ECONOMIC DEVELOPMENT AND INFRASTRUCTURE COMMITTEE

Inquiry into Mandatory Ethanol and Biofuels Targets

Melbourne—20 August 2007

Members

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

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

Staff

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

Witnesses

Mr W. Turner, Chief Executive Officer, Australian Biofuels Ltd;

Mr P. Anderton, Chief Executive Officer, Agri Energy;

Mr A. Lumb, General Manager, Marketing and Corporate Services, Agri Energy; and

Mr S. Rendell, Feed Stock and Agriculture, Agri Energy/Australian Biofuels Ltd.

The CHAIR—Welcome 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 hearings are not afforded such privilege. Could those attending as witnesses please provide their name, business address and if you are representing an organisation, position within the organisation.

Mr TURNER—Wayne Turner, Chief Executive Officer of Australian Biofuels Pty Ltd, and reside out of level 9, 644 Chapel Street, South Yarra.

The CHAIR—You are going to be the sole person?

Mr TURNER—I will read out a short statement and then I have a number of colleagues here who will help me answer some of the questions.

Mr RENDELL—Stewart Rendell, Feed Stock and Agricultural Manager to the company, again out of Chapel Street and Swan Hill.

Mr ANDERTON—Peter Anderton, Chief Executive Officer of the parent group Agri Energy, of the same address, Chapel Street in South Yarra.

Mr LUMB—Adrian Lumb, also with Agri Energy, general manager marketing, of the same adders.

Mr TURNER—Before delivering our views on the questions posed in the terms of reference, may I spend a moment or two on describing who Agri Energy is and the position we occupy as a member of Australia's biofuels community. Agri Energy is an Australian-based dedicated global biofuels production company listed on the Australian Stock Exchange. The company has three subsidiaries located in Australia, Europe and the USA. The first project to be completed by the company will be a 50 million gallon per year biodiesel plant located in Beatrice, Nebraska, USA. The plant is expected to be operational by October 2007 and will be one of the largest biodiesel facilities in the US. In Europe we are finalising the design of an oil seed crushing project in Hungary and have completed the design and permitting for a biodiesel facility in Austria.

Agri Energy Ltd, through its Australian subsidiary Australian Biofuels Pty Ltd, is developing a multi grain feed stock ethanol project located in Swan Hill in the north-west of Victoria. Other project sites identified in New South Wales, Western Australia and Victoria are also being considered by Australian Biofuels for the second ethanol facility to be developed by the company in Australia. These sites are in various stages of obtaining development permits. The Swan Hill Ethanol Project will use up to date technology from Praj Technologies Ltd, an Indian based engineering company. This is being completed by a Victorian engineering company, Process Design Fabrication, which is ensuring the design meets Australian standards.

A number of multi grain feed stock strategies are in place to provide cost control and reduce risk to the project. A detailed analysis of feed stock availability and costs have been undertaken. This analysis shows that the region within 200 kilometre radius of the project can easily support its grain requirements. The strategy for grain accumulation is based on a two-stage process. Stage 1: the project will enter into long-term contracts with local growers and also purchase grain on the open market. The long-term contracts will be priority with the open market strategy as a contingency. Long-term contracts will benefit both the project and farmers by supplying agreed prices for both parties and minimising any price volatility that can occur on the open market. A hedging strategy will also be employed to further reduce grain risk.

Stage 2: Australian Biofuels will develop a grain accumulation business with the involvement of an existing agriculture services company to grow grain for the project. This will be undertaken by entering into a long-term agreement with an agricultural fund manager who will provide land and water based on a long-term fixed return supplied by the project. The project will employ farm managers to grow crops based on using up to date grain and growing technologies to provide high yielding and cost effective grain. This process will enable the project to plan on known grain costs with associated margins to be supplied to the facility and enable risk management of feed stock requirements. It is planned to control grow grain to meet up to 50 per cent of feed stock requirements.

Distillers grain, otherwise known as 'brewers grain', is an important co-product of the grain/ethanol production process. Distillers grain compromises the unfermentable solids, protein, fibre and oils that cannot be converted into ethanol during the ethanol production process, and moisture. The biomass is collected at the end of the ethanol production process and sold as a protein-rich livestock feed suitable for beef and dairy cattle, sheep and to a lesser degree pigs, as part of a controlled diet mix. The Swan Hill Ethanol Project will produce wet distillers grain that has a moisture content of approximately 70 per cent with 30 per cent solids. The wet distillers grain is a much sought after product for feedlot beef and dairy cattle in the United States and Europe due to its protein content, nutritional value and moisture content as these traits improve weight gains and reduce illnesses in the feedlot. For each tonne of grain consumed in the ethanol product process, approximately 900 kilos of wet distillers grain product is produced. The total tonnage of wet distillers grain at Swan Hill will be approximately 260,000 metric tonnes per annum.

