

# Submission to the House Standing Committee on Climate Change, Environment and the Arts

# Inquiry into the Carbon Farming Initiative

### Introduction

The Winemakers' Federation of Australia welcomes this initiative to recognise and provide credit to landholders who work to reduce carbon pollution. The proposed Carbon Farming Initiative (CFI) scheme has the potential to provide a pathway for winemakers and wine grape growers to contribute to carbon reduction both through direct participation in pollution reduction methodologies to create Australian Carbon Credit Units (ACCUs) and subsequently as a purchaser of ACCUs.

However this potential will only be realised if pollution reduction methodologies applicable in the wine sector are included in the "positive list" and the ACCUs are robust, meaningful and internationally recognised. As many potential methodologies applicable to the wine sector (and presumably most other agricultural sectors) are in the early stages of development, they would likely be excluded from the CFI in the short term, thus limiting involvement to tree planting projects. A particular concern is that the agricultural emissions avoidance projects are too narrowly defined and must allow for projects that minimise and treat emissions such as methane from the breakdown of vegetable matter by microorganisms as well as animal wastes.

Benefits for engagement in the CFI may be marginal for some agricultural sectors that nevertheless have genuine emissions abatement and sequestration opportunities, therefore the government needs to identify and reduce barriers for participation in the CFI for those sectors, or provide other incentive mechanisms to engage all agricultural sectors.

WFA is particularly concerned that wine businesses which have demonstrated a strong commitment to environmental issues (notably through membership of Entwine Australia, which requires soil management practices and nitrogen fertiliser use that protect soil carbon and reduce emissions) may be precluded from the CFI on the basis of how it is established.

A significant education program will be needed to ensure landowners are not misled by the legislation and the opportunities it provides. WFA and regional wine associations would be prepared to deliver this education to the wine sector.

# CFI is not a catch-all

The motivation to change practices driven by the CFI will depend on opportunities for gaining a worthwhile number of ACCUs to justify the cost of changing practices, applying new technologies and paying market access facilitators.

For example, where emissions-intensive practices that produce low-value commodities can be transferred into abatement-intensive systems, there will be a significant incentive to change practices and generate ACCUs. However, there will be little incentive to change low emissions practices with a small capacity to generate ACCUs, or in systems that produce high-value commodities, where the relative value of ACCUs is small. Additionally, in those situations where the ACCUs outcome is relatively poor, there is likely to be little appetite to sign-on to long-term carbon stewardship commitments.

The CFI should be only one of a number of tools to encourage good practices in greenhouse pollution reduction. Additionally, where the ACCU outcome for a sector is relatively poor but emissions reductions are worthwhile, the Government may need to support sectors to make the transition to low emissions processes, by developing the methodologies and facilitating ACCUs management and trading.

#### CFI development and additionality rules

Where the development of new technology or practices that reduce emissions in agriculture is also desirable for business as part of enhancing agricultural productivity, CFI methodology approval should not be a barrier for business decision making.



While an allowance is made to backdate projects for which the methodology is approved before 30 June 2012, the CFI should allow for backdating to the date of commencement for emissions reduction projects that commence prior to the approval of an appropriate methodology.

The CFI provides that ACCUs can only be earned for *additional* abatement and not for abatement practices and activities that are already widely used by farmers or landholders. This is a concern for the wine sector, as it is an early adopter of environmental initiatives, having developed both Entwine Australia and the Australian Wine Carbon Calculator for the promotion of best practice agriculture in the wine sector, including greenhouse gas mitigation. Early adopters should be able to access the scheme, as potentially they will be placed at a competitive disadvantage compared with late adopters, who can use the scheme to generate ACCUs

WFA believes all voluntary practices to ameliorate carbon pollution beyond "business as usual" should be duly recognised and be eligible for ACCUs.

#### "Positive List"

Dependant on price, level of investment, and abatement opportunities, ACCUs will lead to a shift in production – either from one commodity to another or across into forestry. The CFI will be a signal to the market that there is a potential value in food and fibre production beyond the commercial sale of the products.

If the activities of other commodities are included on the "positive list", after taking into account business decisions and other factors, this will encourage production to shift. The CSIRO has already warned, albeit with many caveats, that parts of the Murray Darling Basin will be planted with trees at a carbon price starting at just \$11/tonne.

For methodologies to be proven and warrant inclusion on the "positive list" will also be problematic for the following reasons:

- The emphasis on "not been widely adopted", yet not having a definition for what wide adoption means
- Lack of experts in a relatively new science
- The Department of Climate Change is still working out how to measure leakage
- Getting enough data to determine cyclical variability over 100 years is not a short-term task.

Methodologies will need to set a high bar to jump over so the CIF maintains surety, credibility and accountability and lessens opportunity for fraud. With forestation already Kyoto-defined and applicable in Australia, there is a strong likelihood that the CFI will lead to a decrease in farm production and an increase in forestry management.

#### Inclusion of food and beverage manufacturers

WFA submits that the CFI should also have greater scope to develop methodologies that apply to activities associated with the handling and processing of organic materials and food products by food and beverage manufacturers. For example, the definition for "agricultural emissions avoidance project" in the draft CFI legislation has omitted emissions from the breakdown of organic material other than animal wastes; winegrowing and making processes involve the breakdown of organic material in the management of wastewater and fermentation of grapes. The CFI represents a great opportunity to improve the management of these processes.

These operations handle large quantities of organic material, generating organic wastes and wastewater with high organic components. The treatment of these waste materials can have emissions implications that should be considered under the operations of the CFI.

#### Wine sector opportunities and research needs

The wine sector, and farming more broadly, doesn't know what will or won't be included on the positive list and as an accepted methodology. WFA submits that the CFI should receive an additional Budget allocation to fund the necessary research to develop and refine methodologies to enable agricultural sectors to participate in the CFI and hence to ensure that the CFI is effective in achieving greenhouse gas reductions.

