Senate Standing Committee on Economics

ANSWERS TO QUESTIONS ON NOTICE

Treasury Portfolio

Additional Estimates – 25–26 February 2009

Question: aet 92

Topic: Methane Emissions

Hansard Page: E72-73 (25 February 2009)

Senator BOSWELL asked:

Senator BOSWELL—Thank you. I am interested in agriculture and I am sure Senator Milne is too. I will go to agriculture, as just one example. On page 9 of his report, Dr Fisher says:

In the case of agriculture, it is unclear how the large emission reductions would be achieved in the face of substantial increases in output relative to the level in 2008 as suggested by the sectoral results of the Treasury modelling. In a country where competitiveness will continue to depend on extensive rangeland agricultural production of sheep and cattle it is difficult to imagine that technology will become available in the near future to enable major reductions in methane output from rangeland agriculture.

I have to go out and explain this to farmers. I represent farmers and I have to go out and tell them how they are going to stop their cattle emitting methane. Can you tell me what advice I can give to farmers so that they can stop their cattle emitting methane?

Ms Quinn—I am no expert on precise emission reduction technologies in different categories of the economy—not cattle, sheep, kangaroos or anything else. We sought expert advice from people who know about this more than other people and I in Treasury know.

Senator BOSWELL—What is the expert advice so that I can pass it on to farmers?

Ms Quinn—Sure. The expert advice suggests that there are changes in land management and animal management that can reduce emissions. For example, we know that cows raised in feedlot processes produce lower emissions than those that are on long-range grazing land.

Senator BOSWELL—That is very interesting. But, say, you have one million acres on which there are 1,700 cattle; what do we have to do—go out and hand feed those 1,700 cattle every year?

Senator MILNE—Treasury cannot tell you about agricultural practices.

CHAIR—Yes. Senator Boswell, we do have a number of other senators who wish to ask questions. I do think agriculture is probably the place to ask that question.

Senator XENOPHON—I do have a supplementary directly related to that—although not in relation to flatulent cows—regarding the issue of modelling, which I think is an important issue arising here.

Senator ABETZ—Chair, perhaps I can raise one issue here—and it is a difficulty that I think we all face. If Senator Boswell had asked that question in Rural and Regional, they would have said, 'Oh, modelling on the ETS—

Senator BOSWELL—They did.

Senator ABETZ—you've got to go to Treasury.' You then go to Treasury and they say, 'Oh, well, on aspects of cows emitting methane, you have to go elsewhere.'

CHAIR—Senator, to be fair, Treasury did not say that; I did.

Senator ABETZ—No, but that is one of the difficulties. Treasury do not have the expertise, and we can understand that. Potentially Treasury might be kind enough to assist by 'farming out'—if I can use that term— the question to the appropriate department. Senator Boswell has more years under his belt in this place than I have but, even after 15 years, you often try to raise questions in one area only to be told that you should have asked them in another and that other committee is no longer meeting.

Senator MILNE—CSIRO will be on tomorrow; come and ask them.

Senator ABETZ—Perhaps I could just make that suggestion and the officials could do that.

Answer:

The Australian Treasury sought information on emission reduction possibilities from a broad range of experts both in Australia and internationally for inclusion in the modelling undertaken for the Government's *Australia's Low Pollution Future: The Economics of Climate Change Mitigation* report. Below are a set of references which include summaries of the potential abatement opportunities in the Agricultural sector.

Garnaut, R., 2008. *Garnaut Climate Change Review Final Report*, Cambridge University Press, Port Melbourne.

Ford, M., Gurney, A., Tulloh, C., McInnis, T., Mi, R. and Ahammad, H., 2009. *Agriculture and the Carbon Pollution Reduction Scheme (CPRS): economic issues and Implications,* Australian Bureau of Agricultural and Resource Economics Issues Paper 09.2, Canberra.

Gurney. A., Ford, M., Low, K., Tulloh, C., Jakeman, G., Gunasekera, G., 2007, *Technology Toward a Low Emissions Future,* Australian Bureau of Agricultural and Resource Economics Research Report 07.16, Canberra.

F. de la Chesnaye and J. Weyant and (eds). Multi-Greenhouse Gas Mitigation and Climate Policy. *The Energy Journal*, Special Issue, 2006.
http://www.stanford.edu/group/EMF/projects/projectemf21.htm.

The Australian Government recognises the need to improve the scientific understanding of abatement options in the agricultural sector. The Australian Government has allocated funding to help primary producers adapt and manage the impacts of climate change and maintain their productivity through Australia's Farming Future (AFF), providing $130 million over four years (2008-09 to 2011-12).

- Under this initiative the Government is exploring options and working with producers to reduce their emissions while increasing productivity. Expenditure has been approved for livestock emissions research, with Climate Change Research Program (CCRP) funding supplemented by funds from research organisations and industry bodies.

- The $26.8 million Reducing Emissions from Livestock Research Program ($11.25 million from the CCRP over four years) is aimed at developing knowledge, research and monitoring tools, and management strategies of direct relevance to cattle and sheep producers to assist them to reduce their greenhouse gas emissions without loss of productivity.

- Projects under this program will work on abatement technologies and farming systems with low net emissions and will include research into:

  – management of livestock farming systems to reduce emissions;

  – genetic approaches such as selective breeding to develop low emitting animals;

  – manipulating digestive processes to lower emissions, through for example, dietary supplements and alternative feeds, and the use of chemical or biological controls of bacteria in the stomach; and

  – improving management of waste.

- Projects of specific relevance to rangelands producers include:

  – *Reducing methane emissions by supplementing feed with dietary lipids* – to investigate lipid-based feed additives (oils) that can be made available to producers in the short term to reduce methane emissions and increase productivity. This project will concentrate on cattle breeds used in northern Australia; and

  – *Mitigation of methane emissions from the northern Australian beef herd* – to investigate the potential of different legume varieties to manage emissions in northern Australia.

The Committee should also be aware of research being undertaken by the CSIRO through the Agricultural Sustainability Initiative to find practical ways to reduce emissions from farming, bushfires and other non-energy sources.