### **Submission to:**

The House of Representatives Climate Change, Environment and the Arts Committee
Carbon Credits (Carbon Farming Initiative) Bill 2011
Carbon Credits (Consequential Amendments) Bill 2011
Australian National Registry of Emissions Units Bill 2011

### **Submission From:**

Richard Mulcahy Chief Executive Officer AUSVEG



13 April 2011

# **Table of Contents**

About Us	
Introduction	3
Carbon Tax / ETS	3
Issues of Concern	4
Offset Methodologies	4
Financial Capping	5
Administration Costs	6
Sequestration Projects - Additionality	6
Excluded Projects	7
Permanence Arrangements	8
Audits	8
Education	9
Monitoring and Enforcement	9
Conclusion	9

#### **Submission to:**

The House of Representatives Climate Change, Environment and the Arts Committee
Carbon Credits (Carbon Farming Initiative) Bill 2011
Carbon Credits (Consequential Amendments) Bill 2011
Australian National Registry of Emissions Units Bill 2011

### **About Us**

AUSVEG is the national peak industry body representing the interests of Australia's 9,000 vegetable and potato growers and is committed to securing the industry's future.

We represent the interests of growers to government and assist growers by making sure the National Vegetable Levy and National Potato Levy are invested in research and development (R&D) that best meets the needs of the industry. AUSVEG is also an advocacy body on behalf of growers on a range of issues of concern to the sector.

### Introduction

The proposed Carbon Farming Initiative (CFI) has the potential to engage vegetable and potato growers in sequestering and abatement of carbon. AUSVEG strongly supports the concept of the CFI and its goal to drive carbon sequestration and abatement in agricultural systems. However, this potential will only truly be tested after the regulations are completed, the bureaucracy is created and the carbon tax and subsequent emissions trading scheme are finalised.

We are pleased to note that many of risks identified during earlier consultations on the proposed CFI have been incorporated into the Bill. However, a significant number of potential risks to AUSVEG members remain in the legislation, and this submission outlines those. The risks are multiple and the likelihood of detrimental unintended consequences to vegetable and potato growing will greatly test the future viability, productivity and livelihood of our sector.

### Carbon Tax / ETS

There is legitimate concern from farmers with the Carbon Farming Initiative being introduced and operating prior to a price on carbon being released or reached.

The reason for governments introducing a carbon tax and eventual trading scheme to meet environmental goals is to achieve the following:

- 1. Make polluters "pay".
- 2. Investment and financial resources will "flow" to low emissions technology and practices or activities that receive attractive market prices for carbon capture.
- 3. At pressure price points, it will swiftly lead to a "significant change" in businesses practices.

Trading in soil carbon credits has many benefits beside the capture and storage of carbon including less erosion, better soil structure, better water retention, higher levels of nutrient availability, and potentially higher production.

However, a carbon market is a *new* market in which landholders will make a conscious commercial decision on which produce they will grow.

At a number pressure price points, this decision could be detrimental towards various agricultural commodities or forestation, placing greater pressure on meeting global food security challenges.

When trading in the new carbon market, the most important risk management tool is knowledge or applied information.

AUSVEG submits that growers do not have sufficient knowledge to adequately plan the management of their businesses and are, therefore, at a significant disadvantage, which could lead to adverse outcomes.

Food production, which has little chance of sequestration or abatement, will "pay" as they will be relatively higher polluters. The horticulture sector will likely experience higher input costs especially for costs related to fuel and energy. Food production will thereafter "flow" to low emission or high abatement production.

Added pressures on the food processing sector will inevitably lead to downward pressure on prices achieved by growers, as consumers are unlikely to accept price increases at a retail level without potentially changing purchasing behaviour.

While dealing with carbon pollution is certainly a responsibility that all humans should be engaged in, to do so at the expense of food security has potential to be a major folly and not in the national interest.

### **Issues of Concern**

The following are issues of concern to AUSVEG members with respect to the design and operation of the CFI.

