29 August 2008

Committee Secretary
Senate Select Committee on Fuel and Energy
Department of the Senate
PO Box 6100
Parliament House
Canberra ACT 2600
Australia



Dear Sir/Madam

Re: Senate Inquiry into Fuel and Energy

Australian Pork Limited (APL), as the national representative body for Australian pork producers welcomes the opportunity to provide comments on the inquiry of the Senate Select Committee on Fuel and Energy. APL will be focussing its submission on the impact of rising fuel costs for the pig industry and the role of grain-based biofuels as a key contributor to commodity market distortion, increasing cost of production for food producers and rising consumer prices, both on a domestic and international level.

Livestock transport is a crucial link in the pork supply chain that brings together all aspects of pig breeding and raising industries, and pigmeat processing businesses. The pig transport industry provides the key service of transporting livestock between farms and stations, as well as transport of pigs to and from saleyards, feedlots, processing establishments and live export ports nationally. Higher transport costs due to rising fuel costs are expected to significantly increase input costs for pig transportation, and will eventually affect viability and competitiveness of businesses in the pork supply chain.

APL recognises that biofuels are an essential component of Australia's future energy mix, but mandating of biofuels in the transport fuel system via State Government's policy must be excluded since it creates more problems than it solves. APL is concerned economic resources will be expended on a second-rate solution that will not efficiently achieve the objectives of reducing greenhouse gas emissions and improving Australia's energy security. Resources should be directed to solutions such as second-generation biofuels, which reduce market distortion and allow sustainable energy production that can coexist with human food production.

Our recommendations are:

- i. That Government acknowledges that the viability of intensive livestock industries is adversely affected by increasing fuel prices;
- ii. That Government recognises the impact that the CPRS will have on the viability of Australian pig production and the loss of competitiveness against imports of pigmeat from countries such as Canada and the United States;
- iii. That biofuels not be mandated;
- iv. That federal and state governments develop a joint renewable fuels strategy for Australia and coordinate policy development;

- v. That existing government subsidies for the Australian ethanol industry are reduced and funds redirected into additional research effort focussed on commercialization of second generation biofuels;
- vi. That existing tariff protection on imports of ethanol from overseas countries is removed to facilitate free trade; and
- vii. That emissions from grain derived first generation biofuels do not receive a 'zero' rating under the proposed Carbon Pollution Reduction Scheme given the significant downstream emissions related to production of grains.

For Australia's economy to become sustainable under the global climate change scenario, Government needs to broaden its horizon of understanding for effects of climate change in the domestic and international arena. Both perspectives need to be accounted for to develop a sustainable economy in Australia.

Please find an electronic copy of our submission attached to this email. If you require further information, please contact APL Policy Analyst *Stefan Martin* on (02) 6285 2200.

Yours Sincerely,

Kathleen Plowman General Manager, Policy Australian Pork Limited



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AUSTRALIAN PORK LIMITED

Submission to the Senate Select Committee on Fuel and Energy



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Executive Summary

Australian Pork Limited (APL) welcomes the opportunity for comment into the Senate Select Committee on Fuel and Energy. Australian pork producers and primary processors are operating under extremely tense economic conditions, essentially due to rising input costs for feedgrain and low margins. The resulting cost squeeze is further exacerbated by rising fuel costs, which adversely affect transport dependant rural businesses.

Livestock transport is a crucial link in the pork supply chain that brings together all aspects of pig breeding and raising industries, and pigmeat processing businesses. The pig transport industry provides the key service of transporting livestock between farms and stations, as well as transport of pigs to and from saleyards, feedlots, processing establishments and live export ports nationally.

Diesel is widely used in the transportation of live pigs by road nationally, and in the transportation of pork products throughout the supply chain. Higher transport costs due to rising fuel costs are expected to significantly increase input costs for pig transportation, and will eventually affect viability and competitiveness of businesses in the pork supply chain.

Under consideration of the recommendations of the Garnaut Draft Report, the Australian Government decided to include emissions from transport fuel into the proposed Carbon Pollution Reduction Scheme (CPRS). Despite compensation measures for agricultural and transport businesses to offset the anticipated price increases in transport fuel caused by the CPRS, it is obvious that this will push up prices for all fuels used for freight purposes in the long term.

It is highly likely that the adverse effects created by the Government CPRS will put the competitiveness of Australia's pork industry further at risk; this is because Australia's major competitors, Canada and the United States have no stated intentions of introducing an ETS that would similarly increase the cost of production for their respective pig industries.

Like other industrialised nations, Australia faces diminishing supplies of fossil fuels, increasing demand for energy and the need to reduce its industrial emissions; reduction of greenhouse gas emissions in the transport system is an essential part of this action. Therefore, research and development of economical and environmental sustainable energy sources is a key priority.

However, APL believes that biofuel production should be considered with caution, as biofuel production from grains will contribute to commodity market distortion, increasing cost of production for food producers and rising consumer food prices. Under the current environment of climate change, biofuel production from grain exacerbates global increases in food prices and adversely affects sustainability of food production, both in the domestic and international market.

Under current economic conditions biofuel production systems around the world are not presently viable without significant government assistance measures such as tariffs, grants,

subsidies and mandates. Total financial support for the upcoming Australian biofuel industry in 2006/07 amounted to \$95million; more assistance per litre of ethanol produced than in the US. In addition, the proposed exclusion of emissions from biofuel combustion from Australia's Carbon Pollution Reduction Scheme (CPRS) will effectively be another form of subsidising the biofuel industry.

In Australia, the major biofuel policy at the national level is a 350 million litre non-binding target by 2010, i.e. one per cent of current fuel production. On the other hand, state governments in independently have proposed to (WA, QLD), or already have implemented (NSW) biofuel mandates that impose minimum content of biofuels to be blended in commercial fuels, ranging from 2-10 per cent of total petrol consumed. This development indirectly gives rise to an Australia wide mandate for biofuels and is a direct result of uncoordinated biofuel strategies and policies across federal and state governments. This creates unnecessary regulatory burdens and financial impediments for feedgrain dependant intensive livestock industries.

