

The Carbon Pollution Reduction Scheme (CPRS)

Issues for the farm sector

NSW Farmers' Association

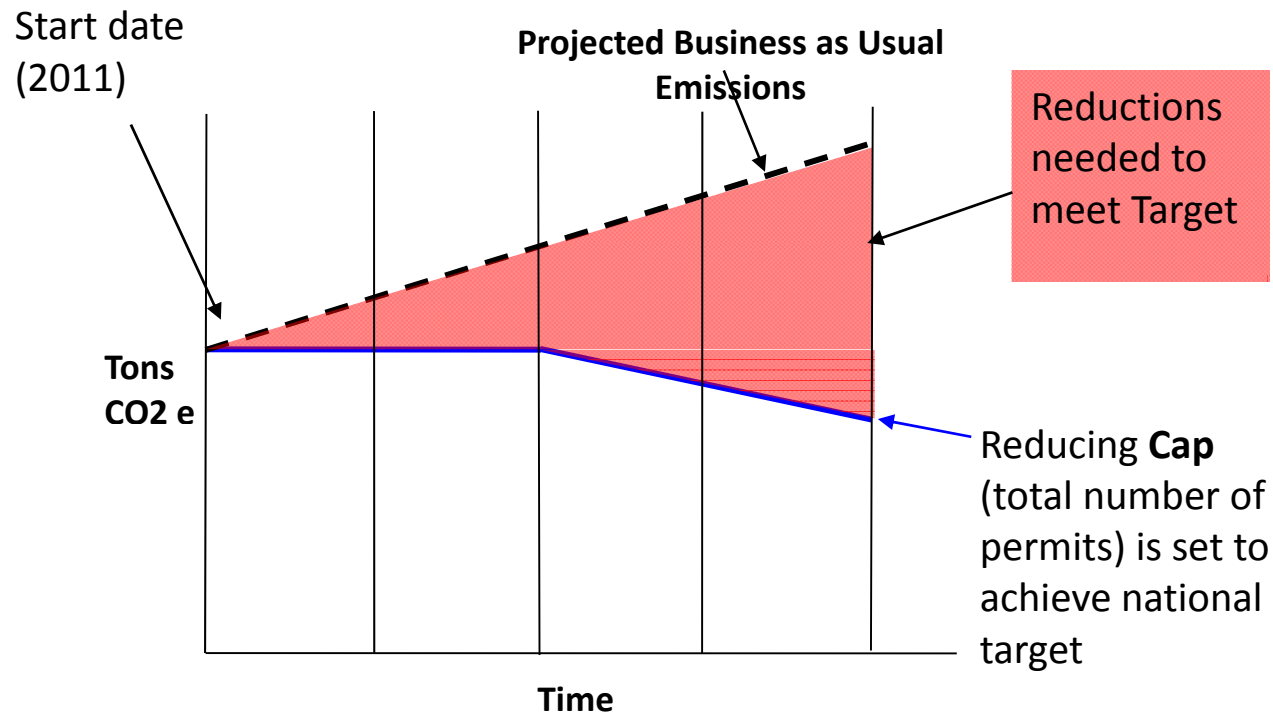
What is the Carbon Pollution Reduction Scheme?

- The Federal Government's name for an Emissions Trading Scheme (ETS) designed to put a price on greenhouse gas emissions
- Sets a target to reduce national emissions by 25% of 2000 emission levels by 2020
- Commences on 1 July, 2011 (if legislation passed!)
- The Government wants to cover agriculture in 2015
- Is based on a "cap and trade" model, similar to the European ETS.

How does it work?

- Covered firms must hold a permit for every tonne of gas they emit
- The quantity of each firm's emissions will be monitored and audited
- At the end of each year, firms must surrender a permit to government for every tonne of emissions they produce in that year
- For most farms, there is no practical way to reduce liability other than by reducing production (or planting trees on cleared land)

Cap and Trade



Emissions are on the y axis, time on the x axis.

The red shows projected emissions in the absence of the scheme.

