Senate Select Committee on the Scrutiny of New Taxes

ANSWERS TO QUESTIONS ON NOTICE

Treasury Portfolio

Inquiry into a carbon tax

23 September 2011

Question: 1

CHAIR: Talking about putting accurate information into the public domain, last time you were here you answered a question from Senator Thistlethwaite around some assertions that were made by Mr Ergas, namely, that the marginal abatement cost curve 'provides abatement like manna from heaven—that is, at no cost'. You made a pretty firm statement to say that 'that statement is completely inaccurate'. I have here some information that was provided to Mr Ergas since then and it says, and I am quoting here from Treasury advice:
"In the GTEM model the marginal abatement cost curves are used for the fugitive and industrial process emission sectors—
and through these MAC curves they do not result:
… in a resource cost for the industry concerned. This default was used to the results presented in the recently released Strong Growth Low Pollution report, the previous Australia's Low Pollution Future report and previous carbon pricing reports …"
So it sounds as if Mr Ergas was in fact correct.

Ms Quinn: I think if you reflect back on the Hansard of my evidence before the previous committee hearing I noted in terms of the analysis for the Australian economy, which was the predominant point of the article that Henry Ergas was doing, that that assumption was incorrect. I also said that it was incorrect to suggest that the economic costs for Australia would be higher if you had costed MACCs on other elements. If you read the rest of the answer that you have just partially read out, that is what the answer says.

CHAIR: It is a long answer.

Ms Quinn: If you read the last sentence of that answer, you will see that it is a conservative assumption not doing the marginal abatement cost curves in the international modelling the same way as we do domestically.

CHAIR: If it is a conservative assumption, why wouldn't you just transparently release all of the detail underlying it. You have clearly used two main models as well as a series of other models.

Ms Quinn: That information is in the public domain in the report about how we do the marginal abatement cost curves.

CHAIR: Except it does not say in the report that you did not actually. You assumed that there was no resource cost—

Ms Quinn: It does provide that information about how the marginal abatement cost curves are costed.

CHAIR: Except it does not say that it results in not having a resource cost for the industry concerned with the GTEM model.

Ms Quinn: It does say that. It is public information.

CHAIR: Can you on notice then give me some indication on where it says that?

Ms Quinn: Sure.

Answer:

The functional form of the marginal abatement cost (MAC) curves for fugitive and industrial process emissions in GTEM is specified on page 162 of the *Strong growth, low pollution: modelling a carbon price* (SGLP) report.

The functional form of the MAC curves in the MMRF model is specified in page 177 of the SGLP report, where, different from GTEM, it is clearly documented that the MAC curves are costed in MMRF.

Modifications to GTEM made for the SGLP report are described in page 140 of the SGLP report.

The fact that the marginal abatement cost curves are not costed in GTEM is explicitly stated in page 159 of the *Australia's low pollution future: the economics of climate change mitigation* (ALPF) report. There was no change made to the modelling of MAC curves in GTEM between the ALPF report and the SGLP report.

Question: 3

Senator CAMERON: Have you seen ads by the Australian Trade and Industry Alliance?

Ms Quinn: I have seen some.

Senator CAMERON: They make some claims in terms of economics. They say that in the first six years in Europe the cost of the carbon reduction scheme was $4.9 billion, and that in Australia over the first six years the cost will be $71 billion. Has Treasury looked at this and come to any conclusion about it?

Ms Quinn: This question was raised on Wednesday morning in the joint committee on the legislative program, and Blair Comley, the Secretary of the Department of Climate Change and Energy Efficiency, provided a comprehensive answer, the short version of which is that that analysis is looking at the revenue raised by two schemes, not the economic impact of the two schemes, and it is not appropriate to look at the revenue raised to then draw the conclusion about the impact on the economy.

Senator CAMERON: So would it be appropriate, given that we will not have the department back again—I do not think we will, will we, Chair?

CHAIR: No.

Senator CAMERON: Given that it has got economic impacts and economic arguments put on it, could you provide Blair Comley's response to the committee?

Senator BOSWELL: It will be in Hansard.

Ms Quinn: We could certainly take the question on notice.

Senator CAMERON: I want it on the record in this committee. I would be happy for some advice from the secretary or the chair on how we do that, but I would like it on the record here.

CHAIR: I think they have taken it on notice.

Ms Quinn: We can take the question on notice and liaise with the department.

Senator CAMERON: I might just leave it there.

Answer

An excerpt of the Secretary of the Department of Climate Change and Energy Efficiency Mr Comley's response provided on Wednesday morning (21 September 2011) to the Joint Select Committee on Australia's Clean Energy Future Legislation is provided below.

"Mr Comley: Let us first go to the question of the EU versus the Australian scheme, or any other Australian scheme you might have. I think this is quite important. The first point to

make is that those claims purport to rely on revenue as a measure of what the impact of a scheme is. I want to choose my words carefully here.

Senator CORMANN: No, give it to us straight!

CHAIR: No, he has to choose his words carefully, because he is trying to direct them to the bill, and I think that is reasonable.

Mr Comley: I am choosing my words carefully, because I think the idea that you would analyse a piece of legislation in terms of the amount of revenue raised as a measure of the impact on the economy is a quite extraordinary way to seek to analyse something. Perhaps I could give you an example. If I turned around tomorrow and banned all coal fired power generation by regulation, I would raise no revenue. I do not think any of us would support the idea that there is therefore no impact on the economy as a result of the decision to ban coal fired power stations. So the idea that the amount of revenue raised is a measure of the economic impact is something that is not supported.