Biofuel mandates distort local grain markets as they provide a guaranteed ethanol related demand for grain. This discriminates against other grain users in the market place such as intensive livestock industries, which have to pay artificially inflated prices for the remaining quantities of grain available in the market place.

According to a recently published OECD report, Government support of biofuel production is costly, has a limited impact on reducing greenhouse gases and improving energy security, and has a significant impact on world crop prices. The OECD estimates that current biofuel support policies would reduce greenhouse gas emissions from transport fuel by no more than 0.8 per cent by 2015; at the same time world grain prices are expected to increase by about 5 per cent for wheat, by around 7 per cent for corn and about 19 per cent for vegetable oil over the next 10 years. The OECD called on governments of OECD countries to refocus (biofuel) policies and suggested research to accelerate development of second-generation biofuels that do not require commodity feedstock.

APL believes that there are many niche markets for which biofuel production, especially second-generation biofuels, can co-exist with food production. However, by mandating biofuel consumption and providing subsidies for ethanol producers to ensure that the mandate is met, governments are interfering with a market previously geared to the production of food, animal feed and a small volume of industrial products.

APL recognises that biofuels are an essential component of Australia's future energy mix, but mandating of biofuels in the transport fuel system via State Governments' policy must be excluded since it creates more problems than it solves.

APL is concerned economic resources will be expended on a second-rate solution that will not efficiently achieve the objectives of reducing greenhouse gas emissions and improving Australia's energy security. Resources should be directed to solutions such as second-generation biofuels, which reduce market distortion and allow sustainable energy production that can coexist with human food production.

Our recommendations are:

- i. That Government acknowledges that the viability of intensive livestock industries is adversely affected by increasing fuel prices;
- ii. That Government recognises the impact that the CPRS will have on the viability of Australian pig production and the loss of competitiveness against imports of pigmeat from countries such as Canada and the United States;
- iii. That biofuels not be mandated;
- iv. That federal and state governments develop a joint renewable fuels strategy for Australia and coordinate policy development;
- v. That existing government subsidies for the Australian ethanol industry are reduced and funds redirected into additional research effort focussed on commercialization of second generation biofuels;
- vi. That existing tariff protection on imports of ethanol from overseas countries is removed to facilitate free trade; and
- vii. That emissions from grain derived first generation biofuels do not receive a 'zero' rating under the proposed Carbon Pollution Reduction Scheme given the significant downstream emissions related to production of grains.

Introduction

Australian Pork Limited (APL) is the national representative body for Australian pig producer and the broader pork industry. It is a producer-owned, not-for-profit company combining marketing, export development, research and innovation and policy development to assist in securing a profitable and sustainable future for the Australian pork industry. APL's members currently represent approximately 92 per cent of Australian pork production.

The Senate established the Senate Select Committee on Fuel and Energy to undertake an inquiry into Australia's fuel and energy sector. APL welcomes the opportunity to provide comments into this inquiry. In particular, APL has focused on the following fuel related issues:

- Viability of pork production and transport businesses in rural and regional Australia;
- Impact of the proposed Carbon Pollution Reduction Scheme (CPRS) on the price of fuel, and the
- Role of biofuels in Australia's energy mix.

For further consideration, we have included APL's submission to the Victorian Biofuels Inquiry (2007) as an attachment to this submission.

The Australian Pork Industry

Structure and Operations

Australia's pigmeat production is built around an estimated 1,500 pork producers and approximately 2.6 million pigs according to ABS data as of 30 June 2007¹. The biggest state herds are located in New South Wales and Queensland. It is estimated that the top 50 producers in Australia account for some 54 per cent of production.

The estimated gross value of production (GVP) for the Australian pig industry was \$944 million for the period 2006-07 decreasing to \$881 million for the period 2007-08². Pork currently represents approximately 2.19 per cent of total Australian farm production³. This figure has remained relatively consistent since 2005.

The Australian pork industry provides a significant positive impact to local, regional, state and national economies through substantial income generation and employment. In 2004, the pig production sector generated \$3.2 billion in output and \$967 million in value added product⁴, compared to an estimated \$2.9 billion in generated output, \$840 million in value added product and 7,928 full time jobs when flow on effects are taken into account in 2006-07⁵.

¹ Australian Bureau of Statistics (ABS), Principal Agricultural Commodities 7111.0 2006-07

² ABARE 2008, Australian Commodities March Quarter 08.1, outlook2008 conference publication

³ ABARE 2008, Australian Commodities June Quarter 08.2

⁴ Western Research Institute 2005, Socio-Economic Impacts of the Australian Pork Industry

⁵ Western Research Institute 2008, Socio-Economic Impacts of the Australian Pork Industry - preliminary report

Around 56 per cent of the 5 million pigs slaughtered in the Australian industry today are part of an integrated supply chain, which includes primary processing and production. The remaining pigs sold for slaughter are sourced either through saleyards (5 per cent), spot market or through forward and general contracts.

Feed Usage

The intensive industries are a growing and valuable customer of the Australian grain industry. Total feed grain usage by the intensive industries has been increasing steadily since 1992-93, when 5.77 million tonnes were used, doubling to 11.5 million tonnes in 2006-07. Due to the ongoing drought, national feed grain demand in Australia has been trending lower as higher feed grain prices, lower returns from pig products, and reduced livestock numbers ration feed demand.

The pig industry's usage of feedstuff has increased from 1.57 million tonnes in 1992-93 to over 2.13 million tonnes in 2002-03. This compares to 1.55 million tonnes of feedstuff used in 2006-07, comprising approximately 1,514 kilo tonnes of grain (predominantly wheat, barley and sorghum) and 41 kilo tonnes of oilseed meals. The declining volume of feedstuff used in pig production correlates with a reduction of the national pig herd, which declined by 5.4 per cent from 2.76 million pigs in 2002-03 to 2.61 million pigs in 2006-07.

