## ECONOMIC DEVELOPMENT AND INFRASTRUCTURE COMMITTEE

# **Inquiry into Mandatory Ethanol and Biofuels Targets**

Melbourne—6 August 2007

## Members

Hon. C. Campbell Mr P. Crisp Mr E. Thornley Mr D. Davis Hon. M. Thomson

Chair: Hon. C. Campbell Deputy Chair: Mr D. Davis

## **Staff**

Executive Officer: Dr V. Koops Research Officer: Ms Y. Simmonds

## Witnesses

Mr K. Seyer, Director, Technical and Regulatory, Federal Chamber of Automotive Industries.

The CHAIR—I welcome Mr Keith Seyer to the public hearings of the Economic Development and Infrastructure Committee's Inquiry into Mandatory Ethanol and Biofuels Targets in Victoria. All evidence taken at this hearing is protected by parliamentary privilege. Comments you make outside the hearing are not afforded such privilege. Would you please state your name, business address, the organisation you represent and your position within it please.

**Mr SEYER**—My name is Keith Seyer. I am the Director, Technical and Regulatory, of the Federal Chamber of Automotive Industries [FCAI]. We are situated in Canberra at Level 6, 10 Rudd Street in the city.

**The CHAIR**—Mr Seyer, what we normally do is try and keep in the 40 minutes to under 20 minutes for your presentation, shorter if you can make it, and then we will ask questions for the remaining 20 minutes. Thank you.

**Mr SEYER**—Sure. Thank you very much. Perhaps if I can run through some background of the Chamber, how it fits in with the automotive industry, and then perhaps take members through the summary of the submission, which I believe you should have before you, that we submitted last week, and then perhaps entertain questions after that if that is an appropriate strategy to go forward with.

The Federal Chamber of Automotive Industries is the peak industry body that represents the majority of Australia's manufacturers and importers of passenger and light commercial vehicles as well as motorcycles. Australia is one of the most competitive automotive markets in the world with more than 50 brands, 350 models from 20 source countries. In its current form the automotive sector is a globally integrated industry with many product lines sharing platforms and major componentry to achieve productivity gains from economies of scale. Steps to encourage the use of biofuels must recognise the nature of the Australian automotive industry whose new vehicle sales are now around about 1 million units annually. This however still only represents less than one per cent of the global market. Currently some 20 per cent of new vehicles are manufactured locally and the remainder of 80 per cent are imported.

**The CHAIR**—Excuse me, Mr Seyer, are you going to read this?

Mr SEYER—No, I am going to—

The CHAIR—Good.

**Mr SEYER**—That is the beginning. I will move quickly to the summary. Do you want to ask questions as I go along or do you want to wait to the end?

**The CHAIR**—It is usually best that you keep it short and then we ask questions.

**Mr SEYER**—Sure. The submission that we have sent to you basically addresses the first point of the terms of reference and that is to report on the merits or otherwise of a mandated target for alternative fuels including biofuels and ethanol. If I can summarise the 18 points that we make at the end of our submission. Firstly:

FCAI acknowledges the important role properly refined biofuels can play in the transport fuel equation. The chamber acknowledges the 350 megalitre biofuels target and notes that the final blended fuel needs to satisfy the operability and drivability requirements of a wide range of vehicles—

not only new vehicles but also those vehicles in the existing fleet. There are a number of vehicles in the existing fleet—

for which certain manufacturers do not recommend the use of E10 or for that matter any petrol containing ethanol. The specific advice from these manufacturers must be recognised.

We draw your attention to the FCAI website where there is a list of vehicles that are suitable or not suitable for use with ethanol blended petrol and that is found at www.fcai.com.au\ethanol. In the submission that we provided, we make mention of a report by Orbital from Western Australia and they were commissioned by the Department of the Environment and Water Resources to look into this issue of suitability of vehicles to use either E10 or E5 ethanol blended petrol. That report was released on 8 March this year. The report supports the industry's advice regarding the use or otherwise of ethanol blended petrol in vehicles.

According to the Orbital report, at the end of 2006, about 40 per cent of the current Australian fleet is not able to use ethanol blended petrol of any kind. For this reason the FCAI does not support mandating any level of ethanol in petrol. Biofuels, whether they are petrol or diesel blends must meet mandatory specifications on international fuel standards and be implemented in Australia through the Fuel Quality Standards Act. FCAI reiterates the need for labelling of ethanol blends to ensure that operators of vehicles not suited for their use are provided with adequate information to make an informed choice. The Chamber does not support ethanol levels in petrol above 10 per cent. One study coming out of the Biofuels TaskForce report in 2005 is one which is currently being conducted as a joint consultancy by Orbital and CSIRO and that is funded by the Department of the Environment and Water Resources and this is to look into the health impacts of using ethanol blended petrol. The report is due for release in the first half of 2008 and it would seem prudent to wait for the recommendations of this report before considering mandating any levels of ethanol in petrol.

