CANEGROWERS

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Committee Secretary
Select Committee on the Scrutiny of New Taxes
PO Box 6100
Parliament House
Canberra ACT 2600
Australia

Inquiry into Carbon Tax Pricing Mechanisms
Submission from CANEGROWERS Mackay

Dear Sir

CANEGROWERS Mackay, which represents the 974 cane growers of the region between Proserpine and Sarina, welcomes the opportunity to make a submission to the Inquiry into Carbon Tax Pricing Mechanisms by the Select Committee on the Scrutiny of New Taxes. This submission will cover the impact of the proposed carbon tax on the entire industry, which extends along the coast of Queensland and northern New South Wales and is the life blood of many sugar communities. The proposed $23 per tonne carbon tax will have a significant impact on the profitability of our growers and so therefore is a source of concern.

As has been flagged, agriculture is "exempt" from the tax. This means that direct emissions such as nitrous oxide from fertiliser use will not be taxed. Fuel, too, will not be taxed for the first two years of the scheme. Beyond that, the government has indicated it would prefer to include a carbon price for on road heavy vehicle use and launch a Productivity Commission review of fuel excise. Whether this means the tax will be applied to fuel used in agriculture remains to be seen.

The Queensland sugar industry produces approximately 30 million tonnes of cane annually translating into around 4 million tonnes of sugar. The cane crop is grown by 4 000 canefarmers and annual industry revenues are in the region of $1.5 – 2 billion. Our value chain supports around 25 000 jobs. We are regarded as a highly efficient world class sugar industry.

In order to assess the impact of the tax, CANEGROWERS contracted the Australian Farm Institute to study the likely impacts of this tax on the industry. This indicates that the impact of the tax on a typical farm (10 000 tonnes cane, Central region) would be about $1 500 per annum for the first two years, rising to $2 800 when the tax is applied to fuel used for freight. This means that the impact of the tax over a five year period is $11 500, representing a reduction in net farm income 3.4% p.a. The impact of this tax over the industry would be approximately $46 M.

CANEGROWERS has previously indicated an industry cost of $81 M. This would be the case if, as a result of the Productivity Commission review, the tax was applied to fuel used in agriculture. The Australian Farm Institute modelling (attached) is commended to the committee for further detailed considerations.

The sugarcane Industry, like most businesses, derives its viability by profitability at the margins. A carbon tax will clearly reduce these margins. Our principal concern with the tax is that it lessens our international competitiveness. We are a trade exposed industry; over 80% of our production is exported. Of all the major world sugar producing countries we are the most trade exposed; even our domestic production has its price discovery anchored to the world price. Our major competitors, Brazil and Thailand, will not have these extra imposts and the risk is that they will reduce world prices over time to levels that do not support production in Australia - a strain on our international competitiveness we can ill afford.

The increase in costs that the carbon tax will trigger comes on top of increases in vital inputs such as electricity and water that are provided through the market but depend on government fiat for their pricing. Cane growers have seen costs for these inputs rise inexorably as more and more "returns" are artificially imposed by governments.

The Australian sugarcane industry is an integral part of the clean, green energy solution for our nation, via ethanol, cogeneration of electricity and a myriad of other developments being researched, all without impacting on the nation's food security issues.

However in order to maintain our current levels and then grow, the sugarcane industry needs to be on the leading edge of international competitiveness.

Australia's sugarcane industry is currently considered to be on this leading edge. However burdens placed upon that impact on margins do jeopardise this and divert scarce financial resources from the green solutions and run the risk of leaving the sugarcane industry in Australia on the "bleeding" edge.

Should the Senate Committee desire any further information or input, please do not hesitate to contact me.

Thank you for this opportunity and for considering our concerns in your deliberations.

Yours faithfully

Kerry Latter
Chief Executive Officer

(attach)

Australian
Farm Institute

The impact of the proposed greenhouse emissions trading scheme on Australian farm businesses:

Sugar cane production.

Australian Farm Institute.

August 2011.

