



EMISSIONS TRADING AND AGRICULTURE

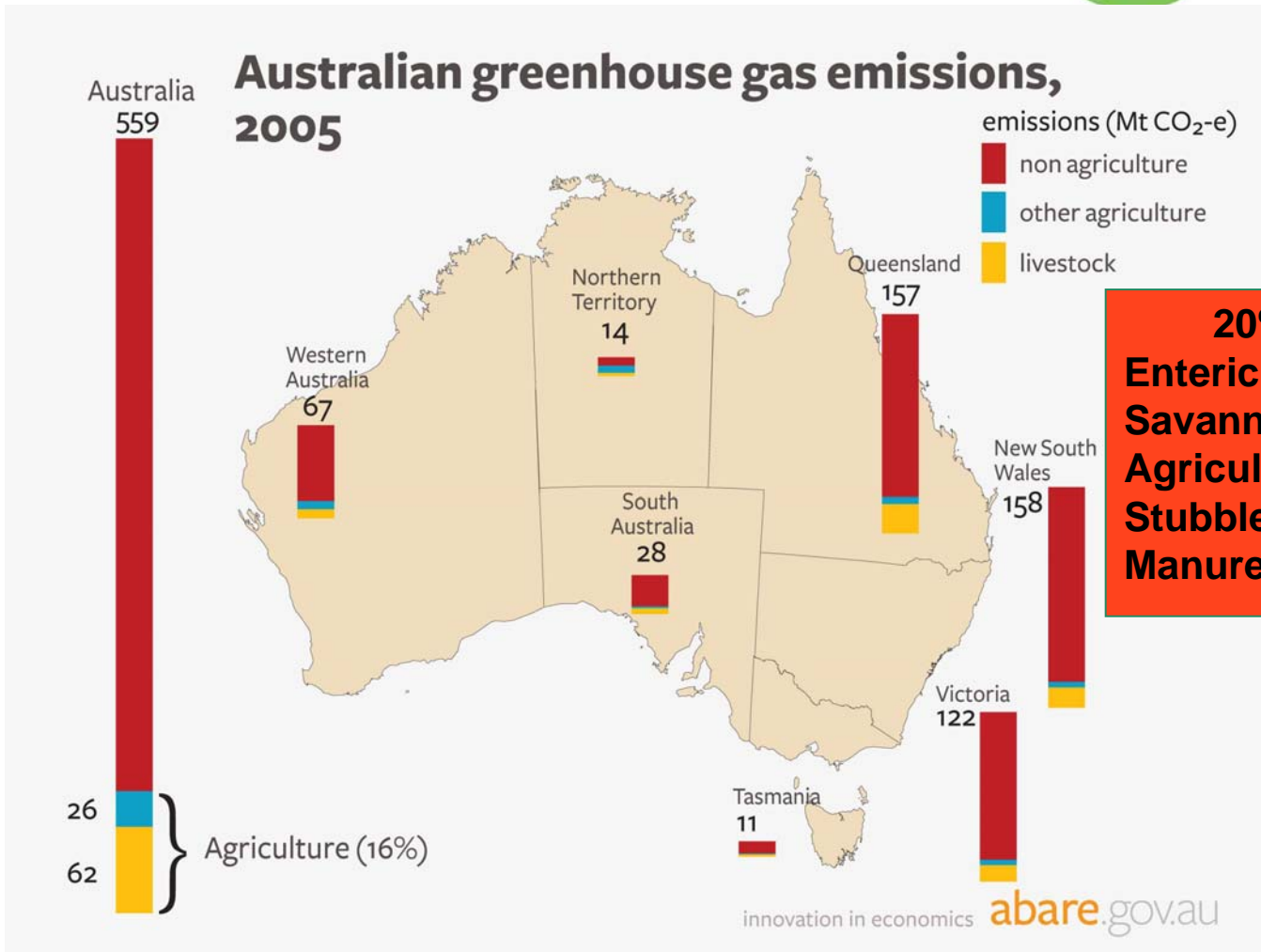
- Emissions from agriculture
- What does the Carbon Pollution Reduction Scheme (CPRS) Green Paper say on agriculture?
- How will it affect farmers?
- Preliminary modelling results.