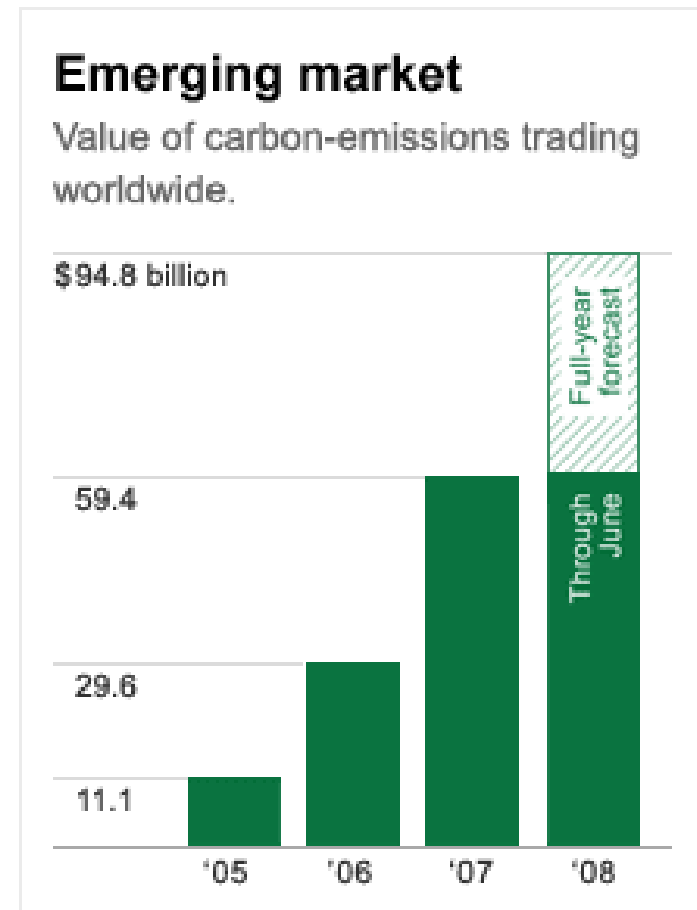
The limited amount of permits (the cap) creates scarcity and will push up the price of permits and, in theory, drive abatement

The European ETS is failing

- There is little evidence that the European Union cap and trade scheme, established in 2005, is driving emissions reduction
- This is because of generous compensation provisions and firms (and EU nations) 'gaming' the system.
- Both critics and supporters are saying that the EUETS will fail in the absence of a mandated global market that eliminates trade exposure issues.
- In the meantime, carbon traders are making billions.

Carbon trading a growth sector

- The global carbon market was worth around \$118 billion in 2008, rising **84** percent from 2007 (Reuters Jan 2009)
- Projected \$150 billion in 2009
- US market estimated at \$1 trillion annually by 2020. (Fortune Magazine, April 2008)



SOURCE: POINT CARBON
FORTUNE GRAPHIC

Why agriculture should not be a covered sector

- No nation other than New Zealand has chosen to cover agriculture in an ETS. The USA has explicitly excluded agriculture from its trading scheme.
- There are a number of reasons for this including problems with:
 - Measurement, reporting and verification
 - Trade exposure
 - Point of obligation
 - Carbon accounting

The point of obligation problem

- ‘Point of obligation’ is jargon for who in the supply chain has to hold permits and account for carbon.
- Under the CPRS, firms emitting more than 25,000 Tonnes CO₂e/pa must hold permits, for example:
 - Power stations
 - Fuel and fertiliser companies
 - Food processors
- But only 2% of farms are above the 25,000 Tonne threshold!
- This means a different threshold and point of obligation would be needed to make agriculture a covered sector

The point of obligation problem... cont

- The Government is considering requiring aggregators, for example abattoirs, to hold permits and recover the costs of permits and administration from producers.
- But such a model would mask the individual performance of farms (which is highly variable even for identical productions systems) and nullify the purpose of establishing a market.
- And it fails to address the cost and difficulty of accurately estimating and accounting for emissions at farm scale

The measurement problem

- Farm emissions can't be measured accurately
- You can't put a monitor on every cow or a bell jar over a paddock
- Nor can emissions be estimated at farm scale with acceptable levels of confidence. There are too many variables and orders of magnitude variations across different farms producing the same goods
- While it is legally possible for government to charge farmers for carbon in the absence of accurate measurement, it would be unjust to do so

The trade exposure problem

- Most of our trade competitors don't have, and never will have, an ETS imposed on them
- In a free trade environment, consumers will simply switch to products imported from countries not subject to an ETS.
- Australian farm production will be lost and shifted to nations with lower environmental standards
- The government is choosing to disregard this fatal flaw, claiming that it can address **trade exposure** via a complicated compensation scheme.
- **As has been seen with the European ETS, who gets what compensation is highly political.**
- It is not clear what, if any, compensation farmers will receive or how amounts could be calculated fairly.