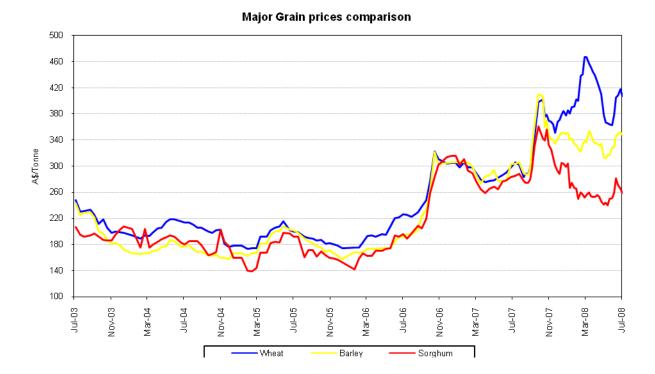
Wheat, barley and sorghum are major feed ingredients used in pig production in Australia and can nutritionally amount up to 80 per cent of the diet. Total usage of wheat, barley and sorghum for pig production was 600 kilotons, 517 kilotons and 71 kilotons in 2006-07 respectively. The amount of grains used for stockfeed varies considerably, depending on seasonal price differences between substitute grains and location of farm.

High feed grain cost is a key competitive disadvantage for Australian pork producers. In general feed cost amount to almost 60 per cent of cost of production for a pig, and approximately 80 per cent of total feed costs are related to costs of grains. This share increases in times of drought.

The ongoing drought conditions across Australia are having a major impact on pork producers and putting at risk the long-term viability of many businesses. The pork industry is faced with the double-edged sword of high grain prices due to drought conditions and increasing international demand, and low pork prices, which are capped by high volumes of imported pig meat.

Weak pork prices resulting from high volumes of cheap imported pigmeat have undermined the ability of pig producers to cope with cost increases experienced over the last years. Due to the ongoing drought, costs for feed grain in Australia (wheat, barley and sorghum) in December 2004 compared to December 2007 show a dramatic 112 per cent increase from \$162 per tonne to \$344 per tonne respectively. As at July 2008, the average feedgrain price is still high at around \$338 per tonne with little relief expected for the next 12 months. Individual commodity prices are about \$407 per tonne wheat, \$348 per tonne barley and \$259 per tonne sorghum (Compare Chart 1).

Chart 1 Prices of Major Grains (\$A/tonne), July 2003 - July 2008



Source: APL

Economic Challenges

Australian pig producers and primary processors are operating under extremely tense economic conditions. In October 2007 persistently low pork prices from increasing imports of cheap subsidised pigmeat and high grain costs resulted in a sharp deterioration in profitability. With the cost of production at approximately \$2.74 per kilogram (feed grain price at \$336 per tonne) and average price of \$2.19/kg pigmeat, producers were making a loss of 55 cents per kilogram or approximately \$40 per pig. This compares with a loss of only 5 cents per kilogram a year earlier⁶ and represents a substantial deterioration in industry profitability.

Chart 2 below shows that in the early months of 2008, there were still losses of up to 44 cents per kilogram or about \$30 per pig.

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⁶ APL: Productivity Commission Inquiry 2007 Submission #1

Australian Pig Feed & Net Profit (cents/kg)Trend (Wheat, Barley, Sorghum) 400 0.60 350 0.40 300 0.20 Average Feed Grain Prices 250 (A\$/Tonne) 0.00 200 -0.20 150 0.40 100 50 Drought Drought 20022003 2004 2005 2006 2007 2008 Year ■ Net Profit (cents/kg) Average Pig Feed Grain

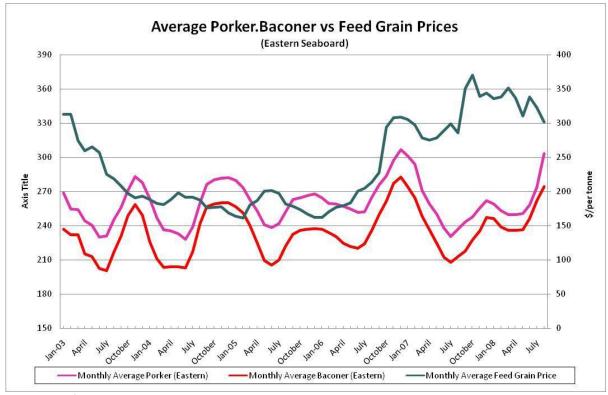
Chart 2 Australian Pig Feed & Net Profit (cents/kg) Trend (Wheat, Barley and Sorghum)

Source: APL from ABS Statistics

Note: Cost of production based on the following two assumptions: 1) When grain is \$300/tonne the cost of production is \$2.60/kg; and 2) When grain is \$400/tonne the cost of production is \$3.00/kg

Chart 3 below clearly shows that the average price of grain has remains above \$300/per tonne since July 2007, and those producers are still paying relatively lower prices for porkers and baconers (Eastern Seaboard). This is relatively consistent with Chart 1 above where the price for wheat was still above \$340/per tonne in August 2008.