## Offset Methodologies

The introduction of this Bill without clear understanding of available or potential Offset Methodologies is a clear case of putting the cart before the horse. Without knowing the methodologies you cannot evaluate the Bill as serving its purpose for carbon farming.

For vegetable and potato growing, there is great potential for plant growth and breakdown to sequester carbon into the soil. It is scientifically recognised that this type of farming offers relatively high levels of soil carbon sequestration, especially in comparison to forestry.

However, without an understanding of what is a fairly "common" agricultural practice being accepted as an abatement activity, there is a great deal at risk to vegetable and potato growers.

At attractive carbon pricing, once viable and productive, vegetable and potato growing land could be turned over to forestation or alternate agricultural activities that have become more commercially attractive due to favourable offset methodologies to achieve carbon abatement.

The Bill and Explanatory Memorandum make it clear that ACCUs will only be issued for *additional* abatement and not for abatement practices and activities that are already widely used by farmers or

landholders.

Depending on what offset methodologies are accepted and which ones aren't will influence farm production.

The Australian Government has, to date, given no commitments towards funding the costs associated with justifying this research. It is likely that industry R&D dollars will need to be expended proving a methodology at the expense of production investments, and all of this will take a deal of time.

The explanatory memorandum in listing sequestration projects makes it quite clear that the emphasis is clearly on forestation activities, with only one – enhanced soil carbon – compatible with agricultural production:

- ▲ Reforestation
- ▲ Revegetation
- ▲ Native forest protection
- ▲ Avoided de-vegetation
- ▲ Improved management of forests
- ▲ Reduced forest degradation
- ▲ Forest restoration
- A Rangeland restoration
- ▲ Improved vegetation management
- A Enhanced or managed regrowth
- ▲ Enhanced soil carbon

Avoidance or reduction in agricultural emissions – mainly though livestock production and fertiliser use – are also referenced.

The clear bias towards forestation activities raises significant concerns about the value of food production against environmental needs.

The risk of this was recently highlighted in a CSIRO study which highlighted the possible risk of a significant change in land use from agriculture to "carbon sinks", starting at an \$11 a tonne carbon price. At \$36 a tonne carbon price, the prospect increased dramatically for land to be converted to carbon forest in the triangle near the border of SA and Victoria, south of Mildura and across to Swan Hill<sup>1</sup>.

## Financial Capping

With any Government demand-driven program, the imposition of budgetary expenditure caps can prove problematic.

The grower angst that accompanied the successful *FarmReady* programme being closed just three months into its financial year is particularly relevant.

A Government initiative established to achieve a set of objectives is perversely constrained from achieving those objectives due to tight financial capping.

<sup>1</sup> Bettles, Colin. Life remains in food bowl. Stock & Land. 08 Apr, 2011

The limited budget allocation is likely to be massively oversubscribed:

Research from CSIRO indicates that the amount of carbon sequestered in forests varies from 280 tonnes of carbon (tC) to 450 tC per hectare. The example used in the explanatory memorandum is at 10.90 uses 400 tonnes per hectare, so we will continue with this figure.

At a mooted price of \$20 per tonne this equates to a payment of \$8,000 per hectare of forest land.

A Budget allocation of \$45.6 million would enable the purchase of 5,700 hectares of land. With over 135,000 farms in Australia, this will result in a significant funding shortfall.

The price of \$20 per tonne is, however, highly questionable (especially for non-Kyoto compliant) until a Carbon Tax or ETS is introduced into Australia. The Chicago Climate Exchange highest value was 750 US Cents in May 2008. Trading reached zero monthly volume in February 2010 and remained at zero for the next 9 months when the decision to close the exchange was announced.

AUSVEG urges much greater surety in the price of carbon in order for growers to make commercial decisions over whether to undertake a project that has a minimum life and associated risk of 100 years. Should the Australian scheme suffer such severe fluctuations as the Chicago Exchange, it will undermine any uptake in the scheme from the first day.

#### **Administration Costs**

It is also unclear as to whether this budget allocation includes administration costs. Factoring in the newly created departments, Landcare information, and policing and audit bureaucrats – all at senior Executive Level positions – will incur significant administration expenses at the expense of carbon purchase.