AGRICULTURAL EMISSIONS



- 16% of Australia's emissions; second largest sector behind energy (50%). If include emissions from energy and transport this increases to 23%.
- 60% of Australia's methane emissions
- 85% of Australia's nitrous oxide emissions

AGRICULTURAL EMISSIONS



20% WA emissions:

- Enteric fermentation 48%
- Savannah burning 27%
- Agricultural soils 20%
- Stubble burning 1%
- Manure management 2%

AGRICULTURE HAS UNIQUE CHARACTERISTICS



- Diffuse sources and sinks
- Large number of farms with a diverse range of climates and production systems
- High variability in emissions
- Trade exposed industries, with 2/3 of total agricultural production exported
- Highly elastic consumer market
- The permanency of sinks and liabilities is difficult to guarantee

CPRS & AGRICULTURE



It is proposed from the start of the scheme stationary energy, transport, fugitive emissions, industrial processes and waste will be covered.

Forestry covered on a voluntary opt – in basis

A decision on agriculture in 2013. The Green Paper offers little guidance on rules for agriculture if it becomes a covered sector.

Offsets from agriculture will not be included

HOW WILL THE CPRS AFFECT FARMERS?



Agriculture not covered from commencement therefore no direct liability at this point in time.

There will be increased costs for inputs such as fertiliser, fuel and energy.

Point of obligation of reporting is a key issue raised in the Green Paper.

PRELIMINARY MODELLING RESULTS

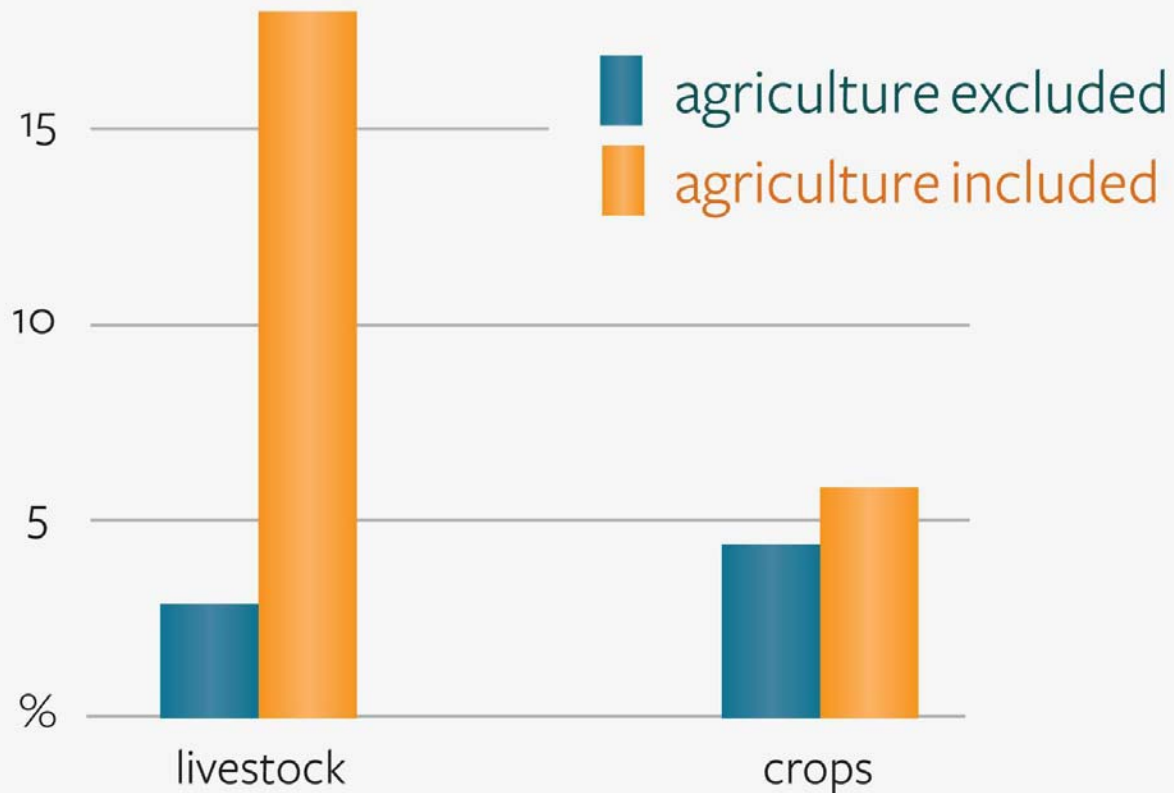


- ABARE
- Australian Farm Institute
- MIDAS
- Australian Treasury
- Cost of sequestration

PRELIMINARY MODELLING RESULTS - ABARE



impacts of a carbon penalty of \$40/t CO₂-e on agricultural production costs



PRELIMINARY MODELLING RESULTS - AFI



Reduce cash margins by between 3% and 9% if agriculture not covered.