Summary

Farm level modelling was carried out of the impact of the proposed economy-wide emissions trading scheme (ETS) on the costs and profitability of two model sugar cane farms in Queensland, one in the Burdekin region and one in the Central region. The carbon price scenario examined was one which commences $23 /t CO_2-e in 2012/13, and increases in line with Australian Government Treasury projections in the years after that, initially at an annual rate of increase of 5% per annum.

Five years after the introduction of the ETS, the two sugar farms were projected to experience total annual business cost increases of between 1.2% and 1.5% compared to a business-as-usual scenario, which amounts to $3,377 (Central region) and $14,700 (Burdekin region) in additional annual farm input costs. The additional costs were all on-farm input costs, with no additional processor costs assumed, because most sugar cane processors generate energy from remnant sugar cane materials (bagasse) and are less reliant on energy sources likely to have their prices affected by the proposed ETS. The increases in business costs (in the absence of the potential for sugar farmers to increase prices) would result in a reduction in net farm income of between 4.1% and 5.1%, relative to a business-as-usual scenario, five years after the ETS commences.

The modelling does not incorporate any assumptions about additional dynamic responses (over and above normal productivity growth) by farm business managers in response to the additional costs, and as such provides a projection of the potential challenge these policies will pose for farm businesses, rather than attempting to project actual future outcomes. Nevertheless, the results highlight that the proposed ETS will represent a progressively increasing challenge for Australian sugar cane producers.

Introduction

The Australian Government has proposed to introduce an ETS that will impose a price on greenhouse gas emissions produced by some Australian businesses from 1 July, 2012. The details of this policy are still to be finalised in legislation, however it is assumed the policy as announced will largely be reflected in forthcoming legislation. It has been announced that the ETS will initially operate with a Government-fixed carbon price commencing at $23 per tonne CO_2-e in 2012-13, and rising by 5% per annum until a market-based emissions trading scheme commences in 2015. From 2015, the carbon price will be set by the market, although it will be constrained between $15 and the international carbon price plus $20 for the first year, with both upper and lower limits increasing by 5% per annum until the carbon price is entirely set by the market after 3-5 years.

The Government has announced that direct emissions from agricultural activities will not incur a cost under the proposed ETS for the foreseeable future, although the possibility of imposing a cost on agricultural emissions at some future time has not been completely ruled out, and has been proposed by a number of prominent persons and groups involved in advising on carbon policy. The government has also announced that emissions from off-road fuel used in farming, fishing and forestry will not be subject to a carbon cost, but emissions associated with fuel used in shipping, railways and for air travel will be subject to a carbon cost from July 2012. The Government has also announced that emissions associated with on-road heavy vehicle use will be subject to a cost from 2014, although this has not been agreed to by all members of the Multi-party Climate Change Committee that has developed and agreed to the policies under consideration.

While agricultural emissions will not incur a direct cost under the proposed ETS, major emitters such as electricity generators will have a cost imposed on their greenhouse emissions. This will mean that the proposed carbon policy will increase the price of energy, and hence the cost of farm inputs that involve the use of energy in their production or delivery.

Generally speaking, the price that Australian farmers receive for the agricultural commodities they produce is set in the international marketplace, in which Australian farmers are price-takers. This means farmers are not able to increase the prices they receive, and that any additional costs incurred by Australian farm business will have a direct impact on farm profitability. Even in the absence of a direct cost being imposed on agricultural emissions, the implementation of an ETS in Australia will have a negative impact on farm profitability. The scale of the adverse impact will vary depending on a range of factors, including the degree of reliance of different farm business and their related sectors on energy and energy-related farm inputs.

The aim of the research reported here is to gain an understanding of the potential impact of the proposed ETS on the future profitability of sugar cane farms in Australia.

Methodology

In order to project the impact of the proposed ETS on Australian farm businesses, financial models were developed of typical farm businesses, based on data available from an ABARES review of the financial performance of sugar cane producers (Hooper, 2008). The methodology utilised has been described in a previous research report (Keogh and Thompson, 2008). In summary, a set of 'normal' assumptions (including rates of farm productivity growth) were

applied to the relevant ABARES farm financial data in order to project trends in farm costs and farm revenue into the future under a "business as usual" scenario.