The accounting problem

- Australia's 'Kyoto complaint' accounting rules overstate agricultural emissions
- Farm emissions are balanced by the constant extraction of carbon from the atmosphere by pasture and crops
- Kyoto Protocol carbon accounting criteria, however, exclude most of this 'plus' side of the farm carbon balance sheet
- **The accounting methodology allows government to present agriculture as a significant 'carbon polluter' and must be changed!**

One-dimensional policy

- The Kyoto Protocol is blind to how greenhouse gases get into the atmosphere
- The Protocol treats coal emissions the same as emissions from agriculture, which are part of the natural carbon cycle
- This one dimensional approach neglects to address critical sustainability considerations regarding the source of emissions
- Farming is a renewable activity, burning fossil fuel is not



Burning fossil fuel is not a renewable activity

- A one-way conversion of fossil carbon
- There is no countervailing carbon sequestration



Key things to know about permits and liability

- Permit = Australian Emission Unit (AEU) = 1 tonne of CO₂e
- If agriculture is made a covered sector, farmers must hold AEU's to cover their emissions
- At the scheme outset, government will limit the price of an AEU to \$40 tonne, with a price increase of 5% until 2015, when the cap will be removed!
- Don't risk locking into an offset scheme until the final policy settings are known! You might need all the offsets you can create!

CPRS carbon offsets

- An 'offset' is a permit created by storing carbon
 - CPRS offset permit can be used to cover own emissions, or traded
 - Subject to strict rules and accounting
- **Presently no significant opportunities to create CPRS offsets in farming systems (only trees are eligible).**
 - Government policy favours carbon plantations on already clearing agricultural land – a new industry and a big problem!
- Soil carbon offsets are excluded
- Existing native vegetation is excluded
- **“Voluntary” offset schemes have no value in the current CPRS**

Soil carbon

- Carbon trading business are promoting soil carbon as a tradable commodity but many hurdles
 - There are many benefits from increasing soil carbon
 - Soil carbon , however, cannot be increased, or retained, without locking up nutrients and nutrients are expensive
- Deal breaker is that soil carbon is not eligible as an offset under the CPRS
- Measurement and accounting problems
- **If, and only if, Kyoto measurement and accounting criteria can be changed, soil carbon may become a viable offset for some farmers**

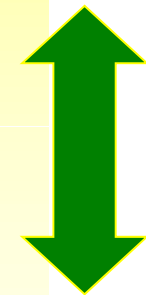
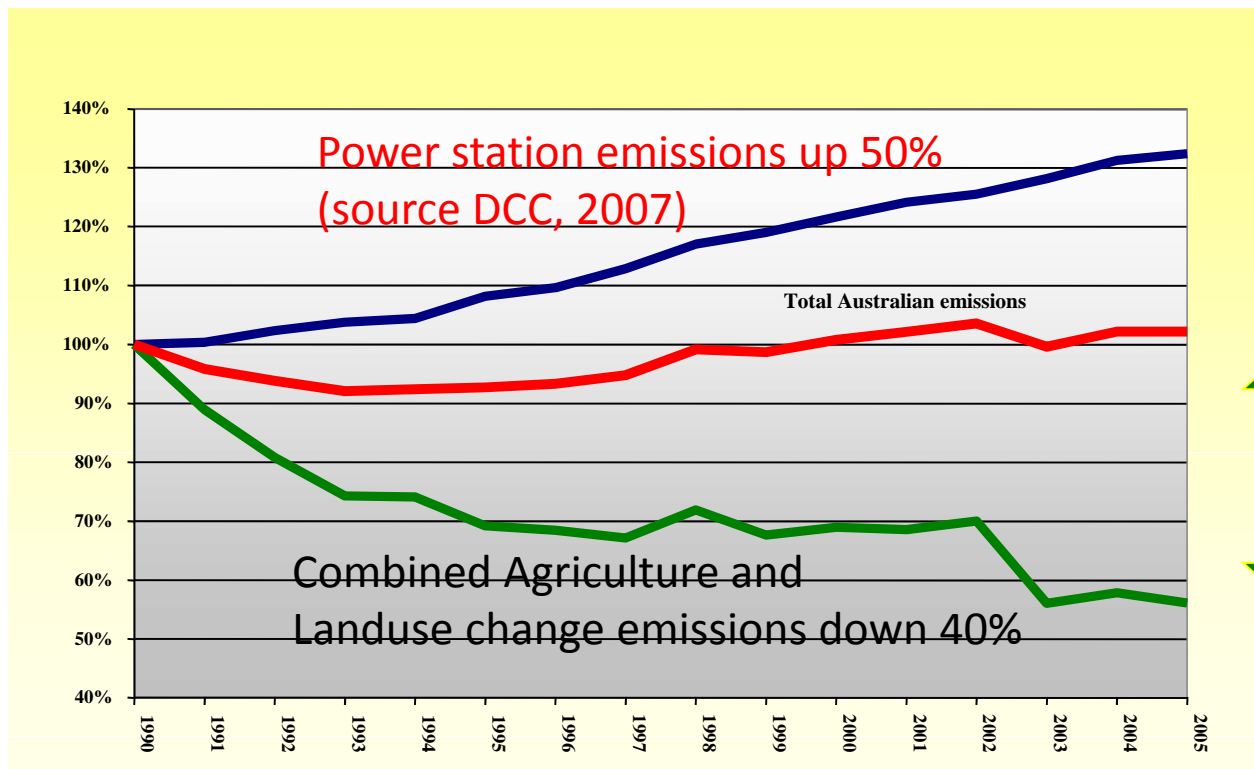
You can't claim carbon in trees older than 1990