Some associations have expressed concern about the ethanol industry as a subsidised industry will out-compete feedlots for feed grain. This stance raises a number of points. There is no subsidy to ethanol producers. Excise is not charged on ethanol sold into the fuel system until 2011 when excise will start to be imposed. Feedlots buy significant amounts of protein such as imported soya bean meal, which would be replaced by local wet distillers grain or dry distillers grain. Feedlots in the United States of America see the ethanol industry as partners that modify feed grain rather than direct competitors. Feedlots have not been proactive in forward contracting feed grains and have been affected by drought as much as any other grain user.

A risk management profile of controlling feed stock and obtaining off-take agreements produces a biofuels financial model that is attractive to investors. Biofuel projects located in rural communities will bring strong economic and social benefits in employment and investment in infrastructure for the community. The Swan Hill Ethanol Project will have a substantial impact on the rural community of Swan Hill and surrounding districts. It is anticipated that the project will deliver in excess of 40 direct full-time equivalent jobs in the region in the ethanol and co-product production. Many of these jobs will be associated with implementing innovative technologies and contributing to and diversifying the skills base of the workforce in the region. In addition to these direct jobs, using an industry multiplier of three, an estimated further 120 full-time equivalent jobs will be created in the industry. Bringing substantial new employment in the Swan Hill region will have a positive impact on the local economy and will enrich and diversify the economic base for the region. The Project concept strongly compliments the existing agricultural industries in the region and there is substantial potential for the skills set in the region to be drawn upon for new project activities. Australian Biofuels is working closely with the Swan Hill Rural City Council on the impacts the project will have in the local community. Australian Biofuels has identified another potential site at Murtoa. A feasibility study has commenced to progress towards a planning permit for the second ethanol plant in Victoria.

I can go on and address the three questions for the impact study, but I have put those in the submission. To probably save time, if we could assess those as being read, it would give us more time for questions from the Committee.

The CHAIR—Do any of the other witnesses wish to add at this point? You talk about wet distillers grain. We have had evidence earlier in our hearings about the less than satisfactory value of that feed compared with straight grain for feedlots. What would your comment be if we were making an assessment of that as part of our recommendations? The second component, again from previous witnesses, was that whilst industries such as yours would come in here and say to us that, 'We are creating jobs,' there are more jobs available in country Victoria if the grain were put to other uses. That has been put to us beforehand. I would like you to have the chance to respond to that.

Mr TURNER—With the wet distillers grain, can I refer to Stewart who is our—

Mr RENDELL—In comparison of wet distillers grain to feed grain, they have a very similar energy level still left. If you look at the analysis of the product after we have gone through and done the ethanol process, the wet distillers grain still has about 11 per cent metabolisable energy and that is coming out of the seed coat. You have basically accumulated all the protein so you increase the protein content to around 24 to 26 per cent. Now, some people would say that that is in fact going to make quite a nice feed product. It is

interesting that we had three different groups of stockfeed manufacturers bid to take all of our product from the facility. Subsequently we have sold all of the product to a third party. It is interesting people saying there is no value in it, but we have stockfeed people lining up to take it.

The CHAIR—No, they did not say there was no value in it. They highlighted, as you did, the protein, the fibre and the oils, but another component being the carbs removed.

Mr RENDELL—The metabolisable energy is still there. The starch, yes, is removed. There is no doubt about that. We have taken that off and made ethanol out of it. But we have milled the product and we have it available through the third party to be taken into a feedlot situation.

Mr ANDERTON—Experience overseas says that distillers grain is not the solution to a stock feed, but it is part of the solution. It is a blend that replaces imported products such as soya meal in the same ways that ethanol is not the solution to fossil fuel problems. It is something that will support a solution in the long-term.

The CHAIR—The jobs component? The claims have been made by others who have been previous witnesses that for the same amount of grain there are greater job opportunities in country Victoria if the grain were used, for example, in feedlots as opposed to ethanol production. That has been put to us.

Mr ANDERTON—The biggest issue in regional Australia, not only regional Victoria, is capital. People have some wonderful ideas to build some wonderful things in regional areas, and they are very noble. But at the end of the day, if you have no capital, you cannot support that and you cannot go forwards. The ethanol industry, even here in Victoria—we have been battling here for four years to finance the project at Swan Hill. We had to go offshore because there was better investment opportunities offshore for our company. I am sure that theoretically people could say a lot of jobs can be created, but without the capital they never will be.

