STATE DEVELOPMENT, INFRASTRUCTURE AND INDUSTRY COMMITTEE

Members present:

Mr DF Gibson MP (Chair)
Mr MJ Hart MP
Mr MJ Crandon MP
Mr R Katter MP
Ms KN Millard MP
Hon. TS Mulherin MP
Mr BC Young MP

Staff present:

Ms E Pasley (Research Director)
Ms M Telford (Principal Research Officer)
Ms M Westcott (Principal Research Officer)

PUBLIC HEARING—INQUIRY INTO THE LIQUID FUEL SUPPLY (ETHANOL) AMENDMENT BILL 2014

TRANSCRIPT OF PROCEEDINGS

WEDNESDAY, 27 AUGUST 2014

Brisbane

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Committee met at 9.29 am

CHAIR: Good morning, everyone. I declare open the public hearing for the committee's inquiry into the Liquid Fuel Supply (Ethanol) Amendment Bill 2014 and I thank everyone for their attendance here today. I am David Gibson, the member for Gympie and chair of the committee. The other committee members here with me today are: the member for Rockhampton, Mr Bill Byrne, representing the member for Mackay; the member for Burleigh, Mr Michael Hart; the member for Keppel, Mr Bruce Young; the member for Sandgate, Ms Kerry Millard, is an apology but may be joining us later in the hearing; the member for Mount Isa, Mr Rob Katter, is on his way and hopefully will be here shortly; the member for Coomera, Mr Michael Crandon; and, by leave of the committee, we have the member for Condamine, Mr Ray Hopper.

The briefing is being broadcast live by the Parliamentary Service's website and is being transcribed by Hansard. For the benefit of Hansard, I ask that all representatives identify themselves when first speaking and speak directly into the microphone. The aim of the briefing today is for the committee to gather background information in relation to the bill. This briefing is a formal committee proceeding and, as such, everyone should be guided by schedule 8 of the standing orders, a copy of which has been provided to you. I now welcome representatives from the Department of Energy and Water Supply.

MILLIS, Mr Alan, General Manager—Energy Supply and Regulation, Department of Energy and Water Supply

QUIREY, Mr Tim, Director—Renewable and Alternative Energy, Department of Energy and Water Supply

CHAIR: Gentlemen, would you care to make an opening statement?

Mr Millis: Thank you, Mr Chairman. I will make a few opening observations. The Department of Energy and Water Supply does not currently have resources allocated particularly to biofuels. It is more focused on stationary energy than on liquid fuels. The energy division within the department is currently delivering on a broad reform agenda, as well as focusing on the future through actions outlined in *PowerQ: a 30-year strategy for the Queensland electricity sector*. However, more broadly the Queensland government, through other departments such as the Department of Agriculture, Fisheries and Forestry, is interested in the biofuels industry.

The private member's bill seeks to introduce an ethanol mandate at an initial level of five per cent, increasing to 10 per cent over time. The proposed change would provide certainty for Queensland's two producers of pure-grade ethanol but would have flow-on effects to a range of other stakeholders including fuel wholesalers, retailers, consumers and motorists, feedstock and livestock industries and the government. The mandate would do little in providing support or assurance for the broader biofuel industry, which is more than just ethanol for motor vehicles.

I would like to make some initial observations elaborating on the introduction of an ethanol mandate and the broader biofuel industry. According to the explanatory notes for the bill, the rationale for a mandate exists around the development of an ethanol industry for both first- and second-generation technologies, providing regional development, new jobs, environmental benefits and fuel security. The department considers it important that the costs and the benefits of an ethanol mandate be considered across all the stakeholders. While ethanol producers will benefit, these benefits can potentially come at the cost of limiting choice for customers, creating additional costs and regulatory burden for retailers and wholesalers and, depending on the feedstock used, can result in additional competition for the livestock industry in terms of sourcing feed.

If a mandate restricts choice to a point where no regular unleaded petrol can be purchased, then customers with vehicles incompatible with ethanol face the prospect of having to buy premium unleaded instead of regular unleaded petrol, and this can create additional cost-of-living pressures. If service stations are required to upgrade tanks, pumps, hoses, signage and site procedures, then millions of dollars of investment may be required in order for the ethanol mandate to be implemented.

While environmental benefits can be realised from displacing regular unleaded petrol with ethanol, it is not clear that this is actually the most efficient form of emission reductions. It has been estimated by the Bureau of Resources and Energy Economics that the cost of abatement under the current Ethanol Production Grants program in 2012-13 was $274 per tonne of carbon dioxide equivalent reduction. With respect to environment and health, it is noted there are existing Commonwealth government legislation and programs, such as the Fuel Quality Standards Act 2000 and the newly proposed emissions reduction fund, which do seek to address such matters.

Regional development opportunities from a five per cent mandate do appear limited. Based on the capacity of Queensland's two existing ethanol plants, approximately 90 to 95 per cent of the volume required could be met by those two existing facilities. Based on observations from the mandate in New South Wales, higher level mandates can be difficult to achieve. New South Wales currently has a six per cent mandate and has, at best, achieved a level of four per cent. During the latest quarter, this figure was tracking at around 3.5 per cent.

Looking more broadly than ethanol and considering alternatives to a mandate, developing a biofuels and biochemicals and bioproducts industry in Queensland does present an opportunity that could be explored further. Such an approach has the potential to build upon our established primary industries and science expertise, attract commercial investment, add value to the traditional sectors, grow jobs, support regional development and diversify the economy. Queensland is, in fact, well positioned to develop a reputation in the use of novel feedstocks such as sweet sorghum, forest and municipal waste and biogas and oil crops such as pongamia and algae to develop high-value commodities alongside biofuels. Queensland already has world-leading research expertise in these feedstocks.

The state's natural endowments such as high solar radiation, a warm climate and extensive non-arable land mean that it is well placed to pursue algal biotechnologies. Algal biofuel production is still precommercial. The algal biomass offers short- to medium-term economic prospects as a feedstock for bioplastics, animal feed, medicine production and nutraceuticals. To this end, there does appear to be scope for exploring ways to support the development of a broader biofuels and bioproducts industry in collaboration with industry participants and we believe this alternative option has alignment with the objectives of the bill. That is the conclusion of our opening statement, thank you, Mr Chair.