- Land clearing bans enabled government to requisition the only significant offset available in farm land – the carbon stored in native vegetation older than 1990 – and use this offset increased emissions from fossil fuels
- Former Federal Treasurer, Peter Costello has said that the Federal Coalition Government was willing to compensate farmers for these carbon credits but the States did not support this
- **The Climate Institute has valued carbon credits requisitioned from farmers at \$1.8 Billion (at \$20 Tonne)***

**Mission Billions: How the Australian Government Climate Policy is penalising Farmers. Climate Institute: October 2006*

Farmers pick up the tab!

The energy sector has not paid farmers for the multi-billion dollar carbon offset provided by farmers.



**\$2 Billion
dollar carbon
offset**

Source: National Greenhouse Gas Inventory data

How was this blatant cost shift possible?

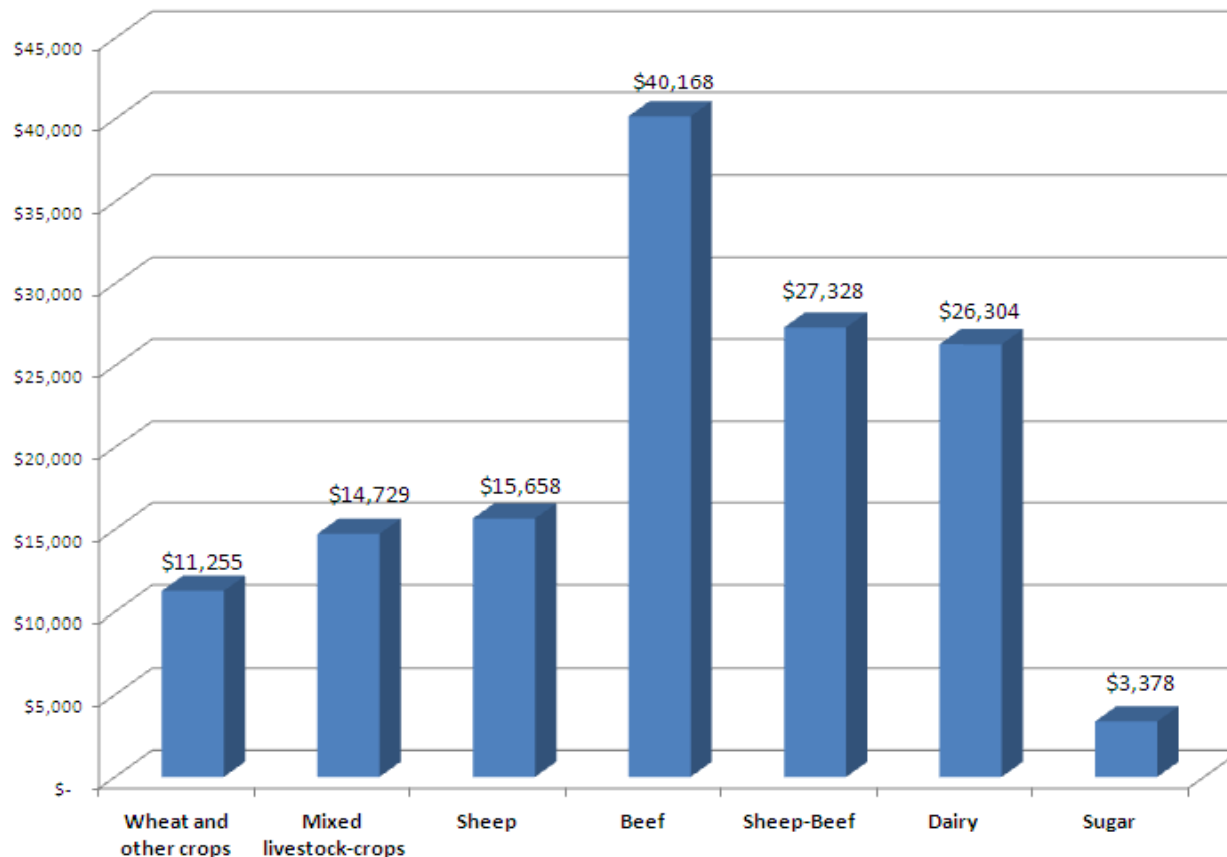
- Australian Government insisted on inclusion of Article 3.7 in the Kyoto Protocol, which allows nations to treat avoided land clearing as emission reduction
- The “Australia Clause” enabled State governments to shift the cost of increased coal emissions onto the farm sector
- Clearing bans have enabled Australia to meet its Kyoto targets while at the same increasing emissions from coal fired power stations by 50%
- **Without the clearing bans, Australia would be seriously in breach of the Kyoto treaty.**