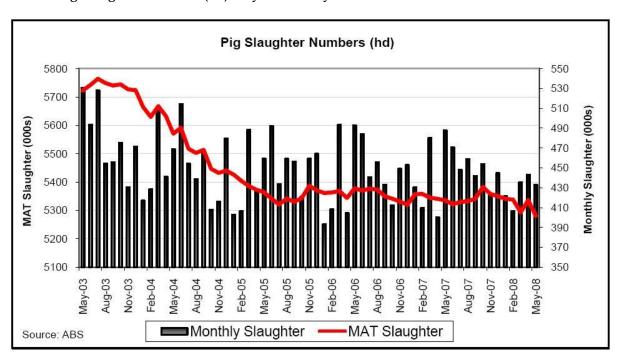
Chart 3 Average Porker and Baconer vs. Feed Grain Prices (Eastern Seaboard)



Source: APL from ABS Statistics

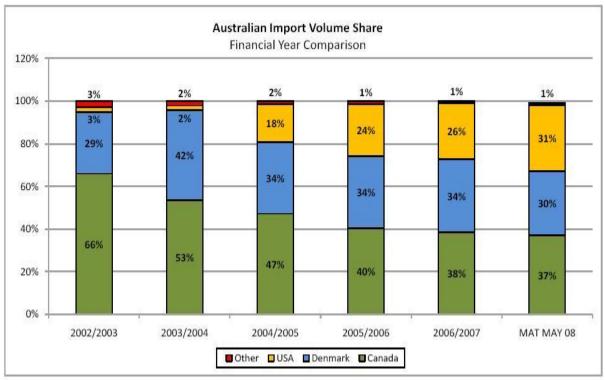
In response to these economic pressures, pig slaughter numbers continue to fall (Chart 4 below).

Chart 4 Pig Slaughter Numbers (hd) May 2003 - May 2008



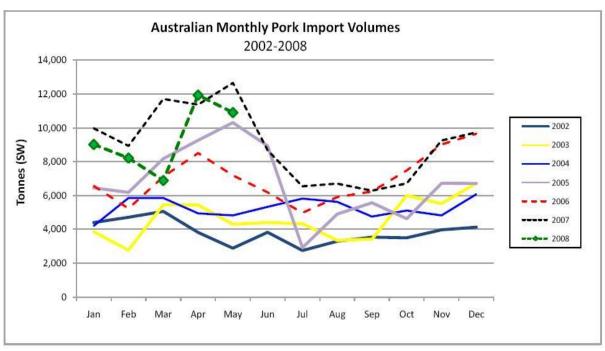
Over the last five financial years, cheap, subsidised pigmeat has been imported from the United States, Denmark and Canada (Chart 5), with import volumes increasing significantly over the last few years (Chart 6).

Chart 5 Australian Import Volume Share - Financial Year Comparison



Source: ABS

Chart 6 Australian Monthly Pork Import Volumes 2002-2008



Source: ABS

In addition to rising input costs, pig producer face significant economical challenges from other areas. To comply with the revised Model Code of Practice for the Welfare of Animals (the Pig), approved by Primary Industries Ministerial Council (PIMC) in April 2007, producers face mandatory changes to the way they run their businesses leading to a significant increase in costs. Farms that have recently made major investments e.g. to multi-site production, have higher debt levels and are most financially vulnerable. Current industry conditions, which could not be foreseen when APL agreed to the revised Code on behalf of Australian pig farmers, have severely exacerbated this vulnerability.

Additional pressure on pork producers results from compliance with Government planning regulations which often create costly impediments for piggery development such as mandatory buffer zones for odour and noise; and the Environmental Protection Regulation, leading to additional impediments and payment of annual fees. These EPA fees show considerable variation when compared on state-by-state basis, adding to the high cost of production and creating a competitive disadvantage for producers in states with high environmental fees.

Because of the ongoing cost squeeze, there is ongoing industry consolidation and rationalisation in the industry resulting in the less resilient pig producers leaving the industry; and the remaining pig producers making significant changes to improve productivity and control costs within their operations. These remaining producers tend to actively use destocking and restocking procedures and cost of production based decision-making tools to manage their business risks.

Fuel Related Issues for the Pork Industry

Use of Transport Fuels in Pork Production

Livestock transport is a crucial link in the pork supply chain that brings together all aspects of pig breeding and raising industries and pigmeat processing businesses. The pig transport industry provides the key service of transporting livestock between farms and stations, as well as transport of pigs to and from saleyards, feedlots, processing establishments and live export ports nationally.

While a large component of pig transport is for purposes of slaughter, there are also considerable movement of pigs from one location to another for purposes of management or for resale and relocation as live animals, such as contracted grow-out units. In 2007 an estimated 7,729,286 pigs were transported by road for up to an estimated 5,219,823 kilometres. The weighted total hours of transport per annum in the pig industry was estimated to be 65,428 hours.⁷

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⁷ Regulatory Impact Statement (2008). Australian standards and guidelines for the welfare of animals – Land transport of livestock, p.3

The annual gross value of total pig slaughter, disposal and exports & pig products (\$million) were as follows:

		Year		
2002-03 ⁸	2003-04°	2004-05 ¹⁰	2005-06 ¹¹	2006-0712
911.3	878.9	906	888.6	930

The estimated total annual cost of transporting livestock for slaughter, export/import and 'other' purposes by road (excluding rail) is between approximately \$604.4million and \$670.4million, with pig transportation costing estimated at \$22.0million.¹³

Higher transport costs due to rising fuel costs are expected to significantly increase input costs for pig transportation, and eventually affecting the viability and competitiveness of the pig production supply chain.

B-double (triple-deck) trucks are the most commonly used by the pig production supply chain to transport pigs for slaughter (estimated at 50 per cent), followed by single deck trucks (estimated at 25 per cent) and double decks (estimated at 25 per cent). ¹⁴ B-doubles are the biggest users of diesel and are used widely by the Australian pig industry and in wider farming operations. Diesel engines offer better fuel economy in comparison to equivalent petrol models. ¹⁵ While the price of diesel relative to petrol is an important consideration, diesel has a higher energy content compared to petrol. This means diesel delivers more kilometres for each litre of fuel consumption – particularly when combined with new, efficient diesel engines. Diesel engines are also inherently more fuel efficient than equivalent petrol engines. ¹⁶

However, higher trends for petrol prices in the face of rising international demand for transport fuels can drive the cost of production for the Australian pork industry to unsustainable levels.