CHAIR: Thank you. I would like to pick up on something that you said in your opening statement. Perhaps for the benefit of the committee you might be able to provide us with some insight. You talked about the New South Wales mandate not being achieved. I think you said the highest it achieved to date was four per cent and was tracking at about 3.5 per cent. What have been the barriers to the New South Wales mandate being achieved? Has it simply been that the industry has not invested, despite there being a mandate there? It is a larger population base and you would assume, particularly for ethanol, there would be larger consumer demand placed on it to achieve it. Is the department aware of what barriers have been in place that prevented the New South Wales mandate?

Mr Quirey: I think there is a range of factors. There is probably some around the actual way the mandate itself is structured in New South Wales. That has a prescribed class of retailers. A retailer who owns 20 or more sites is then subject to the mandate, so there is a range of service stations that are not captured within the mandate. However, there are other difficulties around that consumer choice and I think they were fleshed out in Caltex's submission to the committee. You are blending the fuel at slightly under 10 per cent, so you do not have quite E10 fuel. You then have a range of incompatible vehicles that cannot accept ethanol blended fuel. In order to overcome that, you then provide an alternative fuel choice for the consumer, be it premium unleaded or regular unleaded fuel. Where that choice exists, consumers show a strong preference towards other fuel types. The Caltex submission indicated from their research that where a site contained both E10 fuel and premium unleaded fuel, 50 per cent of the customers would move towards purchasing premium unleaded; where regular unleaded was also put into the service station, there was an 80 per cent switch from consumers away from ethanol blended fuel into the other fuel types. I think there are difficulties around that customer/consumer choice.

CHAIR: Based on the evidence that you see in New South Wales, as a layperson you drive into a service station and you will see E10 which will be a couple of cents cheaper than the other products, but that price difference is still not enough to change consumer behaviour. What you are saying is that part of the barrier is that consumers are making the choice for fuel products other than the blended E10?

Mr Quirey: That is correct. I think price has been a determining factor for some motorists, but also there is still probably a lack of education amongst some motorists as to whether their car can accept the fuel, whether their car is compatible. Also, as was highlighted in the RACQ submission as well as in the BREE report, the energy density of the ethanol fuel itself is not the same as the regular unleaded. It has 68 per cent of the energy density of regular unleaded.

CHAIR: Sorry, I am a simple guy: you are going to have to tell me what 'energy density' means.

Mr Quirey: You are looking at how far you can travel with that particular fuel.

Mr Millis: To put it another way, ethanol per litre has 68 per cent of the energy of regular unleaded petrol. When it is blended, the blend has less energy per litre than regular unleaded petrol.

CHAIR: So I understand it, I fill my tank up and I can drive 100 kilometres on that tank of regular fuel; you are telling me that if I fill it up with the ethanol E10, I only get 68 kilometres?

Mr Quirey: If you fill up with E10 and it contains only 10 per cent, there is a three per cent differential and you would travel only 97 kilometres.

CHAIR: Thank you. That is great.

Mr Quirey: Going back to your question, that price differential that we are seeing in the market of about two per cent is not sufficient to overcome that sort of loss in energy density or efficiency. At a price of around $1.50 you would be looking for, I think, about a four- or five-cent price differential in the fuel for them to be considered equal.

CHAIR: I will open it up to my committee members in a moment, but I have a final question with regard to New South Wales. I was looking at the ACCC's 2013 report into price costs and profit of unleaded petrol in Australia. They were talking about how we have this perverse outcome whereby, as you were discussing, retailers are dropping out their regular, so they have premium and E10. Consumers are not confident with E10, so they are then being forced to buy premium. That is actually resulting in a higher cost of living for people as they are saying, 'I will pay that extra two or three cents that the premium fuel costs, because I do not have the regular choice.' Is that consistent in other experiences that you are aware of, in other markets?

Mr Quirey: I am only aware of New South Wales having the mandate, so that is the key market that we are observing. That is exactly the sort of thing that Caltex was fleshing out in its submission around that choice and people switching to other fuel choices. If regular is not there, then it is the more expensive premium unleaded fuel.

CHAIR: New Zealand had a mandate. Did you look at their market to see if they had a similar experience?

Mr Quirey: No, I have not looked at the New Zealand experience.

Mr YOUNG: There is this underlying fear relating to older cars. Is that fear still real?

Mr HOPPER: One and a half per cent.

CHAIR: Hold on.

Mr Quirey: Looking at Caltex's and some of the other submissions and the surveys they undertook, the customers did express that they were not sure whether their car could accept that fuel. I acknowledge that pre-1986 vehicles were not built to accept ethanol and there is a small number of those in the Queensland market. I think in the latest motor vehicle census there were 60,000 vehicles out of about 2.7 registered vehicles—

CHAIR: Is that Queensland or Australia-wide?

Mr Quirey: That was Queensland. However, there is still a range of vehicle models post-1986 that were not built to the specification of ethanol. That was fleshed out in the submissions. There was previous work done by the University of Queensland that indicated approximately 17 per cent of the motor vehicle fleet would be incompatible with ethanol. In one of the submissions by the Biofuels Association to this inquiry, they provide some updated figures where they estimated that would be around nine per cent of the vehicle fleet. There remains that portion. As a slight aside from that, there remains a range of motorbike brands such as Honda, Kawasaki and Yamaha that have issues with compatibility of ethanol fuels. Aside from motor vehicles, there are also considerations with boat engines and motorcycles.

CHAIR: Can I just apologise. We thought it was a small, intimate gathering. If you were outside, we do apologise. We did not mean to start without your presence as members of the public in the gallery. Welcome to our hearing. Member for Condamine?

Mr HOPPER: So do I get to address the meeting now?

CHAIR: You get to ask questions. We will have an opportunity at our next hearings—not today—where you will be able to brief us at the end, just as a departmental briefing would be at the end. So do you have any questions you wish to ask of the department?

Mr HOPPER: I have a couple of questions. Thank you for your presentation. One of the things you said was that it would provide competition for sourcing stock food. That is probably exactly right—where the feedlot industry is up in arms because this is actually putting a base price on sorghum. So that is wonderful—to have a base price on sorghum. How many sorghum growers have we got out there? Agriculture is one of our four pillars—

CHAIR: Do you have a question?

Mr HOPPER: Yes. The question is: do you believe that is a bad thing?