The Association is fighting to prevent farmers and regional Australia suffering an ongoing cost shift

- The CPRS is designed to spread the costs of emission reduction from the most polluting sectors (coal and energy), to other sectors.
- It is essential that the general community comes to realise that if Government continues to protect the fossil fuel sector, it is placing the economy at severe risk.
- Renewable energy offers viable alternatives to fossil fuel energy.
- In contrast, it would be neither easy nor desirable to replace Australian food and fibre production with foreign imports.
- The CPRS will cripple many agricultural producers, with flow on effects for all business in the supply chain and regional Australia.

Impacts if covered: Estimated cost of permits

Cost of permits per annum (\$25/tCO₂-e)



Over \$40k per annum for the **average** beef producer.

Equates to a 63% reduction in beef producer incomes

Much higher for range land producers!

And this is at a very conservative carbon price!

Source: RIRDC – On farm Impacts of an Australian ETS

Estimate your farms carbon liability

- The Australian Farm Institute has developed a FarmGas calculator.
 - estimates annual GHG emissions
 - examines the financial impacts that different greenhouse mitigation options may have on profitability
- Easy to use – just enter your own data.
- Go to AFI Website: farminstitute.org.au

The calculator home page

Welcome

In this section you may create a new farm or select a previously created farm. Farm enterprises are added (or deleted) in the Farm Setup section and the enterprise calculators are then listed and accessed from here. Many of the worksheets contain default values - enterprise inputs and costs of production - which can be changed for your farm. State and Territory departments of agriculture often provide typical gross margin budgets and these are an additional source of information that may be used.

There is the option to include a value for carbon emissions - a 'Carbon price' which can be included in the Farm Setup section. Activities and inputs associated with the management of pastures and savannahs, including area of legume-based pasture and areas burnt each year, are entered in the Farm Setup screen.

Farm income and expenditure not included in the individual enterprises are entered in the Whole Farm section. Examples of these items include income from 'off-farm' activities (such as contract crop work, agistment income) and farm 'overhead' costs such as rates, electricity, fuel, general repairs/maintenance and expenditure on pasture maintenance.

Important:
To ensure that information is not lost, you should regularly click the "Calculate and Save" button on each screen. To return to this screen click on "Return to Main Page".