The CHAIR—That is helpful to have that on the record. Mr Davis.

Mr DAVIS—I am trying to understand the economics of your proposals. Obviously on one side the subsidies that might be part of the process in terms of lower excise and so forth, or the removal of excise seems to be one critical factor. In terms of the plant itself and the operation of that, there is a series of State Government taxes that would apply to your outfit like any other similar one. Perhaps you can give me some idea of the economics in terms of payroll tax, land taxes, insurance taxes. I would like to get to what taxes would be applied or you would envisage in your business models paying.

Mr ANDERTON—We would have to take that question on notice. Obviously we have it in the detailed models, but we do not have it available in any detail. We can provide that.

Mr DAVIS—That would be good.

Mr ANDERTON—Sure.

Ms THOMSON—With payroll taxes and land taxes and others would apply to every business irrespective of the kind it was.

Mr ANDERTON—Yes.

The CHAIR—Mr Davis wishes to make a political point—

Ms THOMSON—I know—

The CHAIR——which he will tie in with this.

Ms THOMSON——where I would like a discussion that is on biofuels without running into the politics of totally different taxation regimes. My issue is around, you talk about a gradual support for a gradual

mandated ethanol target on the basis that I assume that demand cannot be—if you set a target you can meet the demand initially. Then you go on to talk about E85 and the potential to meet that market and flexi vehicles coming out to be able to meet that. Can you talk a little bit more about how you set your graduated targets and why, and then in the same breath talk about E85 and how we might be then able to sustain it, given the demand on the grain would be increased even furthermore. How do you do that without the production increase?

Mr TURNER—As Peter alluded—

Ms THOMSON—Sorry, you could also meet the Farmers Federation's issue about capacity to grow more grain as well. That would be interesting.

Mr TURNER—As Peter alluded to, ethanol will not be the panacea of all our problems with fossil fuel. A two per cent mandate in Victoria is equivalent to about 100 million litres, which is the volume of Swan Hill. Five per cent will give us about 250, and 10 per cent is about 500 million litres of ethanol, which is probably about three plants for ethanol production in Australia. As we have said here, a mandate would have to mirror the production ability here in Australia. We have some concerns that we have a balance of importing and exporting the regularities. We believe that if we went down a mandate, without the ability to have production to meet that mandate, we would then be importing, which you are not substituting your fossil fuels, you are maintaining your balancing—

Ms THOMSON—(indistinct) exchange rates.

Mr TURNER—Correct. That is how we have worked out some time lines it takes to build ethanol plants and source our feedstock. We are not advocating that the current availability of grain in Australia is going to be where it is and the ethanol plants will suck all that grain up and there will be no food and no grain for flour or anything like that. We are starting a biofuels industry here where a multi grain site at the moment is our best option, and that is a mix of wheat, barley, irrigated corn, irrigated wheat. There will be a function of multi grains to meet the market. That market is the ethanol plant. As we progress, we will be also investing heavily in research and development to not only use the current grain varieties that we have, but also invest in grain varieties that will be drought tolerant, saline soil tolerant, pest disease tolerant. We do a lot of work with molecular plant breeders to look at increasing the varieties to increase the yields to improve the feedstock availability to ethanol plants, biofuels plants, biodiesel plants. There are a range of things that we look at going into the biofuels industry. But the issue we look at at the moment is if we wait for the next range of technology we will not do anything. We have issues with climate warming, greenhouse gases. As we have said here, E85, even E10 will reduce particulate out of your exhaust fumes. But E85 will deliver a significant decrease in greenhouse gases.

Ms THOMSON—(indistinct) given the time lines you have given to get to 10 per cent and then 20 per cent, can you explain your transition to E85, given that you have on your mandated targets 20 per cent by 2020?

Mr TURNER—Yes. 20 per cent would include a mixture of E10, E20 and E85. We are not advocating that every car will be at E85. As Peter has alluded to, ethanol is not the panacea of all the issues. What we are saying is, we have the ability to help move the biofuels industry into Australia and start delivering some real reductions in greenhouse gas and environment concerns.

Ms THOMSON—Have you done any forecasting on what percentage you think vehicles might be in the country requiring E85 by 2020? What is the potential for that market?