CHAIR: You cannot ask for—

Mr HOPPER: No, a statement was made—

CHAIR: Member for Condamine, you know the rules. You cannot ask for an expression of opinion. You can reword the question however you choose.

Mr HOPPER: Okay. How can I reword this? Does the department think it is a bad thing for the sorghum growers to have a base price put on their production because of a mandate on ethanol?

CHAIR: Can I suggest you might want to reword that to 'what evidence does the department have'?

Mr HOPPER: Okay. What evidence does the department have?

Mr Quirey: I guess as Alan indicated in the opening remarks there are a number of stakeholders impacted by an ethanol mandate, and some will benefit and some will not benefit from a mandate. As you have indicated, the growers of the feedstock feeding into the ethanol process are one stakeholder which would benefit from an ethanol mandate, but in considering the broader stakeholder groups we are also acknowledging that the Australian Lot Feeders Association has indicated that it is not in support of an ethanol mandate and it has concerns around the impact that that price war may have on their stakeholders or on their groups.

Mr HART: Can I ask a supplementary on that?

CHAIR: If you are following on the same question, yes. I want to allow a line of questioning.

Mr HART: Have you got any evidence from New South Wales that sort of points towards an increase in price to stockfeeds?

Mr Quirey: I do not have that myself, no, but I guess also the three plants in Australia have used different feedstocks so there would be different impacts depending on the feedstock type. With respect to the two plants in Queensland, the Dalby refinery uses sorghum and the Sarina refinery uses molasses from the sugar cane, and wheat starch is used in the New South Wales Manildra plant. So I would imagine, depending on the feedstock used, it would then have different impacts on the other stakeholders.

Mr KATTER: Mr Chair, can I add to that?

CHAIR: Yes, I am going to allow supplementaries.

Mr KATTER: From my perspective, to put that in context, I agree that there are a lot of stakeholders but the report back to us was that it was almost a negative in that it impacts negatively on feedstocks. That is how I interpreted it. In the case of the sorghum, something like 80 or 90 per cent is retained, and there is the figure of 38 per cent protein. At $70 a tonne, what a fantastic opportunity for graziers in that area to have that feedstock. If that Dalby plant goes from 70 megalitres a year at the moment to 140 megalitres, that is a hell of a lot more demand for sorghum and a hell of a lot more feedstock for producers in the area. It is not just about price, but there would be a lot more available cheap feed for cattle producers. I almost see it as a benefit.

CHAIR: I will take that as a statement rather than a question.

Mr KATTER: Sure.

CHAIR: We will go back to the member for Condamine.

Mr HOPPER: Are you aware that there are ethanol plants on hold waiting to be built if we could achieve a mandate in Queensland?

Mr Quirey: I am aware that there are a range of other ethanol plants being proposed. The Biofuels Association of Australia submission listed a whole range of those, and there are a range of public announcements around the NQBE plant and the IFED plant. So, yes, we are definitely aware that there are a range of ethanol plants available. I guess our question then goes to the fact that, as highlighted in the United Petroleum submission, a five per cent ethanol mandate could be easily achieved by the existing producers. If that is the case, then I still have not seen the numbers that would indicate you would be able to bring on hundreds of megalitres more of new plants as a result of this mandate generating approximately 192 megalitres.

Mr HOPPER: Following that question, are you then aware that the mandate increases to 10 per cent over the next three years? That gives those companies three years to get their plants up and running for when the 10 per cent mandate hits. We produce no petrol in this nation; we import 100 per cent—

CHAIR: You have asked the question. We will allow the department to answer the question.

Mr Quirey: I guess there are probably two parts to that response. One statement that was made in the opening remarks was around the fact that there are potential difficulties in achieving a high-level mandate, so they would need to be considered. Again, the United Petroleum submission proposed three per cent moving to six per cent, and they stated that six per cent could be easily achieved. To then get to 10 per cent, you are not talking huge amounts of regional development. We are talking maybe one of those projects—possibly another, maybe not—then having the necessary support it needs for the ethanol production.

CHAIR: Just to be clear, the bill does not mandate that it would move to 10 per cent. It moves to 10 per cent if there is no percentage prescribed by regulation. So if they were to prescribe a percentage that is less than 10 per cent, that is what it would move to in three years, not the 10 per cent. That is as the bill is worded now. I call the member for Coomera.

Mr CRANDON: I want to come back to the price differential. We talked almost as though it was an assumed situation. We talked about a cheaper price for ethanol blended fuel. Is that the case in the research you have done? Has the ethanol blended fuel been offered at a cheaper price than regular fuel?

Mr Quirey: That is the case. In the ACCC's report called *Monitoring of the Australian petroleum industry*, section 5, chart 5.7 looks at the 'monthly average real and nominal RULP-E10 differentials, all monitored locations'. It was around the 3.5c mark earlier on, so as we go back—

Mr CRANDON: What is 'earlier on'?

Mr Quirey: I think it is back to 2007. The chart relates to the period January 2007 to September 2013. It shows that differential in real terms was 3.5c per litre at the beginning of January 2007 and it decreased to a low of 1.7c per litre between July and September 2011, and then it subsequently increased slightly to 2.2c per litre in August and September of 2013.

Mr CRANDON: So slightly cheaper but not enough from the sounds of things to tip people over the edge. In fact some people are going towards more expensive fuel to avoid the ethanol.

Mr Quirey: That is correct. But I guess you also have that subset of vehicles that are incompatible with the ethanol where people would have no choice.

Mr CRANDON: Just a follow on from that question, have you done any modelling on what impact a mandated volume of ethanol blended fuel would have on the cost of the raw materials coming in? We talk about putting a base price on whatever we are using—whether we are using the sorghum, molasses or wheat starch. If we were to increase production, have we done any modelling on whether or not that would force up the cost to the manufacturer of ethanol which might even negate this price differential? Do you see what I am getting at?

Mr Quirey: Yes. The department has not done any modelling in that respect. I think the BREE report may have touched on it briefly. I will just quickly check: I am sure it is in here, but I will have to find it. I am pretty sure there is a statement that, given the quantities they are talking and the availability of the feedstock, they did not see there would be that sort of impact occurring in the market.

Mr CRANDON: Thank you.

Mr HART: How was the price differential achieved? Was there a subsidy required?

