want this stuff and they are prepared to pay, great, yes.

Mr SEITZ — Would having a bigger volume make it more economical in the market then?

Mr SCOTT — Yes, I think so; of course it does.

Mr SEITZ — That is what my key point is.

Mr SCOTT — Yes; however, that does not mean you necessarily get over the hump of the barriers and the challenges. For instance, when I say that we are looking at a product like biodiesel, we may not necessarily be looking at it all over Australia. To again give you a ridiculous example, trying to serve Karratha, when we have a refinery in Geelong, can be tricky. And maybe that is not economical to put in a whole new stream of fuel for Karratha. Now we are talking about Victoria here, so we can be a little bit more specific, but still from a Shell perspective we have to look across the whole board. Fortunately we do have a refinery in Victoria, so some of these things are a little bit easier for us to try to do. Nonetheless, we need to look at where we can get the raw material, where we can then blend it, how much that costs and what the demand will be. Can we deliver enough into Victoria to make it worthwhile? Do we have the manpower to look at it this year? Maybe it is next year, maybe it is the year after. So yes, directionally I think you are right, but I would not say that that is a silver bullet. It is just another helping hand in the right direction.

The CHAIR — I have a question on the possibility, I suppose, of ethanol being imported post the phasing down of the production grants. Does that make life a bit more certain for Shell?

Mr SCOTT — In what sense?

The CHAIR — In the supply of ethanol itself?

Mr SCOTT — I am not sure that the supply of ethanol, for instance, is currently the blocker. At the last round table I went to at a federal level there was I cannot remember how many millions and millions of litres on the table of proposed plants in Australia. What I understand from them, through the media, is that they are waiting for oil companies to sign up. So right at this point in time I am not sure that that is the particular issue. The real issue is the economics of it at the moment. Whilst people say, 'We have got a high oil price and we can offer you ethanol at

a great discount', if you look at the long term, that may or may not continue to be the case. As well as that there are all the infrastructure costs that we have to overcome. As things start to grow maybe it will get easier. If I look at some examples I have heard of from the US or Brazil, it has taken them 25 or 30 years to get to where they are now. It makes sense, and any emerging market that I have seen or heard of does take time to grow. So the sort of volume that you are talking about in terms of, 'Would we be concerned that there is not enough supply in Australia?', I think that is a question that is a little way off yet — at least, from what I understand from the producers. I am sure you will have some of them talking to you, and they are probably in a better position to answer the question.

Mr BENJAMIN — I have a quick question about summer volatility in Victoria. I think Queensland allows for summer volatility — —

Mr SCOTT — Queensland and New South Wales, yes.

Mr BENJAMIN — Is there an additive that you can add to your fuel that will allow you to decrease the vapour pressure but still maintain your octane level?

Mr SCOTT — I do not know is the answer to that. They may do that in the United States; I do not know if your question comes from a particular knowledge. But if there was, that would be an extra cost. So certainly again it becomes a negative directionally and economically for ethanol blends. Right at this point I understand from the EPA, for instance, that it is likely to give us a variation, if we ask for it. The federal Department of the Environment and Heritage is working on an overall program which is looking at a number of things. Out of that will fall a recommendation on volatility specs. I understand that Victoria, New South Wales, Queensland and other states are all participating in that to refine their legislation. But the point is that right at this point in time in Victoria, or last summer in Victoria, an E10 blend would have been illegal.

The CHAIR — Thank you very much; that has been terrific.

Committee adjourned.