According to the Australian Competition and Consumer Commission (ACCC), the increase in the price of diesel in 2008 has been greater than the increase in the price of unleaded petrol.¹⁷ Chart 2 below details the sharp price increase in national average diesel price since November 2007.¹⁸

¹⁰ Ibid 2004-5

⁸ ABS, 2004-5, Cat. No. 7503.0

⁹ Ibid 2004-5

¹¹ ABS, 2005-06, Cat. No. 7501.0

¹² ABARE (June quarter 2007)

¹³ Regulatory Impact Statement (2008). Australian standards and guidelines for the welfare of animals – Land transport of livestock, p. 143.

¹⁴ Regulatory Impact Statement (2008). Australian standards and guidelines for the welfare of animals – Land transport of livestock, p. 138.

¹⁵ http://www.fuelwatch.wa.gov.au/info/dsp fuel types.cfm

¹⁶ http://www.aip.com.au/pricing/facts/Facts_about_Diesel_Prices.htm

¹⁷ http://theland.farmonline.com.au/news/nationalrural/agribusiness-and-general/general/diesel-prices-rising-faster-than-unleaded-accc/776938.aspx

¹⁸ http://www.aip.com.au/pricing/retail/diesel/index.htm

Chart 7 National Average Diesel Price: Average Weekly Prices for the 40 Weeks to Sunday 17 August 2008

The substantial increase in diesel prices in Australia reflects sharp increases in the international benchmark for diesel prices (the Singapore Gas Oil with 50 parts per million sulphur content). According to ACCC figures, in 2008 the international benchmark for diesel prices has increased by about 40 per cent in Australian dollars. Demand surges from China are contributing to price increases. In recent years, there has also been a greater demand by global refineries for processing diesel, especially diesel refined from low sulphur crude oil.

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While the price of petrol has fallen recently, diesel has not and remains the main fuel used in farming. ¹⁹ Fuel price rises are not favourable to the Australian pork industry and contribute to the existing financial pressure from reduced margins and rising input costs as outlined in the previous sections.

Impact of Australia's Carbon Pollution Reduction Scheme (CPRS)

Jan Feb

The Garnaut Climate Change Review Report (2008) predicted that Australia faces a 92 per cent reduction in irrigated agriculture in the Murray Darling Basin, catastrophic destruction of the Great Barrier Reef and critical water shortages due to adverse effects of climate change. It concluded that emissions from the transport sector should be included in Australia's future emissions trading scheme, and that including as many sectors as possible will help spreading the associated costs across the economy.

Under consideration of the recommendations of the Garnaut Report, Government decided to include emissions from transport fuel into the proposed CPRS from 2010. In addition, it proposed compensation measures for transport dependant businesses to offset the anticipated price increases in transport fuel caused by the CPRS. The Green Paper published in July outlines the Governments' preferred positions.

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¹⁹ http://www.abc.net.au/news/stories/2008/08/19/2340128.htm?section=business

For heavy vehicle road users e.g. transport businesses, the fuel excise (which applies to petrol, diesel and other fuel products) will be cut on a cent-for-cent basis to offset the initial price increase in fuel (petrol, diesel and LPG) associated with the direct and indirect effects of the CPRS. However, this assistance measure will be reviewed after one year. An equivalent cent-for-cent rebate on fuel excise will be provided to businesses in the agricultural and fishing industries to assist rural and regional areas. Government proposed a review of this measure after three years.

Australian Pork welcomes the proposed Government assistance measures to mitigate rising fuel costs in the agricultural and transport sector. However, on the long term, the agricultural sector and in particular the Australian pork industry is facing increasing cost of production due to rising fuel costs. It is highly likely that the adverse effects created by the Government CPRS will put the competitiveness of Australia's pork industry at risk; this is because Australia's major competitors, Canada and the United States have no stated intentions of introducing an ETS that would similarly increase the cost of production for their respective pig industries.

The Role of Biofuels in Australia's Energy Mix

What are Biofuels

Like other industrialised nations, Australia is faced with diminishing supplies of fossil fuels, increasing demand for energy and the need to reduce its industrial emissions. Reduction of greenhouse gas emissions in the transport system is an essential part of this action. Development of economical and environmental sustainable energy sources is in the research focus, and biofuels offer one possible solution.

Biofuels are made from renewable feedstocks such as sugars, grains and seeds, instead of fossil deposits such as petroleum and coal. Globally the two most common biofuels are ethanol and biodiesel. Existing technology uses vegetable oils such as canola and palm oil, and tallow for biodiesel production. Compared to biodiesel, starch based (first-generation) ethanol production utilises grains, waste starch, sugar cane, maize, cassava, sorghum and molasses. Cellulosic based, second-generation ethanol production technology could use any woody or fibrous plant material like wheat straw and sugar cane bagasse. Use of these feedstocks for fuel production does not interfere with production for human food and therefore does not create a food versus fuel relationship; however, this technology is still 10 years from being commercially viable.

Biofuels in Australia

In Australia, the focus on renewable fuels lies on ethanol. Ethanol production based on available first generation technology utilizes molasses from sugar production and grains such as wheat barley and sorghum. Molasses is a by-product from sugar production and is widely available in sugar cane growing areas. According to a recent OECD report, sugar cane is a very efficient feedstock for renewable fuel production as it reduces greenhouse gas emissions by at least 80 per cent compared to fossil fuels. This compares to a 30-60 per cent reduction of greenhouse gas emissions when wheat, sugar beet or vegetable oil is used

as feedstock²⁰. However, in addition to the lower reduction in emission of greenhouse gases, use of grains for ethanol production diverts grain from human food production, creates a food versus fuel relationship and eventually increases food prices for consumers. More significantly, from an intensive livestock industry perspective, additional demand for grain distorts local markets and artificially inflates feedgrain prices. This is a significant threat for the viability of intensive livestock production, in particular for the Australian pig industry.