The next point: FCAI members do not support the use of diesohol, which is a blend of ethanol with diesel, and will not warrant damage caused by its use. There are recognised safety risks in the handling of such blended diesel because the ethanol drops the flashpoint significantly and the diesohol blend becomes a flammable material. Moving on to biodiesels, so-called fatty acid methyl esters [FAME], including vegetable derived esters [VDE], are generally acceptable when blended with conventional diesel up to five per cent, the so-called B5. The FAME on which the biodiesel is based must comply with either the European EN14214 standard or the US ASTM D6751 standards. The resultant biodiesel B5 blend must conform to the national diesel standard, which is based on the European EN590 standard. These requirements are consistent with those set out in the industry's World Wide Fuel Charter [WWFC].

The FCAI does not generally support the use of 100 per cent biodiesel fuel—that is B100. FCAI members will not warrant damage caused by using biodiesel blends greater than B5, unless such use is sanctioned by a particular manufacturer. The adoption of the World Wide Fuel Charter recommendations is particularly relevant in Australia where diesel engine technology comes entirely from overseas sources. Once Ford closes its petrol manufacturing plant in 2010, all petrol engine technology will also be sourced from overseas as well. FCAI recommends that national standards for FAME and biodiesel blends be based on the European or US standards and that they be currently developed with a study on the impact of biodiesel on vehicles. This must include the issue of oxidation stability, regardless of the percentage of biodiesel contained in the blend.

The Chamber has requested that the Federal Government consider adopting the Japanese biodiesel blend standard that came into force in Japan in March of 2007. There needs to be a transparent process to allow consumers to make an informed choice on whether their vehicles can use biodiesel or not. Certainly the Chamber recommends that any benefit cost assessment on the use of biofuels take into account the range of economic, social and environmental aspects and is calculated on a total lifecycle basis. Thank you.

**The CHAIR**—Thank you very much. The first question goes to your third-last point where you refer to March 2007 and Japan. Could you expand upon that a little more, please.

Mr SEYER—The Japanese Government have been working with their industry to come up with a biodiesel blend standard because like many parts of the world there was not one in Japan. They worked for some three or four years together and they came up with a specification that is now legislated in Japanese law. A representative came over late last year and made presentations to ourselves, as well as the Department of Environment, the Department of Transport and also the Department of Industry in Canberra. They basically pushed that there really needs to be a consistent standard for biodiesel blends globally. Of course, based on their work they were recommending that Australia follows the Japanese biodiesel blend standard.

**The CHAIR**—What percentage of our vehicles that would potentially use biodiesel come from Japan? Do you know that?

**Mr SEYER**—Not off the top of my head.

**The CHAIR**—You can take it on notice—that is fine—if you like.

Mr SEYER—I can try and find that out.

**The CHAIR**—If it is readily available.

Mr SEYER—It may not be, but I will attempt to—

**The CHAIR**—The reason for my question was, if there is a significant percentage of our imported vehicles coming from Japan, and Japan sets their standards and they want global standards, it would be really relevant to know that percentage.

**Mr SEYER**—I could probably comment there that it is a B5 standard and that really is currently for light vehicles, the basic industry stance in Australia, as well as in other parts of the world. That might help you.

The CHAIR—Thank you. Ms Thomson.

**Ms THOMSON**—I want to ask if there is any difference in the standards being set out in Europe and Japan. What would those differences be?

**Mr SEYER**—The standards I mentioned, particularly the EN standards, which are the European standards, there has been concern in recent times on this oxidation stability. Oxidation stability looks at the degradation of the biodiesel into products that can cause damage to the engine.

**Mr DAVIS**—Or environmental damage?

**Mr SEYER**—That is a good question. I do not think I am technically qualified there to comment on that one.

**The CHAIR**—The gallery is moving their head to a negative but we can check that later.

**Mr SEYER**—Yes. We were more focused on the issue of engine damage and upset customers.

**Ms THOMSON**—What is the difference then between the Japanese standard and the European in relation to that?

**Mr SEYER**—It has more stringent requirements with oxidation stability. The Japanese having done this work over three or four years is pushing for recognition of this issue of oxidation stability as being very important.

**Mr DAVIS**—I want to ask from an industry perspective, you might want to flesh out the impact of mandating a particular level of ethanol on one hand, and on the other hand a particular biodiesel level on the automotive industry in Australia, but particularly in Victoria.

**Mr SEYER**—Perhaps if I take the ethanol side first.

Mr DAVIS—Yes.

**Mr SEYER**—If you look at our website, you will see that pretty much every new model sold in Australia is capable of running on either E5 or E10. The issue is not really the current models that are available on the Australian market, it is the issue of the whole vehicle fleet that is in Australia. That is what the Federal Government through the—

**Mr DAVIS**—With respect, it is something a bit broader too. It is about imports. Not every import might meet those mandates.

Mr SEYER—My understanding—

**Mr DAVIS**—I am wanting to be educated here.

Mr SEYER—Sure. My understanding is that even the imports are capable of running on either E5 or E10. What I am saying is, the issue is not the current model vehicles, it is the issue with the whole vehicle fleet. That is what the Orbital report commissioned by the Government reported to, to look at the 12 million vehicles that are out there, what percentage of those could not use ethanol blended petrol of any type. The answer was, about 40 per cent. Of course over time, as new models—this will reduce.