VIEW YOUR PREVIOUS FARM SCENARIOS

Select a farm

Case Study 1 [Edit Setup >](#)

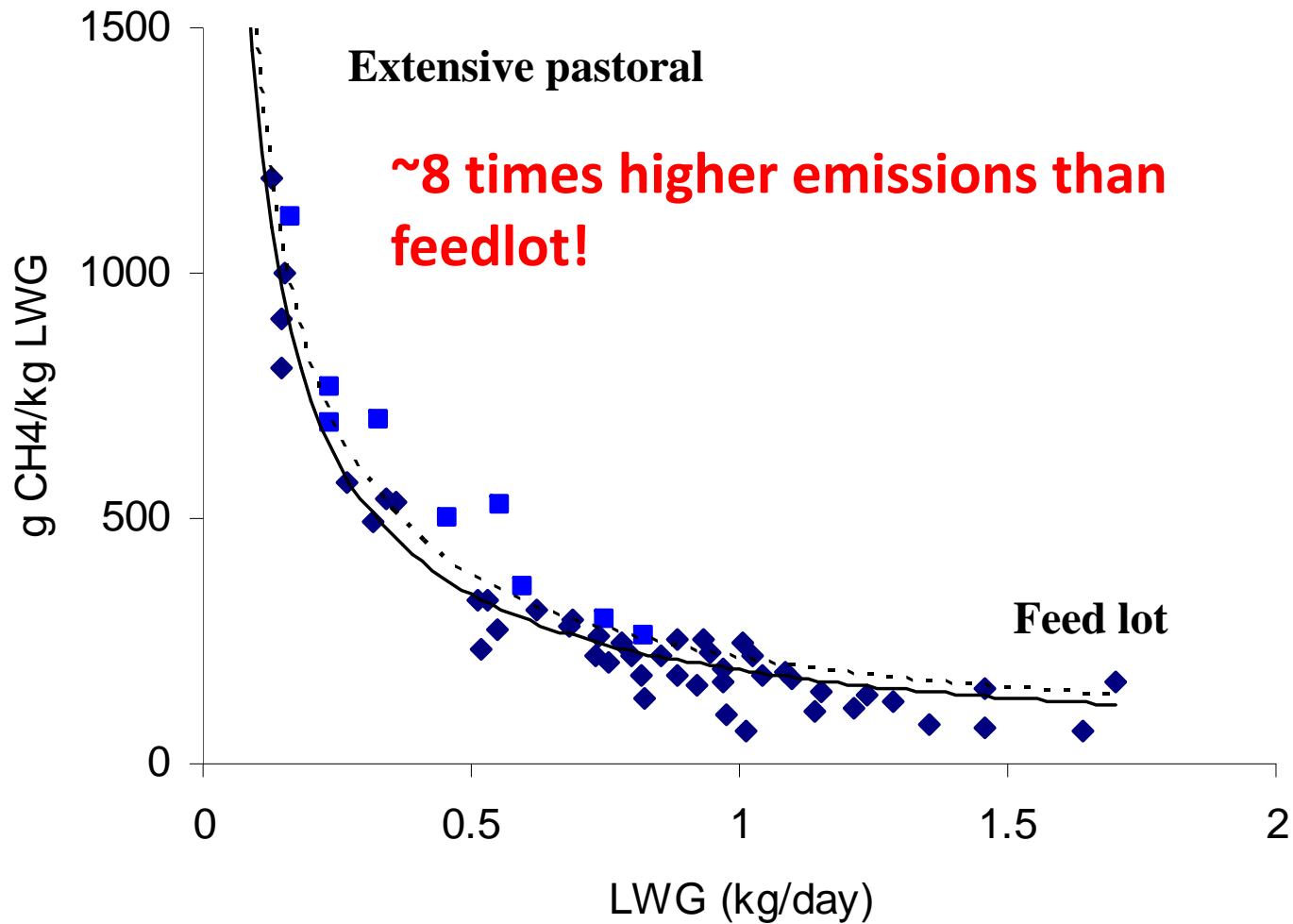
Whole Farm	Frit >
Beef Breed	Edit >
Sheep	Edit >
Crop Dry 1	Edit >
Crop Dry 2	Frit >
Summary	Frit >

Note that the calculator is based on relatively simple model farms. In reality there is huge variation within sectors and for identical activities

Beef cattle example

- The following graph shows the dramatic difference in emission liability between different beef production systems
- The slower cattle grow, the longer they live and the more methane they emit in total.
- You can see that a rangeland pastoralist is facing a far larger carbon bill than a farmer operating a feedlot – perhaps eight times greater.
- This example highlights how the CPRS and a carbon price would distort the economics of agriculture in Australia, destroying the viability of some farming systems and impacting land values.