Government Support

Government assistance and support for biofuel industries around the world comprises tariffs, grants, mandates and subsidies. The US government provides between USD \$11-13 billion per year to the industry²¹; this compares to AUD \$95million provided by the Australian Government to support the upcoming biofuels industry in 2006/07 which is more assistance per litre of ethanol produced than in the US. The assistance package for the Australian ethanol industry comprises a 38.143 cent per litre production subsidy, which offsets the current fuel excise of 38.143 cents per litre petrol. The cost of these Ethanol Production Grants in 2006-07 amounted to \$42 million, paid to four operators for the production of 110 million litres of ethanol. Imported ethanol is subject to a 5 per cent Customs Duty plus the 38.143 cents per litre fuel excise, which imposes an effective import barrier. In addition, the government paid \$3.7 million in Capital Grants to biofuel producing companies for plant expansion and another \$3.4 million to compensate service stations for the costs of installing pumps to be able to sell blended fuel; and to do so at a discounted price to promote uptake of blended fuel (E10) by Australian motorists (Ethanol Distribution Program).

Presently Commonwealth grants to the ethanol industry are under review by the Australian Government amid mounting global concerns over links between food shortages and biofuel production. The review is expected to be finalised in the second half of the year.

In the recently released Green Paper, which outlines the framework of Australia's Carbon Pollution Reduction Scheme (CPRS), the government states that some biofuels have very high life-cycle emissions because distillation and other production processes are very energy-intensive (and therefore emissions-intensive). The life cycle emissions from the domestic production of biofuels will be addressed via the carbon price applied to those emissions – the carbon costs would be incorporated in the pump price of these fuels. On the other hand, emissions from combustion of biofuels and biomass for energy will receive a 'zero rating', in recognition of the carbon sequestered in feedstocks and will therefore not be included in the scheme²².

Contrary to this position, APL argues that growing grain, sugar cane and sorghum for biofuel production produces significant downstream emissions from energy, fuel and fertiliser use. Therefore, emissions from combustion of biofuels must not be 'zero rated' and thereby allow first generation biofuels to claim a 'clean green' image. APL believes that exclusion of

²⁰ OECD Directorate for Trade and Agriculture, Economic Assessment of Biofuel Support Policies, 2008, available at http://www.oecd.org/document/25/0,3343,en_2649_33785_39633881_1_1_1_1_1,00.html

²¹ International Policy Research Institute, High Food Prices – the what, who and how of proposed policy actions, available at http://www.ifpri.org/pubs/ib/foodprices.asp

²² Department of Climate Change, 2008 ,Carbon Pollution Reduction Scheme - Green Paper, available at http://www.climatechange.gov.au/greenpaper/report/index.html

biofuel emissions from the CPRS effectively amounts to another subsidy for the biofuel industry and therefore will indirectly affect production and lead to increases in food costs.

Biofuel Policies in Australia

In Australia, the major biofuel policy at the national level is a 350 million litre non-binding target by 2010, i.e. one per cent of current fuel production. Meeting this target with currently available technology would consume approximately 765,000 tonnes of grain (assuming 80 per cent of that biofuel output is grains based and the ethanol yield is 366 litre/tonne²³). On the other hand, state governments independently have proposed to, or already implemented biofuel targets or mandates that impose minimum content of biofuels to be blended in commercial fuels, ranging from 2-10 per cent of total petrol consumed.

These mandates distort local grain markets as they provide a guaranteed ethanol related demand for grain. This discriminates against other grain users in the market place such as intensive livestock industries. These heavily grain dependant industries have to pay artificially inflated prices for the remaining quantities of grain available in the market place, which are already on record low levels due to ongoing drought impacts on grain production in Australia; additional demand for grain as feedstock for ethanol production will only exacerbate the current situation. The following table provides a detailed breakdown of current Australian biofuel policies.

Table 1 Overview of Current Biofuel Policies in Australia

State	Current Biofuel / Ethanol Policy
NSW	In October 2007 NSW mandated 2 per cent ethanol content in the total volume of petrol
	sold or delivered in NSW, with an increase to 10 per cent by 2011.
QLD	In 2007 the Queensland Government proposed a mandate for a minimum of 5 per cent
	ethanol blend in regular unleaded petrol produced and wholesaled in Queensland to be
	achieved by 2010; the percentage should be increased to 10 per cent as soon as practical
	after 2010.
	It is expected that in August/September 2008 the parliament will debate over new laws
	brought up by the Qld Nationals in May. If these are agreed on, a 5 per cent ethanol
	percentage could be possible by 2009 ²⁴ , rising to 10 per cent by 2011.
WA	The WA Government is committed to a 5 per cent target of biofuel consumption by 2010,
	with the option of a mandate to take effect in 2011 if this target is not reached.
VIC	The Victorian Government has set a 5 per cent target for biofuels while keeping open the
	option of a mandate if this target is not reached.
	In February 2008 the Victorian Government inquiry into mandatory ethanol and biofuel
	targets concluded that mandatory targets should not be imposed given that the cost and
	risk outweigh the benefits.
SA	No ethanol target or mandate
NT	No ethanol target or mandate
ACT	No ethanol target or mandate
Commonwealth	Biofuel target of 350 million litres by 2010, i.e. one per cent of current fuel production.

Source: APL

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²³ Alberta Agriculture and Food, Integrating Biogas, Confined Feedlot Operations and Ethanol Production available at http://www1.agric.gov.ab.ca/\$department/deptdocs.nsf/all/agdex11839

²⁴ Mandating 5 per cent ethanol in Queensland as proposed would approximately meet the Commonwealth Government's 350 million litres biofuels target for Australia

As outlined above, the Federal Government strategy for biofuel does not include mandates, however state level mandates are already imposed (NSW) or likely to be imposed (WA, QLD) for at least 5 per cent of biofuel content in fuel; this indirectly provides for a mandate for biofuels throughout Australia.