Mr ANDERTON—It depends on the price. If you are selling fuel at Swan Hill for $1 a litre, I think you will have quite a large demand. That is irrespective of the fuel price; that is purely on grain based cost (indistinct)

Mr LUMB—I find it most interesting that we are unable to purchase E85 here in this country full stop because it is illegal. We also find it interesting that vehicle manufacturers, particularly in the US, offer side by side flex-fuel vehicles to standard vehicles at the same price and the consumer who buys a flex-fuel

vehicle picks up a $2,000 tax credit from their state government. This was the case in Nebraska four weeks ago.

Mr DAVIS—What is the tax credit? What nature does that tax credit take? It is a sales tax reduction?

Mr ANDERTON—A corporate tax reduction.

Mr TURNER—No, it is an income tax.

Mr ANDERTON—Called LLC on a limited likely income.

Ms THOMSON—The corporate fleet, yes.

Mr RENDELL—General Motors Holden manufacturer a flex-fuel engine here in Melbourne and export it to the United States.

Ms THOMSON—Yes, I noticed that. That is good for the industry.

The CHAIR—Yes. Picking up on E85, in part of your submission attached, it says, 'Biofuels Australasia Agri Energy Study, A Breath of Fresh Air,' where reference is made to a recent study commissioned by Australian Biofuels Ltd, would that be available to the Committee?

Mr TURNER—Yes, it is available on our web site and I will make it available to the Committee when I get back to the office.

The CHAIR—Thank you very much.

Mr TURNER—It is a very interesting report that highlights a number of benefits.

The CHAIR—Your last answer also covered R and D, which I want to ask about before you leave. You mentioned R and D and how you are trying to do as much as you possibly can yourself. Through the universities, through State Government sponsored R and D, and Federal Government, is there anything that is coming forward that is of use to you? I am thinking of the Bio21 Precinct. My understanding is that is pretty much all under medical research, not agricultural research, but I could be wrong.

Ms THOMSON—You are.

The CHAIR—Right. Okay.

Mr TURNER—We have had some discussions with Molecular Plant Breeding CVC that are located out in La Trobe Uni, which has DPI backing and all that, who are doing some really good work on future grains. One potential there is that they have a potential grain that would double the wheat yield per acre.

Mr ANDERTON—Our plan as a company, you cannot start or change agricultural industry and create an ethanol industry at the same time. One has to lead the other. Our model is that the ethanol industry will be created from traditional grains, cereal grains. By having control of being able to grow 30 to 50 per cent of our own grains, we have the ability to vary into high-starch and even non-cereal grains and some of the high yielding grains that Wayne speaks of. In the long-term—

Ms THOMSON—Are they GM grain?

Mr ANDERTON—Some.

Mr TURNER—Some are.

Mr ANDERTON—In the long-term, we do not see that the traditional grains that are food grains are appropriate from a cost model in Australia. We would be growing grains on a more arid soil with a higher

starch focus as opposed to a high protein focus.

Ms THOMSON—Right.

Mr DAVIS—You would bring back into operation land that otherwise would not be available.

Mr ANDERTON—And a lot of salinity affected land we have targeted. We do not need high quality grain. We can get along with a low quality grain (indistinct) disease affected grain.

Ms THOMSON—Can I ask you the question on the salinity base, or salinity tolerant grain?

Mr ANDERTON—We do a lot of work on salinity based crops to produce a high starch of which internationally there is a lot of trials going on. But without the ethanol plant, it is the same thing as your theoretical model that there are plenty of jobs for grain. Where is there? Without the ethanol plant, you do not have the base to move on. Otherwise you are doing the same thing: you are supplying the same market and the export market is not the best market for Australian grain, the domestic market is.

Mr CRISP—My questions are all around feedstock security and we have covered that pretty well.

Ms THOMSON—I want to ask a supplementary environmental question coming from that then. I like this issue around salinity so I am going to hang onto it. What about the effect that that then has on salinity levels in the soils that you are working with?

Mr RENDELL— We are growing salt tolerant wheat crops in high saline areas.

Ms THOMSON—Yes. If you have a higher tolerance—

Mr RENDELL—Yes. We can go into higher. We were in Western Australia two weeks ago with the Department of Primary Industry to look at some of their trial work. They have some varieties coming along. Again the thing does not happen until the ethanol plant can come along because it is a higher starch, it is not a human consumption wheat. They are looking to come in to the initial stages at about a tonne to a tonne and a half a hectare. If you look at the long-term wheat average of the Mallee, it is 1.8 tonne a hectare. Now, if you can grow that in soil that is declared saline, unsuitable for normal cropping production through the use of EM38 machinery it will increase the total yields for the area and open up new land for cropping.