The wine sector would find it hard to justify "methodology research" as a priority given its low relative impact on the viability of grape and wine businesses and the uncertainty around climate change abatement policies (carbon price being an obvious example).



The wine sector does, however, offer many potential avenues for carbon sequestration through plant soil sequestration and the re-use of wine stalks to reduced fertiliser application as described below:

Potential methodology	Description/application/concerns	Status of methodology/ knowledge	Sector take-up likely?	Timeframe
Increase vineyard soil carbon	Develop practices that increase soil carbon in vineyards, depending on soil chemistry at site such as appropriate nitrogen balance, but what are the effects on grape quality?	Poor	Low	2 years
Vine wood (trunk and root)	Woody thickening of trunk-root system over time.	Poor	Very low	2 or 3 years
Plant trees	Woodlots and revegetation on vineyard/winery company properties	Good	High	now
Organic waste	Change management to reduce emissions, such as to produce biochar or capture methane	Poor	Fair	2 years
Fertiliser use	Reduce the use of manufactured nitrogen fertilisers, by replacement with alternatives or optimisation such as targeted use	Poor	Low	2 or 3 years
Winery wastewater	Change management to reduce emissions, such as to capture methane	Promising	High	Now for some
Wine fermentation gas capture	<ul> <li>Change management to reduce emissions of CO2 and volatile organic compounds, such as by using membranes. Would require one or more of:</li> <li>a) a 'rule change' to make operations accountable for these emissions</li> <li>b) the development of a cheap technology to achieve separation and removal</li> <li>c) a mechanism for storing or using captured CO2</li> </ul>	Poor	?	5 years +

In a perfect world, grape vines would be recognised as carbon sequesters (in both soil and plant growth) in a similar fashion to trees. The CFI, however, would make this virtually impossible because of its rules.

Grape vines have an optimum life of less than 50 years. Vines would also need to be rootstock replaced to meet changes in varieties; environment and climatic conditions; market forces; and to manage disease. So despite a vineyard being able to sequester carbon through its entire life, it would not be recognised under the CFI 100-year rule.

# **Tree carbon bias**

The listing of sequestration projects clearly shows an emphasis on forestation activities:

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

While this is important, it should not allow other opportunities to be under-researched or overlooked, especially where they can simultaneously support employment, and wealth generation.



#### Managing the risk of perverse outcomes

While efforts are being made to prevent perverse outcomes, such as specifically noting Manage Investment Schemes, conversion of harvest plantations and the creation of a negative list, this doesn't address the cumulative effect of many small projects. The native forest planting bias of the CFI is likely to mean that more native forest areas will be established, predominantly in areas where Kyoto-compliant carbon sinks can be established. These areas are likely to be within the climatic band shared by Australia's high-productivity agriculture (such as wine grapes), competing for space and water.

While the CFI includes an opportunity for the Minister to take certain matters into account, this list does not include an assessment on impacts to the viability of businesses adjacent to or affected by the abatement proposal and assurance that assessments include analysis of the cumulative effect of proposals. For example, greater areas of native forest will increase the necessity for prescribed fuel-reduction burning and the risk of wildfires, both bringing increased smoke which can destroy the quality of wine grapes.

The CFI should address this problem by ensuring that all native forest proposals have a fire and smoke management plan that minimises detrimental impacts on businesses and the community.

#### CFI risks to, and burdens on, landholders

Because of the 100-year commitments, and the difference between Kyoto-compliant and non-compliant ACCUs, we need an education campaign to inform farmers.

It is very difficult to make commercial decisions on 100-year commitments without any surety about price. We only need to look at the history of the Chicago Exchange, which suffered significant fluctuations and eventual collapse. A firm price on carbon is therefore essential for the success of the scheme.

Landcare may not represent the most effective vehicle to provide education to landholders on the CFI, given the narrow focus of Landcare and variable coverage of landowners. As an alternative, industry groups that have regular contact with sectors on a range of issues may be a better avenue for the delivery of education.

WFA and regional wine associations would welcome funding support to ensure that the wine sector fully understands the implications of the CFI.

#### Audit requirements

While the requirement for audits is reasonable within the context of this scheme, it represents an additional audit burden for landholders.

#### Conclusion

The CFI has the potential to revolutionise the agriculture sector by engaging many landholders and appropriately recognising their voluntary efforts to reduce pollution and sequester carbon.

However, WFA is concerned that the full potential of this scheme in terms of engagement of the agricultural sector and the amount of emissions abatement will not be realised for the following reasons.

- 1) The omission of the treatment of emissions from the breakdown of vegetative matter in the definition of agricultural emissions avoidance projects.
- 2) Lack of support for sectors where the ACCUs' generating potential is low. An alternative mechanism to recognise the goodwill and encourage good practices among this group should be considered.
- Overly strict additionality rules. Voluntary emissions abatement should be recognised, endorsed and supported by the CFI, regardless of other business factors.
- 4) Lack of a straightforward process to acknowledge and backdate the allocation of ACCUs to projects that commence prior to methodology approval.



- 5) Lack of clarity on the treatment of operations that deal with large volumes of organic material outside of direct production activities, such as wineries.
- 6) A bias towards tree farming activities that needs to be addressed with a strong commitment to support the development and approval of methodologies for a range of sectors and hence capitalisation on the goodwill of the agricultural sector.

WFA believes the following actions also should be considered:

- 1) Further guarantees of mitigating the risk of perverse outcomes, such as smoke management planning and recognising the cumulative effect of CFI initiatives.
- 2) Guaranteeing appropriate education of landholders to prevent unwitting exposure to onerous ACCUs management commitments, via engaging agriculture peak bodies to conduct education.