Mr Quirey: Currently, through the federal government there is the Ethanol Production Grants program, so the 38.143c excise on fuel, there is a rebate for that amount. So they are receiving that I guess as a relief. On an E10 blend, if you take then 10 per cent of that amount, there is potentially

3.8c of benefit flowing through into that fuel type being consumed driving that differential. However, I guess, as I stated before, those ACCC figures show that the differential is more in the order of 2c. In the BREE report titled *An assessment of key costs and benefits associated with the Ethanol Production Grants program*—which is its analysis undertaken earlier in the year—they have no visibility of where across or along that supply chain that discount is being lost—

Mr HART: So there is a 3.8 per cent subsidy basically—

Mr Quirey: It is 3.8c per litre, sorry.

Mr HART: Per litre, and it is actually only achieving a two per cent discount.

Mr Quirey: It is 2c per litre, yes.

Mr HART: So a 2c per litre discount. To drive the usage would require possibly a higher subsidy. Would that be fair to say?

Mr Quirey: In terms of that energy density argument, yes. For it to be a like for like in terms of the price you pay for the distance you travel then, yes, you would need a further discount.

Mr BYRNE: Tim, I listened with interest to Alan's introductory comments. In one of his sentences, he talked about the department being 'interested' in biofuel, and the wraparound language did not give me a great sense of enthusiasm on the behalf of the department. Can you explain to me what 'interested' in biofuel is as a definition from the department in your role as the Director of Renewable and Alternative Energy?

Mr Quirey: I think Alan's opening statement, if I understand the sentence you are referring to, was that the department currently has no resources allocated to biofuels, but across the broader Queensland government there is still interest in biofuels. So there are other departments such as the Department of Agriculture, Fisheries and Forestry, for example, that are looking at—

Mr BYRNE: But you are the Department of Energy and Water Supply, and you have no resources actually engaged in biofuels; is that what you are telling me?

Mr Quirey: That is correct. The resources are focused on the stationary energy sector.

Mr BYRNE: That is fine with me. In the introduction, you said that the mandate would do 'little in providing support' for the biofuel industries. That seems to me to be a totally counterintuitive remark. Can you explain to me how a mandate would do little, when it would seem to a normal person that a mandate would encourage the biofuel industry? Can you tell me how it would do little to encourage the biofuel industry?

Mr Quirey: With regard to the mandate doing little, the statement is in reference to what sort of level we are talking about in terms of fuel required if a mandate is introduced. We are talking approximately 190 megalitres, based on the most recent fuel statistics. We are then saying that current capacity within Queensland's two ethanol facilities is 140 megalitres, so if we introduce a mandate we are talking an incremental increase above capacity of about 50 megalitres of ethanol. So that is why we are saying it would potentially do little. It supports the existing producers who may expand production to meet that additional requirement. There could be fuel coming from Manildra. Currently total ethanol demand is about 284 megalitres and capacity in Australia across those three plants is 440 to 450 megalitres. So there is the potential that the mandate would help facilitate existing production or existing facilities and therefore do little in growing the industry further beyond the existing incumbents, based on the incremental increase.

Mr BYRNE: But surely that is going to secure the businesses themselves. Surely that provides a level of certainty and demand for those businesses and gives them some growth trajectory that is predictable. That would seem to me to be logical, rather than saying that it is going to do nothing for production.

Mr Millis: Perhaps I can clarify a little. I did say in my opening statement that that would secure the existing businesses, and I accept what you say if we actually give them some growth as well.

Mr CRANDON: I think you gave me the answer that I have to ask you for, but I just want to clarify it. What is the current usage of ethanol blended fuels? How many megalitres currently in Queensland and then in the rest of Australia, if you have the figure?

Mr Quirey: If we look at ethanol blended petrol, regular unleaded petrol and premium unleaded petrol, premium unleaded petrol we group in proprietary brands of petrol as well, which is the same treatment that the ACCC uses in its report in terms of the monitoring of fuel sales. In 2013-14—so the most recent financial year, and the numbers came out, I think, last week or the week before—within Queensland there was 353 megalitres of ethanol blended petrol and across Australia the corresponding figure is 2,352 megalitres, so Queensland represents 15 per cent of those sales. In terms of regular unleaded petrol, within Queensland there was 2,583 megalitres consumed and across Australia the corresponding figure is 10,736, so Queensland then represents 24.05 per cent of those total sales. Premium unleaded petrol was 917 megalitres in 2013-14 for Queensland and 5,033 megalitres for Australia, representing 18.22 per cent.

Mr CRANDON: So just to clarify, then, those plants' capacity is what again?

Mr Quirey: In terms of the capacity of the two plants, the Dalby and Sarina plants are approximately 140 megalitres. I think the BREE report quotes 140 and the ACCC report quotes 150, so there is a difference for the Dalby biorefinery of 10 megalitres in those two reports.

Mr CRANDON: Okay, and in New South Wales?

Mr Quirey: In New South Wales it is 300 megalitres.

Mr BYRNE: You were talking about the customers of ULP and customer preference—and I understand that, and you see it evidenced all of the time—but shredding right down to the bottom of this in terms of the pre-1986 fleet and other, I suppose, boutique fleet motorbikes or whatever else, that is quite a small percentage of the customer base, and clearly there must be a model where at some point that fleet becomes irrelevant based on time and wear and tear. At what point would you project that the pre-1986 fleet demand would become insignificant to this debate?

Mr Quirey: As you indicated, the pre-1986 fleet is diminishing. As I said earlier, there are only 60,000 vehicles as per the 2013 Australian Bureau of Statistics census of motor vehicles for Queensland. But I guess the issue is not just pre-1986 vehicles; there is a range of post-1986 vehicles that are not compatible with ethanol.

Mr BYRNE: You mean motorbikes?

Mr Quirey: No. There is a whole range of cars which you can access from a website, but we are talking Fiats, Daewoos, Holden Astras, Lexus, Lotus, some types of Mazdas, Peugeot, Porsches, Rovers, Renaults, Subarus, Suzukis and some Toyotas.

Mr BYRNE: That tells you what not to buy, doesn't it?

Mr Quirey: I guess, yes, acknowledging that the pre-1986 is diminishing, but there is still another group of vehicles. So the analysis that UQ had done that is referenced by RACQ showed the number of non-compatible vehicles decreasing to 6.9 per cent in 2020.