Ms THOMSON—The question was about the environmental affect on the land.

The CHAIR—That is already experiencing great salinity.

Mr ANDERTON—It helps us, does it not (indistinct)

Ms THOMSON—It could if it—

Mr ANDERTON—But in Western Australia, for instance, where the salinity problem is probably a lot worse, the ability to grow crops that will improve the land over time, that is proven.

Ms THOMSON—Yes, that is what I was wondering.

Mr ANDERTON—The problem is, what are you going to use those crops for, and one of the appropriate crops is high starch ethanol.

The CHAIR—Where has it been proven that the salinity has improved?

Mr ANDERTON—In Arizona it has been improved, and in Texas, the southern US.

Ms THOMSON—Can we come back to you for some more information in relation to that?

Mr ANDERTON—Yes.

Mr TURNER—That is fine.

Ms THOMSON—That would be really useful.

Mr TURNER—There is a lot of work going on in Western Australia.

The CHAIR—Yes, because that would be very helpful. Now, is there anything that any of you have thought look, I really want to put on the public record?

Mr TURNER—From a state level we would like to request that the state permit a trial for E85 in the Swan Hill area. We would like to prove what we say. The ethanol plant will be in the vicinity. If we can prove that we can sell E85 for $1 and enter into agreements with the local government, like the State Government for their vehicles and the like, I think it sets a good target.

The CHAIR—All right.

Mr ANDERTON—We do not see the E85 necessarily as something that in the short-term would be in the big cities. It is more of a regional fuel, using the fuel that is produced in the region as opposed to having to transport it out of the region. I think the other thing we can tell you while we are here, we are the only plant that is licensed to be built in Victoria. It takes four years to build an ethanol plant by the time you go through design, the licensing and all the other processes. Even if there was a plan that was identified and started work today, they are not going to come on-stream for four years. We are the only plant at 100 million litres that has any capability of supplying ethanol in Victoria till 2011.

The CHAIR—If you wish, you might want to document anything that our Committee should be aware of that would assist, make that a little less in terms of time. We are getting the EPA to appear.

Mr ANDERTON—There is not anything.

The CHAIR—There is not, okay.

Mr ANDERTON—It is not able to be done.

The CHAIR—Okay.

Mr ANDERTON—It is a fact of life.

The CHAIR—All right. I thought there might be some recommendations. We have another two minutes before our next witness. If you were writing our report, what would be the key recommendations you would have up there in writing?

Ms THOMSON—We guess the E85 trials.

The CHAIR—That is what prompted me to follow up that question. It was a good recommendation.

Mr RENDELL—Why isn't it happening here in Victoria, or why isn't it happening here in Australia? There are no mandates. Why is it happening in the US? Why is it happening in Europe? You have government putting in mandates. They do not probably like them, but that is the way they have to drive it.

Ms THOMSON—Would you have answered the Farmers Federation's opposition to mandates based on all it is going to do is raise the price of the grain and therefore the price—

Mr TURNER—I know what the VFF Grains Council's statement is and it is a little bit different to the next level up. They fully support it. But again, as Simon rightly said, they are a multidisciplinary group.

Ms THOMSON—But the issue of cost still remains. You are talking about—

Mr TURNER—That is correct. But what we want to do is, we want to give growers the ability to grow more grain. If you look at the grains industry who have done a study up to 2025, it implores that grain industry to double production over that period. We need to see those growers do that. We need to develop markets. As Peter rightly said, it is the domestic market that would be the most profitable, rather than try and send it offshore.

Ms THOMSON—You see that as all remaining quite localised in its usage?

Mr TURNER—Yes, we do.

Mr ANDERTON—The only change to that could be the distillers grain, which is a high protein low carb food. It is currently not used as human consumption, but there is a lot of work going on for distillers grain to be made into biscuits and sold into developing countries where there is a protein problem and you do not want protein together with the carbohydrate because of obesity. There are huge opportunities in a range of what we are doing. That is without even looking at cellulosic or any other feedstock, which probably in the future will come. My answer to your question is, there is going to be an ethanol and biofuels industry in Australia. The sooner any government gets on board, the better because if you look back in 10 years time, we are already probably seven to eight years behind the rest of the world. You do not really want to be 17 years behind because it is hard to catch up.

The CHAIR—Thank you very much.

Mr TURNER—Thank you.

The CHAIR—It has been very interesting. I thank you for taking on notice and providing us with that information requested on salinity and the report.

Mr ANDERTON—And the lifecycle analysis.

The CHAIR—Yes, thank you.

Witnesses withdrew.

Hearing suspended.