

Senate Standing Committee on Economics

ANSWERS TO QUESTIONS ON NOTICE

Treasury Portfolio

Budget Estimates, 2 June – 4 June 2009

Question: bet 81

Topic: Employment Impacts of the ETS

Hansard Page: E95

Senator Boswell asked:

Senator BOSWELL—Has the Treasury undertaken analysis on a short- to medium-term basis that attempts to model employment impacts of the ETS?

Ms Quinn—Yes.

Senator BOSWELL—You have modelled that? I do not think you had. What was the outcome?

Ms Quinn—Once again, I do not have those numbers with me. I am happy to take that question on notice.

Senator BOSWELL—I will ask you again because this is important. I cannot see anywhere where you have modelled this. I do not believe you have modelled it. I will say it again, because I do not want to get you into trouble. Has the Treasury undertaken analysis on a short to medium term basis that attempts to model the employment impacts on the ETS?

Ms Quinn—Yes.

Senator BOSWELL—Can I put on notice what the results of that modelling was?

Ms Quinn—Yes.

Answer:

The analysis included in the Government's *Australia's Low Pollution Future: The Economics of Climate Change Mitigation* report draws on three computable general equilibrium models and a further five sector-specific models. The three CGE models used in the report make different assumptions about the short-run dynamics of the labour market.

- At one end of the spectrum, the Global Trade and Environment Model assumes that labour and capital are perfectly mobile across industries, at all times and at no cost.
- At the other end of the spectrum, the G-Cubed model assumes immobility of capital, slow adjustments to wages and liquidity constraints, and includes partial forward-looking behaviour.
- The Monash Multi-Regional Forecasting (MMRF) model assumes capital, labour and abatement technologies take time to adjust, capturing the majority of short-term adjustment cost mechanisms in the economy.

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- In particular, the MMRF model assumes that it takes between seven and ten years for the labour market to adjust following an economic policy change.
- All three CGE models assume that in the long run, in the absence of any further change in policy, real wages will adjust such that aggregate employment levels return to their pre-policy levels.

All three CGE models have been developed over time by independent researchers and have been used extensively in peer-reviewed literature. The Government's report drew on, and reported results from, a suite of economic models to encompass the wide variety of academic views about how the Australian economy responds to policy changes.

The ALPF report found that Australia's aggregate economic costs of mitigation are small, although the costs to sectors and regions vary. Growth in emission-intensive sectors slows and growth in low- and negative-emission sectors accelerates.

The distribution of future employment growth will reflect the structural shift necessary for the economy to transition to a low emission future. In general, employment shifts between industries will broadly reflect movements in industrial output.

In all scenarios modelled, in all models, output continues to grow over the years to 2020, delivering substantial increases in real wages and employment from today's level.

- Australia's real GNP per capita would be one tenth of one percentage point slower than it would be without emission reductions from 2010 to 2020.
- Consistent with the output estimates, employment growth across the CPRS scenarios and the suite of models is between zero and one tenth of one per cent slower over the period to 2010 to 2020.