Mr BYRNE: So 6.9 per cent in 2020; right.

Mr Quirey: However, that said, the Biofuels Association of Australia said that they believed that currently there is only about nine per cent of the fleet that is incompatible, which corresponds to the University of Queensland's figure of this year being around that sort of 17 per cent mark. So that number could decline quicker, I guess—the 6.9 per cent. That is what I am saying.

Mr BYRNE: There are no new vehicles being sold of any type in Australia now that are non-compatible?

Mr HART: Yes, there are.

CHAIR: There are, yes.

Mr BYRNE: There are?

CHAIR: Yes.

Mr HART: Plenty.

Mr BYRNE: Okay. Thank you.

Mr KATTER: I have a few questions. A lot of the responses refer back to the New South Wales experience, and I just want to make clear something you mentioned earlier. I thought it was 25 or fewer service stations in New South Wales that have an immediate exemption from having to comply with that mandate in New South Wales.

Mr Quirey: According to the ACCC—

Mr KATTER: You said 20 I think before.

Mr Quirey: Yes. So the ACCC report—

Mr KATTER: I would just like to check that. I thought it was 25.

Mr Quirey: Sorry. The monitoring of the Australian petroleum industry at section 5.2.1 says that retail sites are excluded if they are not part of an operation of 20 or fewer sites and that these retail sites comprise around 25 per cent of retail sites in New South Wales.

Mr KATTER: I would like to be clear on that. It is not a huge point, but the point is if you own 20 or fewer service stations you do not have to comply with the 10 per cent mandate?

Mr Quirey: That is correct.

Mr KATTER: Which would capture an enormous market.

CHAIR: A quarter of the market.

Mr Quirey: According to Caltex's submission, yes, it captures a lot of the market. But in terms of actual volume, it is a small portion of the volume because most of the major retailers throughout the nation are in populated areas.

Mr KATTER: I have been made aware that exemptions are just handed out over and above that from the Office of Biofuels in New South Wales—readily handed out. I have heard that people have not even asked for them and that a large number of exemptions are handed out 12 months in advance on the basis that they cannot get supply, which to me seems difficult to understand if you are trying to promote the use of ethanol by creating a mandate but then you are giving exemptions 12 months in advance where they cannot get supply. It begs the question whether there is real impetus there to drive this mandate at all or there is something else working against it. Were you aware of those exemptions that have been made in New South Wales, because it does cast a completely different light on the New South Wales experience to me?

Mr Quirey: Yes. I guess I am aware that they do have an exemptions framework in place. The New South Wales biofuels website lists the retailers and what level of ethanol they are achieving, and that seems to range so that—I think the latest numbers I saw—some of the obligated parties were achieving about 1.77 per cent as lowest and the highest was up around a five per cent level. So a lot of the retailers or all of the retailers were not achieving the mandated level and therefore they seek those exemptions.

CHAIR: I just want to pick up on this theme. Looking at the bill and clause 35AG where this bill contains exemptions for producers and refiners not to comply with the mandate provided, is the department aware how this exemption that is contained within this bill compares to New South Wales? As I read that clause, I see that the minister can grant them an exemption under section 52 if he is satisfied that the applicant cannot secure a sufficient quantity of ethanol priced to satisfy the requirement but I do not see a time limit on the exemption as is contained in this bill. If you are not aware, if you could take that on notice and perhaps provide the committee with a comparison between what is proposed in this bill and the exemptions that are currently provided for in New South Wales.

Mr Quirey: I guess the key difference is the New South Wales mandate prescribes that class of retailer whereas there is no prescribed class of retailer in the proposed bill. It is relating to the fuel wholesaler and therefore the exemption would apply to the wholesaler—

CHAIR: Wholesaler, not a retailer.

Mr Quirey: Yes.

CHAIR: So we could have a situation contained under this bill where a wholesaler is granted an exemption. As the bill is worded now, how long would that exemption last for?

Mr Quirey: I am unsure of that answer.

Mr HOPPER: Until they can get the fuel.

CHAIR: The way the bill is worded, there is no time limit on that exemption. It is as long as the minister grants that exemption. Am I reading that correctly?

Mr Millis: We might have to take that one on notice.

CHAIR: If you can take that on notice for us, that would be great.

Mr KATTER: To me there seems to be ambiguity in the message that has come back, and I say this with all respect. In New South Wales we are saying there is a drive to make people use ethanol so we want you to use ethanol, but there is a problem because we have only got the 3.5 per cent or whatever it is, which I think is a success. If you want people to use ethanol, who cares if it does not make five per cent? At least we have that, but that is just a comment. If the restriction then is supply, that is the only conclusion you can draw because you want people to use it but you do not want to make them use it so you will have five premium unleaded bowsers and one E10 one and the take-up is decided. If there is a supply issue, we are coming back to Queensland and saying, 'There's going to be no impetus for development here because we've got that available supply in

New South Wales,' which presumably takes them back to one per cent or two per cent, so it is a self-manifesting problem. Thrown into the mix of that, I think it is important to acknowledge—and I can put this as a question—the Burdekin—

CHAIR: It will help, Rob.

Mr KATTER: The Burdekin facility and the Hinchinbrook facility are shovel-ready to produce another 140 or almost 200 megalitres which will have an enormous impact on the market in terms of supply and for all of the other benefits. I get a sense of ambiguity from those two messages that New South Wales has not reached its targets and the subtext to me is that there is a lack of supply, but then in Queensland we are saying, 'We'll be right for supply because we'll get whatever we don't match,' and so there is no impetus for development in Queensland because we will get whatever we cannot make from New South Wales.

CHAIR: Is there a question? I know what you are saying and we can take that as a statement—

Mr KATTER: I would just like a response to it, because it is unclear to me what the real message is there. Is it a supply issue or is it consumer demand, but I thought that the whole point of a mandate is to make consumers use it to drive the use of it?

CHAIR: So, Rob, is the evidence that New South Wales is not achieving its mandate related to a lack of supply of ethanol for New South Wales? Is that what you are saying?

Mr KATTER: We can frame it that way.

CHAIR: I am just trying to get it narrowed down to a point. Do you understand what we are trying to draw from that?