## Sequestration Projects - Additionality

The darkness surrounding what "management practices that are designed to reduce expected losses of soil carbon as well as increasing soil carbon sequestration" is perhaps the biggest concern to growers.

Potato, tuber stock, and root farming all require a level of ploughing to harvest despite advances in minimum till technologies. This disturbs microbes, dries out the soil, and releases greenhouse gases into the atmosphere. During a typical harvest, land is exposed, heated and dried, suppressing biological activity.

However, significant vegetable and potato research and development has demonstrated that our sector is able to achieve significant results in reducing emissions intensity or emissions reduction per unit of output.

A favouring of forestation activities that result in an absolute reduction in GHG emissions may also lead to leakage that reduce productivity such as reducing fertiliser use, turning prime farm land over to reforestation or lead to reductions in animal stocking rates.

AUSVEG recognises that the Government has made significant movements in the critical area of financial additionality, however, the possibility remains that a bureaucratic decision based on the regulations will still exclude projects leading to material benefits or productivity gains.

Concerns were addressed by removing the project-level additionality test, including references to

financial additionality. Instead, abatement activities that are not common practice within an industry or region would be included on a 'positive list' and recognised as additional. The 'positive list' is a good step toward streamlining the project approvals process.

It is this 'positive list' that lends itself to the greatest potential for totally changing agricultural production.

If an agricultural practice in one commodity fails to be recognised on this positive list by a bureaucrat, then production will "flow" and lead to "significant change".

The test is still defined "as not been widely adopted". What, how and who determines the definition of "widely adopted"?

As this requires a Ministerial decision, after receiving advice from the Domestic Offsets Integrity Committee, it will ultimately be open to political considerations.

This is an area that is unlikely to remain clear in any short time-frame, especially considering:

- ▲ 'Expert judgement' is limited due to CO₂ sequestration in soil and plants being relatively new science
- ▲ the Department is still considering how to measure 'leakage'.
- △ 'Peer-reviewed' papers are commonly critiqued by 'peer-reviewed' papers.
- ▲ 'Measurable' and 'Verifiable' methodologies and 'estimation methods' are still being developed or haven't commenced.
- Accounting for 'cyclical variability' over 100 years would challenge even our best and brightest scientists. It requires significant longitudinal data using real world trials. If this baseline data or research hasn't already been conducted, new farming methods will need decades to establish average sequestrations levels. By which time the practice may be common and therefore, ineligible.

Yet the activities that do get included in the regulations will underpin agriculture's involvement in the Scheme.

With forestation already known and quantifiable, there is going to be an early incentive for investment in trees over food production through soil sequestration.

The time-frames for considering a methodology assessment could easily take at least a year even if the methodology is presented on day one of the CFI operation. Presenting a methodology will require a significant upfront and ongoing investment in R&D, with no guarantee of a successful outcome.

## **Excluded Projects**

AUSVEG welcomes the Government "negative list" aimed at addressing perverse outcomes from the Carbon Farming Initiative that could have encouraged:

- ▲ reductions in available water
- ▲ biodiversity destruction
- unemployment
   unemployment
- reductions in community amenity

Specifically noting MIS Schemes and conversion of harvest plantations is a positive step.

AUSVEG does, however, sound a note of warning over impacts from creeping activities.

Approval of sequestration projects individually will tend to mask the wider impacts on an area. The slow "creep" can over time, totally transform a farm production area into one that delivers the perverse outcomes set out above.

### Permanence Arrangements

The international carbon market is in its infancy and with the failure of the Chicago Carbon Exchange it is quite opaque as to how it will develop - for both Kyoto and non-Kyoto credits.

The Australian Government is quite forthright in highlighting the impacts of climate change on Australia.

Its principal Adviser Ross Garnaut recently said "I would now be tempted to say that views that temperatures and damage from a specified level of emissions over time will be larger than is suggested by the mainstream science are much more likely to be proven correct than those that embody the opposite expectations"<sup>2</sup>.