This development towards an effective biofuel mandate in Australia is a direct result of uncoordinated strategies and policies across federal and state governments. It will create unnecessary regulatory burdens and leads to financial impediments for feedgrain dependant intensive livestock industries, as outlined in APL's submission to the Productivity Commission Inquiry into Regulatory Burdens on Businesses - Primary Sector 2007. This was confirmed by the findings of the 2007 Productivity Commission Safeguards Inquiry into the Import of Pigmeat, which recommended, "There should be a review into the overall economic impact of current and proposed policies related to ethanol. The review, which could encompass assistance for other biofuels, should consider the impact of policies promoting ethanol production on consumers and other industries, including grain users" 25.

In addition, it stands against the key findings of the 2020 summit. The final report states, "By 2020 the biofuels industry should not compete with food and water production and usage, while reenergising rural Australia"²⁶. It also conflicts with the findings of the Victorian inquiry into mandatory ethanol and biofuel targets, which in February 2008 concluded that mandatory targets should not be imposed given that the cost and risk outweigh the benefits²⁷.

Impact of Biofuel Mandates on Food Prices

Government subsidies for grain derived ethanol production distort regional feedstuff markets and will exacerbate global food inflation and food shortages. For example, approximately 1/8th of the world's grain production or about 240 million tonnes of grain will be required to meet current mandate targets for biofuels in just the USA and the EU²⁸. As a result of increasing demand for food and international policy support for biofuels world grain prices have trended upward and are predicted to have reached a new benchmark; currently world grain prices are up to 200 per cent above long term averages.

As a direct result of these increases in world grain prices, the consumer prices for pork, beef, poultry and dairy products have all subsequently increased as well. The International Food Policy Research Institute in Washington has found that ethanol production was responsible for between 25-33 per cent of global commodity price increases during 2000-2006²⁹. And according to an unpublished World Bank report "the basket of food prices examined in the

²⁷ Inquiry into Mandatory Ethanol and Biofuels Targets in Victoria - Final Report, available at http://www.parliament.vic.gov.au/edic/inquiries/biofuels/

http://www.parliament.vic.gov.au/edic/inquiries/biofuels/
Booker, C., & North, R., 2008, The Great Biofuels Con, available at

http://theland.farmonline.com.au/news/nationalrural/agribusiness-and-general/general/the-great-biofuels-con/811124.aspx

²⁵ Productivity Commission, 2008, Safeguards Inquiry into the Import of Pigmeat, Final Report

²⁶ Australia 2020 Summit – Final Report, available at http://www.australia2020.gov.au/final_report/index.cfm

²⁹ IFPRI, High Food Prices - The What, Who, and How of Proposed Policy Actions, available at http://www.ifpri.org/pubs/ib/foodprices.asp

study rose by 140% between 2002 and this February [2008]" ³⁰. This report estimates that higher energy and fertiliser prices accounted for an increase of only 15 per cent, while biofuels have been responsible for a 75 per cent jump over that period.

The key findings of a recently published report by the Organisation of Economic Co-operation and Development (OECD)³¹ comprise:

- Government support of biofuel production is costly, has a limited impact on reducing greenhouse gases and improving energy security, and has a significant impact on world crop prices.
- Current biofuel support policies reduce greenhouse gas emissions from transport fuel by no more than 0.8 per cent by 2015; at the same time world grain prices are expected to increase by about 5 per cent for wheat, by around 7 per cent for corn and about 19 per cent for vegetable oil over the next 10 years.
- Ethanol from sugar cane reduces greenhouse gas emissions by at least 80 per cent compared to fossil fuels. This compares to biofuels produced from wheat, sugar beet or vegetable oil, which rarely provide emission savings of more than 30 to 60 per cent, while savings from corn-based ethanol are generally less than 30 per cent.

In its report, the OECD called on governments of OECD countries to refocus (biofuel) policies and suggested research to accelerate development of second-generation biofuels that do not require commodity feedstock.

Despite the clear signals for international market distortion and rising food prices due to the increasing ethanol production, international policy support remains firm. In March 2007, the leaders of the European Union, in a package of measures designed to lead the world in the "fight against climate change", committed to deriving 10 per cent of all transport fuel from "renewables", above all biofuels. The United States Environmental Protection Agency is not expected to roll back the Government's mandated ethanol content in fuels, arguing the corn cost incurred have been worth it.³² In Australia, the Queensland Government is expected to debate in August/September 2008 new laws brought forward by the Qld Nationals in May 2008. If these are agreed, a 5 per cent ethanol mandate could be possible by 2009, rising to 10 per cent by 2011.

The first significant retreat by a major government from a biofuels target as a direct reaction to the impact of biofuel production on food prices came from the UK. In July 2008, the UK Government has made a significant concession to slow the use of biofuels, following the release of the findings of the "Gallagher Report", which was commissioned to study the impacts of biofuels adoption³³. Since April, all petrol and diesel in Britain has had to contain 2.5 per cent of biofuels, with a planned increase to 5 per cent in 2010; the Government

Eccleston, P., 2008, Biofuels cause 75pc increase in food prices, report says, available at http://www.telegraph.co.uk/earth/main.ihtml?yml=/earth/2008/07/04/eahiofuel104.yml

http://www.telegraph.co.uk/earth/main.jhtml?xml=/earth/2008/07/04/eabiofuel104.xml

31 OECD Directorate for Trade and Agriculture, Economic Assessment of Biofuel Support Policies, 2008, available at http://www.oecd.org/document/25/0,3343,en_2649_33785_39633881_1_1_1_1_1,00.html

³² Smith, R. 2008, US not Expected to Roll Back Ethanol Mandate, available at

 $[\]frac{\text{http://theland.farmonline.com.au/news/nationalrural/agribusiness-and-general/general/article/844706.aspx}{23}$

³³ RFA Review of the Indirect Effects of Biofuels, Gallagher Report, 2008, available at http://www.dft.gov.uk/rfa/reportsandpublications/reviewoftheindirecteffectsofbiofuels.cfm

pushed this step back to 2013 or 2014. The UK Government committed to a more cautious approach until the evidence is clearer about the wider environmental and social effects of biofuels. Further research effort will be directed into the development of more sustainable biofuel technologies.