Mr Quirey: I think it is more the demand-side drivers in terms of that customer choice. Where there is the choice the demand does not exist, and therefore there remains existing capacity on production on the supply side.

Mr HART: Just following on from that, the legislation has a mandate for the supply of ethanol based fuel at a petrol station, but there is no mandate for someone to produce that fuel, is there? We are not pushing anybody to actually produce it. We are basically saying, 'If it is commercially attractive to you, then it can be sold if you are willing to make it.'

Mr Quirey: We are saying to the fuel wholesaler, 'You need to dispense that amount of fuel, and therefore you will need to source it from one of the existing facilities.'

Mr CRANDON: Or overseas.

Mr HART: We are not encouraging anybody to supply that to the wholesaler to start with.

CHAIR: Can you bring that into a question?

Mr HART: Has there been any move towards subsidising the manufacture of ethanol plants in other states or other jurisdictions that you are aware of? Would that be required in Queensland in order to make this work?

Mr Quirey: In terms of the actual economics of the projects, there is probably information in both the BREE report and the ACCC report. In section 5.6 of the ACCC report it talks about the APAC biofuels consultants' report *Australian Biofuels 2013-14* that was released in October 2014. It notes that there is a comment in that report which says—

The current economics are not favourable for new projects if their justification is to supply the domestic fuel market.

So I guess there are economic considerations in that respect.

Mr HART: Do the two shovel-ready projects that we have been hearing about require subsidisation, some sort of capital input by the government to start with?

Mr KATTER: No.

CHAIR: I do not know if it is fair for the department to answer what projects are able to be stepped up into, so I might—

Mr Quirey: There is the Ethanol Production Grants program that provides that excise benefit to producers.

Mr HART: The excise benefit is the only thing that you are aware of?

Mr Quirey: Yes.

Mr KATTER: This is the last question. Well, I have plenty more here but this may be the last one I am allowed. There was not a lot of comment made in the submissions, but to me a primary driver for the mandate would be the tax benefits of any new facilities that are built. I am acutely aware of how eager two in North Queensland are. They are saying that all they are waiting for is a mandate so that they have some security. The Burdekin is creating 600 jobs, and there is payroll tax on that and GST and company tax. Have there been any studies or data that you are aware of that would show the benefit of this industry to the state's revenue? That, to me, should be a primary driver and consideration. In the scope of when we are talking about the cost of fuel, I think it is a relevant point of discussion. I was wondering if that has come up in your research or if you have considered that.

Mr Quirey: We do not have any state-specific numbers on possible jobs creation. The BREE report looked at the existing plants. It takes the Dalby figures and extrapolates out those employment numbers for the other two plants and states that there are between 160 to 200 jobs created in those three plants. It then looks at the cost of the Ethanol Production Grants program and says that it costs $108 million. Then it equates that to dollars per job and indicates that that grants program is possibly costing between $545,000 and $680,000 per FTE. Some of the submissions talked about a Deloitte report that indicated, I assume, a broader bio-industry employment figure of 3,800 FTEs. But the department has not seen that report, so it is not in a position to comment on those figures.

Mr KATTER: I just felt that it was a bit narrow, because we made reference to the BREE report and how it effectively comes back looking like a subsidy from the grants of what it puts in per employee. I am seeing 160 employees, when the Burdekin is talking about 600 just in their plant alone and we are not discussing all the other added revenue benefits. It just seems like a narrow view of the impacts when we are making reference to the BREE report, but you are not discussing any other tax benefit to the government.

Mr Quirey: The BREE report did look at those direct benefits and did not look at the direct flow-on impacts, so that is a definite consideration.

Mr KATTER: It was identified, and I thought it is a pretty narrow view and gives the committee a distorted view when they see it.

Mr CRANDON: We are talking about potential for employment and all those sorts of things. If the bill was passed, would there be anything preventing fuel retailers from obtaining their ethanol supplies from outside Australia, like Brazil or other countries?

Mr Quirey: I guess there is nothing stopping them from importing that fuel. But given that domestic producers are subject to a rebate on that 38c excise, it is very uncompetitive for international products to flow.

Mr CRANDON: Have we have done some modelling on the cost of production in Brazil, for example, versus the cost of production here?

Mr Quirey: The department has not done that modelling, no.

CHAIR: But simply on the excise that would be applied to the product regardless of what it cost to produce in its country of origin?

Mr Millis: Correct, so the 38c excise would be payable. It is currently payable by the domestic producers but rebated.

CHAIR: But rebated.

Mr Millis: Yes, whereas the imports would be subject to the excise.

CHAIR: So we are clear, my understanding of the bill is that it does not require the sourcing of ethanol from within Queensland, so we could be sourcing that ethanol from New South Wales or another Australian state or territory that the excise rebate would be applicable to; is my understanding correct?

Mr Quirey: Yes, that is correct.

Mr HOPPER: I have a supplementary question to the member for Mount Isa's question. I think you stated around 200 jobs. Are you aware of the flow-on effects? Dalby uses 250,000 tonnes of grain sorghum. Do you know how many farmers are required to produce that grain, how many truck drivers to go and pick that grain up and how many farmers are using the by-product from the grain? The figure of 200 employees from the two plants is quoted. I would say it should be more like 1,000. I think the figures that are being portrayed here today are false.

CHAIR: Is that a question or a statement?

Mr HOPPER: I did ask the question. I said, 'Are you aware of the flow-on effect to the numbers of those people employed?' I do not believe those figures are correct.

Mr Quirey: As I stated previously, we are aware that the BREE report considers direct employment and does not consider the indirect flow-on effects or the economic multipliers that may occur throughout the broader industry, so we do not have that information or those figures.

Mr HOPPER: Has the department ever done a report on the benefits of biofuels?

Mr Millis: I am not aware of any.

CHAIR: Can I just pick up on that? This bill was introduced in the previous parliament and under the previous government it did not proceed, and it was substantially the same bill that is being reintroduced here. Are you saying that at that time the department, under a Labor government, did not produce a report looking at the benefits of an ethanol—

Mr Quirey: There was work done, but that work remains cabinet-in-confidence.

CHAIR: So there was work done when the bill was introduced under Labor, but it is not available because it was cabinet-in-confidence?

Mr Quirey: That is correct.

Mr HOPPER: Now that the federal government is removing their renewable energy targets, what effects will this have on the biofuels industry?