With CSIRO forecasting more regular and intense droughts in Australia due to climate change, it would take a very brave farmer to agree to 100 year permanent arrangements in which they (and their children and grandchildren) will be held accountable for "natural disturbances such as drought that may cause carbon to be released from the soil".

Equally, placing all risk and costs as the growers' responsibility for "bushfire (deliberate or natural), drought, or actions by neighbours or third-parties" belies the Government's own commitments to meeting its Kyoto obligations.

Given these serious challenges and immense uncertainty of carbon markets, it is quite unrealistic to expect vegetable and potato growers to sign 100 years commitments (with the threat of civil and criminal prosecution), undertake major investments, and change generational farming practices without any firm guarantees on the price they will be paid.

The present Carbon Farming Initiative puts nearly all the risk on the landholder and assumes almost none by the Australian Government

Just one small change to the Kyoto protocols could totally subvert farmer involvement in the Carbon Farming Initiative.

The collapse of Copenhagen also makes it increasingly unlikely that a global market for carbon offsets will develop in the near future.

As Government is establishing the carbon market in Australia, it will need to underwrite against these risks and provide greater guarantees, especially in the absence of a clear carbon price and a relatively stable one at that.

#### **Audits**

AUSVEG urges the Australian Government to streamline environmental reporting audits. Many

<sup>2</sup> Maher, Sid. Climate change may be worse than feared: Ross Garnaut. The Australian. March 11, 2011

vegetable and potato growers submit to FreshCare environmental audits, energy audits, retailer audits, HACCP audits and even the industry's own Enviroveg system and they will now also need a CFI audit.

The growing compliance burden on Australian farming requires significant structural reform.

#### Education

The Australian Government also needs to recognise and make substantial budget allocations to farmer education on the new CFI. Growers must be educated on the range of potential activities that can be used to generate offsets, how to distinguish between Kyoto and non-Kyoto ACCUs, and the requirements for reporting and auditing.

The reality is that the CFI is favoured towards forestation at present. Should farmers wish to participate through soil sequestration methods, they will need to adhere to stringent obligations.

Vegetable and potato growers need to be aware of these challenges and reciprocal responsibilities through a detailed education program.

### Monitoring and Enforcement

While recognising the need for effective enforcement to ensure credibility, the level prescribed seems overly 'police-state like' and likely to be costly due to minimum APS employment level requirements.

Many Australian farmers already find the growing minefield of environmental regulations to be immensely challenging without consideration of food production or safety needs.

As land managers, growers are increasingly losing control over their land to environmental laws in which their properties can be 'locked up' or confiscated without proper compensation. Growers can be prosecuted for a previous acceptable practice made suddenly illegal under amendments to vegetation laws. The fact that these can be applied retrospectively is an affront to sensible land management.

The CFI continues this trend with wording that assumes the farmer is virtually presumed guilty until innocence can be proven, often at great expense.

When the clearing of native vegetation to maintain a fire break becomes illegal, it would be a trepidatious farmer to agree to 100 years of rule over their land by a bureaucrat.

### Conclusion

AUSVEG has significant concerns over establishing the CFI prior to a relatively stable carbon price being in place.

In the absence of a carbon tax or stable carbon price and with no Government investment in the market to underwrite demand, the CFI risks being still-born.

As soil is the largest carbon sink over which farmers can directly control – holding twice<sup>3</sup> as much carbon as the atmosphere, and twice as much as all the vegetation, including forests – this is an important Scheme to get correct.

Impediments to soil sequestration such as being on a 'positive list' and the predisposition towards forestation as the solution is likely to have food production "flow towards forestry.

As the world needs food, this reduction in Australia's food production capacity will be taken up by overseas competitors.

To quote the Government's own adviser Professor Garnaut<sup>4</sup>:

"It's very important that the arrangements put in place give true credit for carbon that is in the soil. That's one of the reasons we can't go quickly with agriculture - because we're still working out how to measure that."

<sup>3</sup> Source: Kansas State University

<sup>4</sup> Skuthorp, Lucy. Soil carbon a must for emissions trading. Rural Press. 09/07/2008