If covered by an ETS this figure increases to between 4% and 191%.

With EITE assistance of 90% free permits this is reduced to between 3% and 25%.

PRELIMINARY MODELLING RESULTS – MIDAS



Metcalf and Kingwell MIDAS modelling:

\$20/t for carbon 15% to 25% reduction in profits if agriculture is covered, and 7 to 12% if agriculture is not covered

\$40/t for carbon 15% to 24% reduction in profits if agriculture is not covered

Free permit allocation reduces the cost burden to producers of being covered

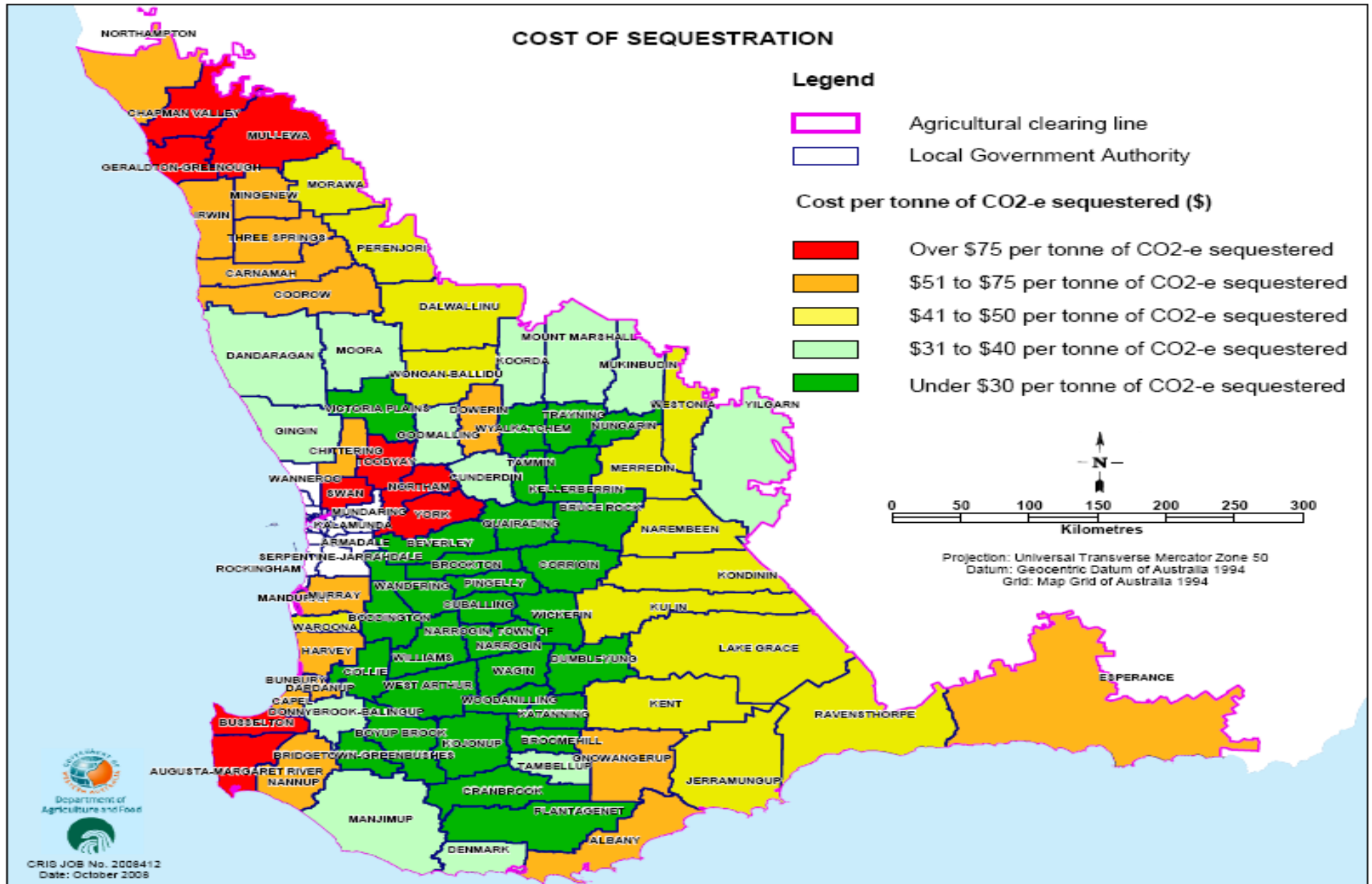
PRELIMINARY MODELLING RESULTS – TREASURY