Mr Millis: That is a good question. I think it is probably supposition at the moment to say they are removing it, because we are not really sure what the outcome will be, although the press reports indicate a range of possible outcomes.

Mr HOPPER: If they do.

Mr BYRNE: The Prime Minister is quite clear about it.

CHAIR: I am just not sure the Senate is.

Mr Quirey: I know energy generation is definitely captured, but I am not sure how liquid fuels—

CHAIR: Would you care to take that question on notice? You can get back to the committee if you would like.

Mr Millis: We can certainly think about it, but there is not a lot of biofuel used in electricity production. The answer off the top of my head would be that there would be a very small effect.

Mr Quirey: The Emissions Reduction Fund is talking about fuel switching possibly being a eligible item under that fund arrangement. If there are changes to the RET I guess the direct action plan from the federal government, with the Emissions Reduction Fund being that underpinning foundation, could provide alternatives or options for companies to seek to reduce their emissions through fuel switching.

CHAIR: Was that your answer and we will not take that question on notice? Are you happy for that—

Mr Millis: Yes. I will just add a little more, because obviously there are existing sugar mills and the like that produce electricity from biomass. I am taking that as separate from the biofuels question, which is more in relation to liquid fuels.

Mr HOPPER: Are you aware that America has a total 10 per cent mandate right across the whole nation? Australia is importing 100 per cent of their petrol and there is Brazil's model. Would you say we are a backward country when it comes to ethanol production compared to the rest of the world?

CHAIR: Do not—

Mr HOPPER: That is fair enough.

CHAIR: No, it is not. I am going to give you the opportunity to reword your question. You are making me earn my money today, member for Condamine.

Mr HOPPER: Would the department say that Australia is behind the rest of the world in the ethanol industry? It is a simple question.

CHAIR: I know where you want to go, member for Condamine, and I am not going to allow it. I will tell you that you have made your point.

Ms MILLARD: Good morning, gentlemen. Thank you for coming along this morning. Obviously you have been looking at the production of ethanol, but it seems to be a little bit patchy as to how it is being looked at. I am sure you have your program and whatnot. My background is manufacturing, and in manufacturing we used to have to build a lot of tanks for storage purposes or convert tanks. If there was to be a further generation of biofuels, have you looked at any costs associated with regard to the storage capacity of any—

Mr HOPPER: They have to clean the tanks.

CHAIR: We will allow the department to answer.

Mr Quirey: We have heard anecdotal evidence from retailers in discussions, but I understand there can be changes required to the pumps, to the tanks, to the hoses and also then sort of the soft infrastructure around software and signage. We are led to believe that the sort of softer infrastructure side could cost up to $10,000 per site, depending on what retanking is required in terms of what hose and pump upgrades are required. That could go into the hundreds of thousands of dollars. I think in our response to the submissions we raised the point that we thought the committee might be best advised to seek information on a more definitive number from some of the fuel retailers. I do not have any concrete numbers on that.

CHAIR: I will pick up on this. The committee has been made aware of isophthalic resin tanks and the failure of one of those in 2010. Are you aware of how many of those tanks we may have across Queensland in retail outlets?

Mr Quirey: No, I am not.

CHAIR: Would you be aware if the state government has that data in any of its agencies, or is this something that we would need to identify via the various industries?

Mr Quirey: I am not aware of which department would hold that information.

CHAIR: Do you have a further question?

Ms MILLARD: Not a question as such. It is obviously down to what is within Australian standards in terms of tank manufacturing. Obviously it needs the expertise of engineers and metallurgists.

Mr Quirey: With the previously proposed mandate there were a range of sites that did undertake upgrades in preparation for that. There would be a range of sites that do have the necessary infrastructure as result of the previously proposed mandate. This mandate seems to apply to all retailers whereas the previously proposed mandate applied to a class of retailers. There could still be a range of retailers who would need to undertake site works to be compatible.

CHAIR: There is a supplementary question from the member for Condamine.

Mr HOPPER: I follow on from the member for Sandgate's question about tanks. Are you aware that the Beattie government gave a $10 million grant across the state for those service stations to upgrade their bowsers? From the briefings and research we have done we have found that tanks only need to be cleaned thoroughly to accept E10. Are you aware of that?

Mr Quirey: I guess in relation to the first part of the question, we are definitely aware that the previous government offered a range of support in preparation for the proposed mandate at that time, including an education campaign as well as funding for retail sites to be site ready.

CHAIR: Was that all out of that $10 million—the education campaign and site readiness?

Mr Quirey: I would have to check what the $10 million related to.

CHAIR: If you could, we would appreciate that. Please continue.

Mr Quirey: In terms of the preparation that is required to make the tanks ready, I do not have specific information on that.

Mr CRANDON: We have talked about the retail sites. Are you aware of the approximate costs associated with converting rural and regional supply depots to store ethanol?

Mr Quirey: No, I am not aware of that information.

Mr CRANDON: Would it be somewhere?

Mr Quirey: We would have to try to approach industry and gain that information.

Mr HART: In terms of the cleaning question that the member for Condamine asked, would that be related to sites that have already been upgraded? Do you have any information on that?

Mr Quirey: No, I do not have information on that, sorry.

Mr KATTER: One of the comments made in your response was that the government purchasing policy that was scrapped stated that 4.6 megalitres per annum would do little to strengthen demand for E10. I want a bit of an explanation on that. To me that seems ambiguous. If there is a desire to increase the usage and drive demand for ethanol then 4.6 megalitres is 4.6

megalitres, and it is not insignificant. It is not insignificant if you accept that you do want to promote the use of ethanol. If you took the counter view that you did not want it then it would seem irrelevant. I cannot see the fact that 4.6 megalitres was used as a failure.

Mr Quirey: I do not think it is a failure. I guess the point was in relation to what incremental increases we are talking about. If we are talking about 4.6 megalitres and we are saying we have capacity within the existing two production facilities of 70 megalitres then we are talking about the fact that a reintroduction could potentially fill five per cent of that capacity. I guess that was the point. It would not provide the necessary certainty that the suppliers are seeking.

Mr KATTER: I accept that. It just came across when you are reading it that it was scrapped because it was useless. That was how it came across. To me it was not useless at all. It provided 4.6 megalitres of demand.