The impact of the ETS on sugar cane farm businesses was then estimated using formulae that create a link between the price of carbon, the impact of that carbon price on fuel and electricity costs, and the impact of changes in fuel and electricity costs on the cost of farm business inputs, including upstream and downstream sectors. The responsiveness of farm input costs to a change in energy prices was calculated on the basis of the significance of energy as an input to the goods or services being utilised by the farm business. This enabled the impact of the carbon price mechanism on farm inputs costs and farm profitability to be calculated based on projected future changes in the price of carbon. Projected farm costs and farm profitability under an ETS could then be compared with the business-as-usual scenario in the absence of the ETS, in order to estimate the impact of the policy on future farm profitability.

Previous research by ABARE (Tulloh et.al. 2009) has identified that post-farm transport and processing costs will also be impacted by a carbon price, and given the international exposure of Australia's farm commodity and food sectors, it is also anticipated that these additional costs will be passed back to farmers in the form of higher processing costs and/or lower farm commodity prices. Most commodities will experience an increase in costs as a result of additional post-farm costs, however for sugar processors most plants are fuelled by sugar cane materials - bagasse (remnant fibre after the cane is crushed to produce sugar and cane leaf) for renewable energy co-generation. As such, no additional processor costs are assumed to be passed back to the model sugar farms from sugar processors. This is probably an overly conservative assumption as sugar processors would undoubtedly be users of network electricity for some functions, liquid fuels for transport and gas for heating. However, in the absence of detailed energy consumption data averaged for all sugar processing mills, no cost increases are assumed to occur for these processor inputs.

Model farm businesses

The ABARES review of the financial performance of sugar cane farms (Hooper, 2008) was accessed to extract farm financial data for two 'average' sugar farms, one located in the Burdekin region of Qld and the other in the Central region of Qld. These farms represent an average of the sugar farms included in the farm surveyed.

Itemised annual farm financial data was obtained for three years from the 2005-06 financial year to the 2007-08 financial year. The cost and revenue items were converted to 2009-10 dollars and averaged to provide 'typical' farm financial data for each of the two farms. While both farms carried small number of cattle, the revenue associated with these was ignored for the purposes of this analysis.

Some physical and financial characteristics of each of the two farms are displayed in the following table.

Table 1. Characteristics of the two 'model' sugar cane farms.

	Central region sugar cane farm			Burdekin region sugar cane farm		
	Hectares.	Cane production (t)	Yield (t/ha)	Hectares.	Cane production (t)	Yield (t/ha)
	112	10,304	92	389	37,344	96
Farm revenue	$ 349,446			$ 1,196,059		
Farm costs	$ 293,393			$ 999,574		
Fuel	9%			7%		
Freight	3%			3%		
Electricity	2%			2%		
Fertilisers	18%			17%		
Farm contracting	21%			23%		
Chemicals	3%			4%		

Carbon price

A single carbon price series was analysed, commencing at $23 per tonne CO_2-e and increasing in line with government announcements and Treasury projections, as detailed in the following figure.