Agriculture has more costly mitigation than other sectors

Forestry activity increases significantly with an additional 5 to 40 million hectares of forests by 2050

PRELIMINARY MODELLING RESULTS - KINGWELL & HARRIS ADAMS



CLIMATE CHANGE & LAND SUITABILITY FOR WHEAT

*Assumes no
technology trend.
Uses simple crop
yield estimation.*

*Source: van Gool &
Vernon, 2005. RM
Tech Rept 295*

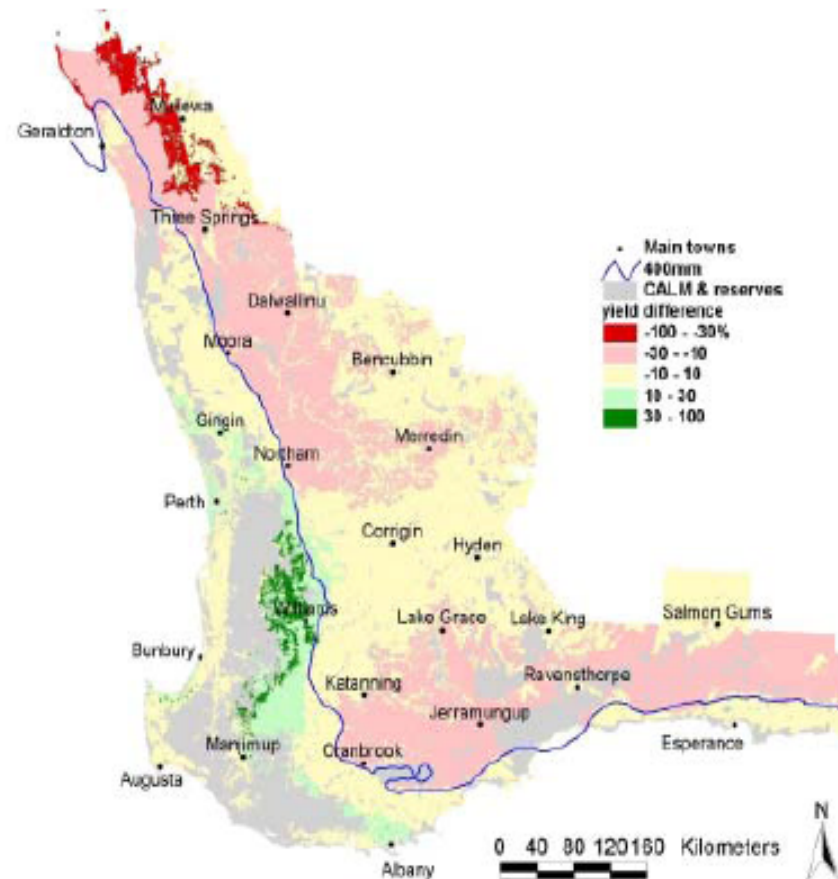


Figure 7: Wheat yield change over the 50 year scenario when current potential yield was greater than a third of the maximum potential yield achieved by the model (1600 kg/ha). Note the 400 mm isohyet is mean growing season rainfall, not the mean annual isohyet

OBSERVATIONS

- Decision on agriculture coverage to be made in 2013.
- Even if not covered, agriculture will be affected through increased input costs.
- There will be competition for land between agriculture and forestry due to the CPRS.
- Livestock producers will be most affected if covered by the CPRS
- Cropping more affected if not covered by CPRS
- Free permit allocation reduces the financial affect of the CPRS.



THANK YOU