Industry Position on Biofuels

Australian Pork Limited (APL) actively supports the need for Australia to reduce gas emissions and that reduction of greenhouse gas emissions in the transport system is an essential part of this action. At the same time, the pork industry are strongly opposed to Government assistance for the grain derived ethanol industry as it distorts grain markets by artificially inflating grain prices. Feed grains represent the single biggest cost of production of a kilo of pork, beef and chicken, or per litre of milk. In a normal season, 80 per cent of Australia's east coast grain production is consumed by these intensive livestock industries³⁴.

First generation biofuels, specifically grain based ethanol, compete directly with food production for the agricultural products that they require as feedstocks, leading to higher grain prices and ultimately to increases in food prices as outlined in this submission. At the same time, a decision to mandate biofuels will provide only limited short-term and heavily subsidised employment opportunities, while destroying real jobs in Australia's economy, including the pig industry, which provides full time employment for about 8000 people³⁵. The ABARE analysis for the Prime Minister's Biofuels Task Force Report showed that if the 350 million litre target was achieved in 2009-10 the government expenditure would be \$545,000 per direct job created and the direct economic cost would be \$417,000 per direct job created. This analysis did not take into account any job losses in other grain value adding industries.

Adaption to climate change and the launch of the Carbon Pollution Reduction Scheme in 2010 will affect consumers in every field of their daily budget, from fuel to electricity and food. This will only exacerbate the effects of international biofuel policy support as outlined in this submission. Further rising food prices will impact on consumer choice and especially support for Australian product. Even if consumers wish to support local producers they will be influenced by price in the face of shrinking budgets. Demand is likely to switch to cheap imported product that, in case of pigmeat is readily available in Australia. This will place further economic hardship on the Australian pig industry.

As outlined in APL's submission to the Victorian Biofuels Inquiry in August 2007³⁶ technology for production of biofuels from sugar cane is already available and represents a viable niche market that can co-exist with food production and could add further value to Australia's sugar industry. Additional research efforts should be focussed into commercialising second-generation biofuels that do not divert grain from humane food production.

³⁴ Grain Growers Association Australia, Delegates primed to visit Australia's largest feedlot operator, 2008 available at http://www.graingrowers.com.au/

³⁵ Western Research Institute, 2008, Socio-Economic Impacts of the Australian Pork Industry - preliminary report

³⁶ Available at http://www.parliament.vic.gov.au/edic/inquiries/biofuels/call for submissions.html

APL is concerned that mandating and subsidising biofuels will drive up the price of food both internationally and nationally; potentially place marginal land into production which in turn will increase erosion and nutrient run off problems; and that biofuel plants will use significant amounts of scarce water for crops and in the plants themselves. APL recommends removal of the current tariff on imports of ethanol from overseas countries that are better situated to sustainably produce biofuels. Removal of existing tariff protection would also facilitate free trade and take economic pressure off intensive livestock industries in Australia such as the Australian pork industry.

Summary

Recent increases in fuel prices due to diminishing supplies of fossil fuels and rising international demand from developing economies such as China and India have significant impacts on the competitiveness of Australian industries, and in particular the pork industry.

Fuel is a key contributor to cost of pig production on-farm; moreover, rising fuel prices significantly affect viability of pork producers and pigmeat transportation businesses. Diesel is widely used in the transportation of feedgrain, live pigs by road nationally, and in the transportation of pig products throughout the pork supply chain. Diesel prices are trending higher and this has a significant impact on the cost of production, which may not be recoverable by pork producers and transporters.

Rising fuel prices will be further exacerbated by the expected increase in petroleum, diesel and gas prices as a result of the launch of Australia's Carbon Pollution Reduction Scheme in 2010. Despite the proposed Government assistance in form of tax off-setts, it is expected that direct and indirect effects of the CPRS will increase cost of production in the long term. This will put the competitiveness of Australia's pork industry at risk, because Australia's major competitors, Canada and the United States have no stated intentions of introducing an ETS that would similarly increase the cost of production for their respective pig industries.

APL acknowledges that biofuels are an essential component of Australia's future energy mix. However, mandating of biofuels in the transport fuel system must be excluded since it creates more problems than it solves. Government support for the upcoming biofuel industry as a measure to diversify Australia's reliance away from imported petroleum contributes to commodity market distortion, increasing cost of production for food producers and rising consumer food prices.

International policy support for biofuel production from grain exacerbates global increases in food prices and adversely affects sustainability of food production, both in the domestic and international market.

Australian Pork Limited urges the Australian Government to remove support for first generation grain derived biofuel mandates and refocus efforts into accelerated research into the development of second-generation biofuels that do not require commodity feedstock. We are concerned that economic resources may be expended on a second-rate solution that will not efficiently achieve the objectives of reducing greenhouse gas emissions

and improving Australia's energy security. Resources should be directed to solutions such as second-generation biofuels, which reduce market distortion and allow sustainable energy production that can coexist with human food production.

In addition, we recommend removing of the current tariff on imports of ethanol from overseas countries, which are better situated to sustainably produce biofuels, and to facilitate global free trade.

Rising fuel and energy costs play a key role in Australia's efforts to develop a sustainable economy under the current environment of climate change. Government needs to broaden its horizon of understanding for effects of climate change in the domestic and international arena. Both perspectives need to be accounted for to develop a sustainable economy in Australia.

Attachment: APL Submission into the Victorian Biofuels Inquiry 2007