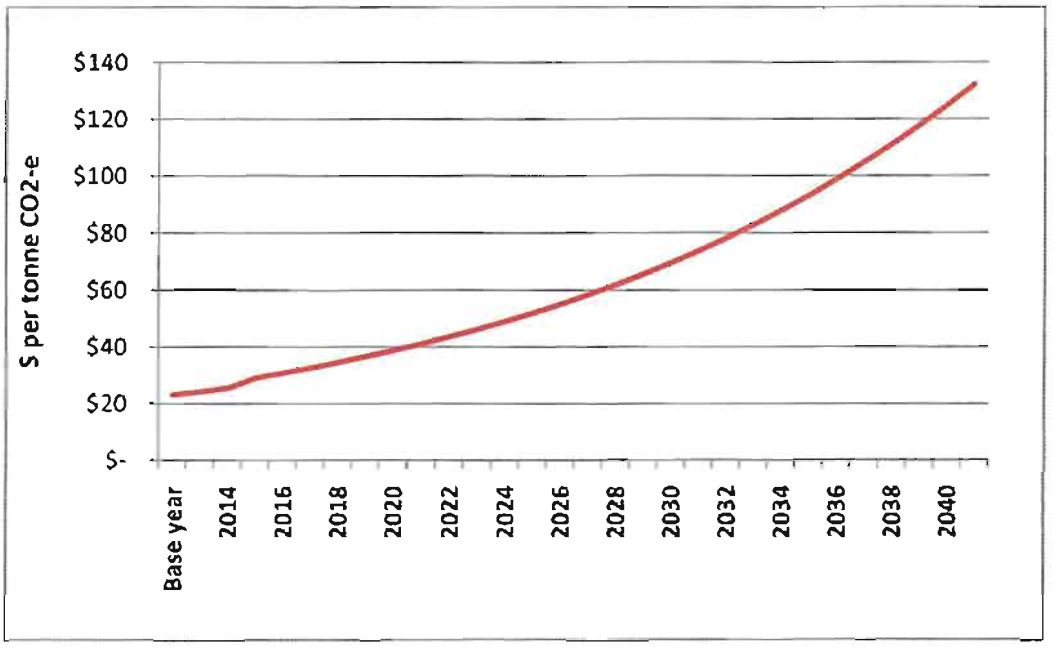

Figure 1. Carbon price series utilized in modelling.

Results

It should be noted that the following discussion relates to projected changes from the business-as-usual scenario under which no ETS is implemented in the Australian economy. As such, the projections being discussed are relative rather than absolute changes. Tables 3 below display changes in farm input costs and farm cash income (gross farm cash revenue minus farm cash costs) arising from the impact of the carbon price, assuming agriculture remains an uncovered sector. Results for Year 3 have been included as this will be the first year that on-road fuel emissions incur a cost under the proposed ETS, and this has an impact on farm freight costs from that year onwards.

Table 2. **Projected change in farm business costs and farm cash income, Queensland sugar cane farms.**

Change in total costs and cash income (Central region Qld Sugar farm)									
Carbon price scenario		Year 1	Year 3	Year 5	Year 10	Year 15	Year 20	Year 25	Year 30
$23 starting price	Carbon Price	$ 23.00	$ 25	$ 30.74	$ 41.14	$ 55.05	$ 73.67	$ 98.59	$ 131.93
	Cost - Processor ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Cost - farm ($)	$ 1,533	$ 2,810	$ 3,377	$ 4,456	$ 5,874	$ 7,729	$ 10,148	$ 13,289
	Cost Total ($)	$ 1,533	$ 2,810	$ 3,377	$ 4,456	$ 5,874	$ 7,729	$ 10,148	$ 13,289
	Cost change (%)	0.5%	1.0%	1.2%	1.5%	2.0%	2.6%	3.5%	4.5%
	Income change (%)	-2.5%	-3.9%	-4.1%	-4.0%	-4.1%	-4.4%	-4.8%	-5.4%
Change in total costs and cash income (Burdekin region Qld Sugar farm)									
$23 starting price	Carbon Price	$ 23.00	$ 25.36	$ 30.74	$ 41.14	$ 55.05	$ 73.67	$ 98.59	$ 131.93
	Cost - Processor ($)	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -
	Cost - farm ($)	$ 7,491	$ 12,216	$ 14,700	$ 19,442	$ 25,691	$ 33,903	$ 44,660	$ 58,705
	Cost Total ($)	$ 7,491	$ 12,216	$ 14,700	$ 19,442	$ 25,691	$ 33,903	$ 44,660	$ 58,705
	Cost change (%)	0.7%	1.2%	1.5%	1.9%	2.6%	3.4%	4.5%	5.9%
	Income change (%)	-3.5%	-4.9%	-5.1%	-5.0%	-5.2%	-5.6%	-6.1%	-6.8%

For both model farms, the ETS is projected to result in increases in farm input costs, which become more significant as the carbon price increases over time. In percentage terms, the impact of the ETS on farm input costs is initially similar for both farms, although increases more quickly for the larger Burdekin farm, possibly due to the greater significance of contract planting and harvesting costs for that farm, compared to the Central region farm.