Beef Cattle Methane /kg Live Weight Gain



Howden and Reyenga (1999)

Too many problems to address in this presentation

- Kyoto accounting rules include farm emissions but exclude the majority of farm sequestration
- Farm emissions can't be estimated accurately
- Huge variation across and within farm sectors
- No clarity about the “point of obligation” – who in the agricultural supply chain has to hold permits and account for emissions?
- Carbon plantation tax breaks are alienating agricultural land
- Even if agriculture is not covered, the CPRS will increase input costs – eg fuel, fertiliser

What is the Association doing

- Lobbying at all levels of government
- Collaborating with other organisations
- Attracting media attention to the problems
- Providing information and spreading the word

Spreading the word

Association CPRS
Committee Member,
Hamish Munroe,
promoting the
FarmGAS carbon
calculator

*“Emissions trading will
cost this farmer
\$75,000 pa”*

THE LAND

Casella Wines' \$10,000 toast to country women p84

500 out of water p...

CROSSING TRACKS STOP

CPR-Stress

PROOF: Emissions trading will cost this farmer **\$75,000 pa**

TERRY MILLER

POLLY

From 2000 to 200000 litres

From 2000 to 200000 litres

From 2000 to 200000 litres

What can you do?

- Write to politicians
- Meet with your local member
- Ring talk back radio
- Learn more!
- Help spread the following message

The CPRS threatens food security

- Food security is a national and global priority.
- The CPRS will increase the price of locally produced food, like meat, milk and bread and threatens to shut down whole areas of Australian agriculture.
- Australia a major source of global food supply. With increasing food scarcity, the world needs Australian farmers to keep farming.
- The CPRS policy will see many Australian farms converted to carbon plantations and agriculture driven to nations with lower environmental and food safety standards.
- **A vote for the CPRS is a vote for imported food**

Agriculture is the only sector to have reduced emissions

- Emissions from farms have been reduced more than 40% since 1990. ¹
- In contrast, emissions from power stations have increased 50% ¹
- Agriculture has already made a significant contribution
- Further abatement options for agriculture are either not available or are expensive to implement
- **There is huge potential to sequester carbon in certain agricultural soils, if funding is made available** ²

1. Including land clearing. Source: National Greenhouse Inventory, 2007

2. United Nations Food and Agriculture Organisation, 2008

Don't rush in before other nations

- The CPRS is an expensive and dangerous experiment with far bigger implications than the GST
- It will negatively affect the economy and Australia's ability to compete with nations not burdened by a carbon price
- It makes no sense to establish an Australian scheme in the absence of an international scheme that includes all our trade competitors on the same terms
- The CPRS is a trade policy issue and needs to be treated as such

Invest directly in abatement

- Instead of wasting billions establishing the CPRS bureaucracy, the government should invest directly in abatement and mitigation technology, with a focus on renewable energy
- It is hypocritical for government to approve additional fossil fuel power stations – currently five new ones are being considered and potentially many more
- We need open discussion of the full costs of continuing to rely on coal to produce electricity
- **Renewable energy offers viable alternatives to coal and can replace a significant proportion of peak-load power**

The obvious solution



The Prime
Minister
inspecting
utility scale
solar plant in
NSW

Photo
courtesy of
Ausra

- Australia can accelerate a transition to renewable energy and phase out fossil power

The CPRS and sustainability

- Cutting farm production and replacing farmland with carbon plantations is not a sustainable solution
- The CPRS has potential to decimate employment in many parts of regional Australia
- Those arguing for the coverage of agriculture:
 - don't consider the impacts on towns, communities and families
 - don't recognise the importance of agriculture to the social and economic fabric of Australia.
 - seem willing to allow Australian food and fibre to be replaced by foreign imports, which is what the CPRS will cause.

What we want

- **Investment certainty** – a decision now that agriculture will never be required to hold permits under a CPRS
- **Changes to accounting rules** - to accurately reflect the full farm carbon cycle and give farmers credit for abatement in soil and pasture
- **Direct funding** - for on-farm abatement and mitigation so we can continue to adapt to climate change & develop renewable energy opportunities
- **Increased research and development** - funding for sustainable farming technology and practices
- **Improved rail transport infrastructure** - to reduce reliance on fossil fuels
- **Direct investment in renewable energy technology**

A time for vision

- We need to encourage urban Australians to see beyond city boundaries and realise that agriculture is a foundation of society
- We need to encourage Government to see beyond the CPRS and realise that there are more effective ways to achieve sustainability objectives
- We urgently need to foster opportunities for sustainable agriculture and renewable technology that could create new jobs and bring new vitality to the rural economy and regional Australia