The CHAIR—Thank you.

Mr DAVIS—Hang on, we did not hear some ideas on—

**The CHAIR**—Sorry.

**Mr SEYER**—Sorry. That is the ethanol side of things.

Mr DAVIS—Yes.

Mr SEYER—On the biodiesel side of things, the industry is comfortable with a B5 level, provided the biodiesel blend standard, which is currently being developed to be legislated under the Fuel Quality Standards Act, is met. That is the big question mark at the moment because there is no biodiesel blend standard in Australia. It is very difficult to say is this B5 or B10, B20, B whatever; does it meet something? It is fair to say, whether it be fuels or any other consumer good, that it is very difficult to audit against something that has no specification.

**Mr DAVIS**—Is there a preferred standard or position that the industry has?

**Mr SEYER**—We have recommended that the Federal Government look carefully at adopting the Japanese biodiesel—

Mr DAVIS—And the impact of adopting the European one would be?

**Mr SEYER**—There would still be this question mark over the oxidation stability issue.

**Mr CRISP**—Would your members be prepared to support a niche market of higher ethanol blended vehicles like an E85? What would be the requirements to service, or to an issue that was there to be serviced?

**Mr SEYER**—Certainly Saab and Ford have shown an interest in looking at such what are called flex-fuel vehicles, E85 fuel vehicles. Now, there has been, I understand, recent legal advice that E85 is not petrol and does not fall under the control of the Fuel Quality Standards Act.

Ms THOMSON—That can change quickly enough.

**Mr SEYER**—Yes. Certainly if there is a market out there and the actual fuel is available, and that is going to be the main question; is there going to be enough ethanol produced in Australia to provide a reliable supply of E85 and the availability of E85 at normal service stations. It is obviously not much use having a vehicle that can use E85 if you can only get it at a handful of service stations in the state or even in Australia.

**Mr CRISP**—Thank you.

**Ms THOMSON**—I want to pick up manufacturer of flex-fuel vehicles later, that was touched on briefly there. I will take that up later.

Mr THORNLEY—That is kind of where I was going.

**Ms THOMSON**—I will perhaps ask a supplementary to Mr Thornley's question, whatever it may be.

**Mr THORNLEY**—Leaving aside the specific issue of mandating for a second, I am more interested in coming at it from the other end in terms of the manufacturing opportunities. I was keener to understand a little bit more about what capabilities exist within the manufacturing sector in Australia for flex-fuel vehicles and engines. I want to make sure I have a basic understanding of that. I understood that there was some flex-fuel engine capacity at Fishermans Bend as well that exports into the Brazilian market.

**Mr SEYER**—My understanding is that the engines that are sold into Brazil are E24 engines.

**The CHAIR**—What did you say, please?

**Mr SEYER**—E24, which is another type of fuel that is available in Brazil.

Mr THORNLEY—Yes.

**Mr SEYER**—Certainly from a manufacturing view point, anything is possible. You need to change componentry in the power train, the fuel system etcetera to suit whatever fuel is being marketed in the country.

**Ms THOMSON**—You said both Saab and Ford were looking at fixed-fuel systems, some flexible system there. Where is Ford undertaking that work from?

**Mr SEYER**—As you know, there is a number of flex-fuel vehicles that are available in the US. I am not exactly sure where Ford is—

**Ms THOMSON**—Where they are at.

**Mr SEYER**—Yes, where they are at. But certainly there are flex-fuel vehicles from the major manufacturers available in the US.

**The CHAIR**—My question is, what capacity do you think there would be to manufacturer such vehicles in Australia? Is this a realistic option for us?

**Ms THOMSON**—Is there a reason why you can not?

**Mr SEYER**—I come back to the availability of the fuel to put in the vehicle.

**The CHAIR**—Yes, I realise that.

**Mr SEYER**—My understanding is that if you pooled all the ethanol produced in Australia, put it in the petrol, you would get about an E1.5 or something. That may have changed slightly.

**The CHAIR**—No, I do not think so, not in the last week.

**Mr SEYER**—The issue remains, do you move from a dependence on getting crude to a dependence on importing ethanol. It is getting the fuel that is going to be the main issue.

**The CHAIR**—Are there any other questions? Another one then from me: if government decided that the key driver of any discussions in the future on biofuels was to reduce the environmental impact of the Australian vehicle fleet, what would you put as the recommendations to such a government to achieve such a result?

**Mr SEYER**—I am not too sure I have a recommendation, other than to look at the lifecycle analysis, to look at the full picture.

**The CHAIR**—Thank you. Many thanks, Mr Seyer. We appreciate your advice and your submission.

Mr SEYER—You are welcome.

**The CHAIR**—Our secretariat may be in touch with you with further follow-up questions.

Mr SEYER—Sure.

**The CHAIR**—*Hansard* will be provided to you for typographical corrections, should they be required. I am sure *Hansard* would appreciate a contact detail given your reference to a number of scientific terms that most people as yet need to familiarise themselves. Thank you.

Mr SEYER—You are most welcome.

Witness withdrew.

Hearing suspended.