Total farm business costs increase between $3,377 (Central region farm) and $14,700 (Burdekin region farm) five years after the introduction of the ETS. The dollar cost increases are more significant for the Burdekin farm because of its larger scale.

The impact of a carbon price on farm businesses can also be expressed in terms of the changes in farm cash income (gross farm cash revenue minus farm cash costs) as the price of carbon changes. Farm cash income is an important measure for a farm business, as it reflects the cash surplus generated each year that is available for owner/operators expenses and/or to retire debt.

The projections in this table highlights that the 'bottom-line' impact of increases in farm input costs are significant when considered from a perspective of the effect on farm profitability, with a 1.5% increase in farm input costs for the larger Burdekin farm (Year 5), for example,

translating to a 5.1% reduction in farm cash income. For the smaller Central region farm, a 1.2% increase in farm costs results in a 4.9% reduction in farm cash income, compared to the business as usual scenario with no ETS introduced.

It should be noted that the above results are expressed in terms of changes from the business-as-usual scenario, under which no carbon price is introduced into the economy, and the sugar industry maintains current productivity growth rates of approximately 1.5% per annum. In all cases, the imposition of a price on carbon slows the rate of growth in future farm cash income, (in $2009-10 terms) but farm cash income continues to grow under all scenarios examined, as Figures 2 below highlights.

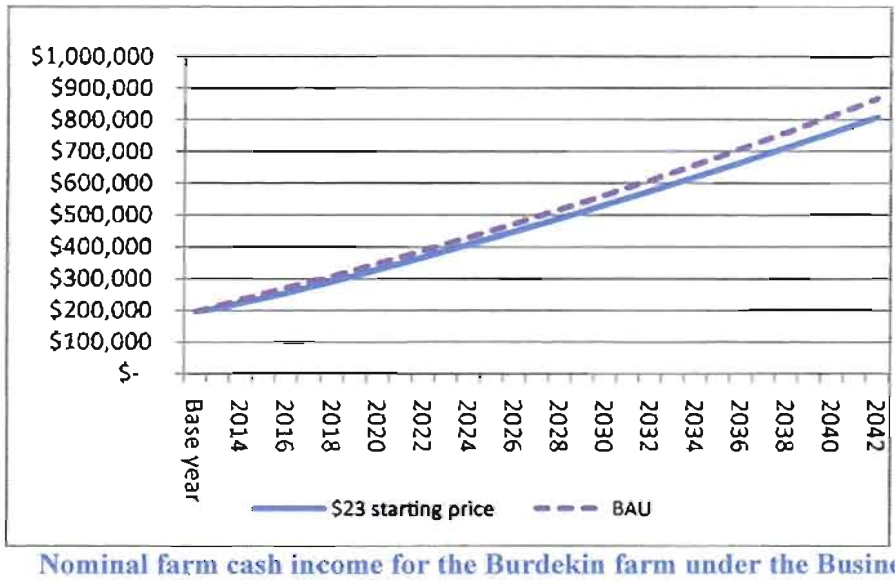

Figure 2. **Nominal farm cash income for the Burdekin farm under the Business-As-Usual (BAU) and ETS scenarios.**

Conclusions

The scenarios modelled here and the assumptions underlying the modelling are as realistic as possible, but are still subject to a large degree of uncertainty at both a policy and also at a farm operation level. Faced with additional costs, farm business managers would respond in a variety of different ways that are not foreseeable or predictable, and technologies may emerge over time that enable adaptation to occur and the negative impacts of a carbon price on farm businesses to be reduced. However, in the short to medium term it is difficult to envisage major technological changes occurring, especially given the extent to which Australian farms have already adopted practices and technologies that minimise energy inputs over the past two decades. It is also evident from this modelling that the impact of a carbon price will be proportionally greater on sugar cane farms that are more reliant on fuel-related inputs.

In conclusion, the introduction of a carbon policy in the Australian economy is initially projected to have a modest initial impact on the profitability of sugar cane production in Australia, but the negative impact will increase substantially with the proposed inclusion of fuel emissions from 2014, and as the price of carbon increases over time.

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