Mr Quirey: It definitely provides an extra increment.

Mr KATTER: To add to that, I wonder if you could comment on the fact that in the same response it alluded to $4.6 million in subsidies that went into the sugar industry to look at diversification. If you talk to anyone in the sugar industry, diversification is ethanol. It comes out in any of their submissions. That is their big opportunity for diversification. It worked out at about $7.8 million a year in fuel that was going into government cars—it must have been more than that. We put $4.6 million into subsidies for diversification. One of the biggest opportunities for biofuels is ethanol and we put $4 million into it but we scrapped the thing that was using fuel that we already had to buy—we were spending $7.8 million a year on that—but ethanol was contributing to that anyway. I wanted a comment on that. There seemed to be a contrast. It was identified as positive, putting $4.6 million back into the diversification of the sugar industry. We have acknowledged that there is the opportunity there for diversification. The sugar industry will say that its biggest opportunity is ethanol. But then we scrapped the government purchasing policy—that is, around $7 million in fuel purchasing that was of direct benefit to the sugar industry diversification.

Mr YOUNG: It was 5.6 megalitres, Rob.

Mr KATTER: I do not know whether I made myself very clear there.

Mr Quirey: The support by the current government in the sugar industry is also looking at the broader sugar industry—the yield, the efficiency and the supply chain.

Mr KATTER: That is fair.

Mr Quirey: That funding is for a broader consideration for the sugar industry as opposed to specifically saying, 'How do we support ethanol?' I guess the previous government's commitment around fuel purchasing was directed at ethanol itself.

Mr KATTER: I should have made that clearer. There was more to it than just diversification, but my point still stands.

CHAIR: Can I pick up on something that you alluded to in your opening remarks, Alan. I am conscious of the time. We have about seven minutes left. I wanted to tease this out a bit more. The committee has looked at the second generation of biofuels and how that is progressing. You talked about the potential for algae and what Queensland's benefits are in that space. What research is currently being done within Queensland that the department may be aware of? Is the department aware of any potential time frame for commercialisation of that second generation of biofuels, particularly algae?

Mr Quirey: There has been a piece of work done as part of the Queensland Sustainable Aviation Fuel Initiative. It undertook a technoeconomic analysis looking at a range of feedstocks. They include pongania, sugar cane and algae. That work has been completed. It looked at those particular feedstocks. That is one project. The initial report is completed and they are due to release a subsequent report in the near future, I understand. UQ at Gatton, I also understand, has a demonstration trial on a future biofuels project and does have an algae facility there which is demonstrating the technology.

They are two examples. Broader industry-wide you have the Mackay biocommodities plant which looks at different technologies in the production of fuels. There is the bioport facility that was proposed by a consortium of industry, including Virgin and Red Sky Energy. They were doing a feasibility study looking at the viability of a bioport supplying aviation fuels in Brisbane.

There was also a media release last week by the University of Queensland which talked about algae boosting livestock productivity. It talks about another project that is underway. It stated, 'The UQ algae energy farm was officially opened today by the minister for agriculture, John McVeigh.' That is probably another example of work that is occurring that is looking at algae technology.

CHAIR: The department does not have any views on when we might see the commercialisation of that second generation of biofuel production?

Mr Quirey: No, I would have to try to source that information from another department.

Mr BYRNE: I am not sure whether you are able to answer this question. Many modern families would look at ethanol as being a sensible way to go when purchasing fuel for their car simply because of the perceived environmental benefits—the reduction in carbon emissions. There is quite a bit of recent material and not-so-recent material that says that, when you look at the entire chain, the argument would be that they are carbon neutral or, if anything, detrimental. That is quite aside from the supply issues, for example. Has the department done any work, especially in terms of renewable alternative energy, about the environmental benefits—forget the commercial issues, forget the opportunities for business and other things—that come from ethanol fuels actually rather than biologically?

Mr Quirey: I guess there are a couple of studies. CSIRO has done some work looking at this matter. Looking at life-cycle greenhouse gas emissions, molasses delivers a reduction of 5.1 per cent and sorghum delivers a reduction of three per cent. So they are the figures we have from CSIRO.

CHAIR: Do you have the name of that report?

Mr Quirey: No, I do not have it here.

CHAIR: If you could take that on notice and provide that for the committee, that would be helpful.

Mr Quirey: I have another report which provides similar figures—well-to-wheel greenhouse gas emission reductions from ethanol pathways compared with US gasoline. Again that study shows, including land use change emissions, that sugar cane delivers a 51 per cent reduction in greenhouse gas emissions. That is the same as the 5.1 per cent figure because we are talking about E10 fuel in that study. I can send you the details of that study—

CHAIR: If you could.

Mr Quirey:—rather than read out the long title.

CHAIR: That is fine.

Mr KATTER: I was looking back through the departmental response and I cannot remember seeing too much on the health benefit which is addressed in the United Petroleum submission. They make comment on that. To me that is a primary driver for the whole mandate. Would you like to comment on that?

Mr Quirey: In terms of health benefits—

Mr KATTER: And the cost-benefit of the health benefit.

Mr Quirey: We refer back to the BREE report, which estimated about $10.6 million—

CHAIR: Is that per annum?

Mr Quirey: Per annum.

CHAIR: Thank you.

Mr Quirey: 'And declining' are the subsequent two words to that statement. They do note in the BREE report that for all car models in Australia the new Euro 5 mandatory standard will be introduced from 1 November 2016. Once fully implemented, in 2018 the new laws will cut a new car's maximum allowable emissions of particulate matter by up to 90 per cent. I guess the argument in the BREE report and some of the other articles is that there is a health benefit but also that standards in place around fuel and further developments or improvements in technology around engine efficiency are already addressing or reducing these sorts of impacts. That is why the BREE report says 'and declining', as it notes that there are standards coming online and being implemented that will seek to address those health impacts.

CHAIR: Thank you very much for your time today. There being no further questions, we will close the briefing. The committee would appreciate if answers to any questions taken on notice could be provided by close business on Wednesday, 3 September. I thank everyone for their attendance at today's briefing. As always, the committee benefits and gathers valuable information that will assist it in its inquiries into the Liquid Fuel Supply (Ethanol) Amendment Bill 2014. I declare the briefing closed.

Committee adjourned at 10.45 am