The second point is that if you asked most economists how they would measure the impact of a set of measures on an economy they would typically say that they would consider the coverage—that is, how broadly does the measure apply across the economy?—as well as the effective carbon price of that measure. If I was using a straight economy-wide carbon price and I was thinking about how significant the measure being taken are, I would start looking at the price and the coverage, and then I would have to take into account what is done with the revenue—for example, is it redistributed?

The claims made by the ATIA make quite a strange comparison. They do not compare like with like, on a number of bases. They start off by taking a trial period of the EU emissions trading scheme and then they net off all the permits that are allocated for free in calculating the revenue. All the economic analysis that has been done says that the economic impact of a scheme is not so much to do with how you allocate the permits but is a matter of the price of those permits and how broad the coverage is. They end up with a very small number for the first phase of the EU scheme because a lot of permits were allocated for free. But I think it is fairly well known in the analysis of the EU scheme that whilst permits were allocated free to electricity generators they increased their prices to consumers in the same way as if they had paid for the scheme. So the economic impact was measured by the price of permits, not the way they were allocated.

The other curious thing that they do in those claims is that when they calculate the revenue raised by the Australian proposed scheme they do not actually net off permits allocated for free. So they take a measure, which is the total value of the permits in the Australian scheme, but in the EU scheme, for a different period—which was explicitly a trial period—they net off all permits allocated for free.

If you were to try to do a comparison of the equivalent market size over the same period—the three years in the EU scheme of 2013-15—and the Clean Energy Future package, the number for the EU ETS would be around 145 billion and the number for the Clean Energy Future package would be around 27 billion—if you were actually doing a like-for-like comparison. You would have the EU scheme being more than five times the size of the Australian scheme in the overall permit allocation on a like-for-like basis.

I think the reason that these claims are a little unusual is that they are making comparisons of the first phase of the EU scheme, which was explicitly a pilot phase. They are netting off all permits, even though those permits have an economic consequence, and then they are comparing it to the Australian scheme without netting off the permits that are allocated free of charge as well. When you put all those things together, to my mind the right comparison about whether a scheme has a significant impact on an economy should be with coverage and carbon price, or effective carbon price. These comparisons certainly do not do that."

Question: 4

CHAIR: I have a final few questions in relation to your GST modelling. Going back to the 2000-01 budget papers, at the time when the GST and the impact of the GST on the economy was modelled, on page 3-19 Treasury wrote—you can take my word for it but check it if you want—that in the longer term the overall effect of the new tax system measures on the CPI was likely to be around 2¼ per cent.

Dr Gruen: You said 'in the longer term'?

CHAIR: Yes. But on page 124 of the original carbon tax modelling, Treasury states that the effects of the carbon tax are small compared with the effect of the new tax system introduced in July 2000 which raised consumer prices by 2½ per cent. Can you confirm then that Treasury underestimated the actual impact of the GST by about 10 per cent?

Dr Gruen: I think we had better take that on notice. I am not sure whether there was later work that suggested it was 2½ rather than 2¼. I am just not aware.

CHAIR: The context of the question obviously is that if Treasury does end up underestimating household impact of the carbon tax by 10 per cent, as we believe on the basis of your figures that Treasury did in relation to the GST, that would then wipe out the 20c better off that the average person would be under the carbon tax, wouldn't it?

Dr Gruen: I think we had better take this on notice.

Answer:

The New Tax System (TNTS, of which the Goods and Services Tax was a major component) was estimated to have increased the Consumer Price Index (CPI) by 2½ per cent over the course of 2000-01 (Economic Roundup, Autumn 2003). Prior to the introduction of TNTS, the short run increase in the CPI was estimated to be around 2 ¾ per cent over the same period. This was equivalent to 2½ per cent after taking account of the move by the ABS to the 14th series CPI, which had the effect of lowering the original estimated impact by ¼ of a percentage point (Economic Roundup, Autumn 2003).

As stated in Budget Paper Number 1, Statement 3 (pages 3-18 to 3-19) of the 2000-01 Budget, the estimated increase of 2¼ per cent in the CPI was a long-run estimate that factored in measures forming part of TNTS that were to be implemented after 30 June 2001, including in 2001, 2002 and 2005, and long run reductions in capital costs. The impact of TNTS on the CPI in the long run has not been re-estimated following the full introduction of the policy.

Question: 5

CHAIR: The benchmark in relation to emissions is always compared to the 'business as usual' baseline trend, which is essentially comparing apples with pears. I have made my point. I just want to very quickly refer you to a submission that Treasury made to the Senate economics committee inquiry into the impact of supermarket price decisions on the dairy industry. Treasury states:
The broader NCP— national competition policy— reforms brought substantial benefits to the Australian community and increased the economy's resilience to economic shocks. Under that point, Treasury supports its completion by pointing to Productivity Commission analysis which shows that those reforms have 'served to permanently increase Australia's GDP by 2.5 per cent'. A 2.5 per cent increase in GDP is substantial benefit, yes?

Ms Quinn: Yes.

CHAIR: I refer you, then, to your updated modelling which was released this week. It showed that under a carbon tax Australia's GDP would be 2.8 per cent lower by 2050 than it otherwise would be, but on page 2 of your modelling you say: 'The costs of cutting pollution and transforming the Australian economy to clean energy sources through carbon pricing are modest.' How can a 2.5 per cent increase in GDP due to national competition policy reforms be described as substantial part 2.8 per cent decrease in GDP due to a carbon tax be described as modest? What is your definition of modest and what is your definition of substantial?

Ms Quinn: The modelling that we have undertaken for climate change suggests that it is around 0.1 percentage points off a year on GDP and gross national income. In the context of an economy growing at around trend levels, we judge that to be a modest number. So it depends a little bit on the timing. You have talked about level differences. The 2.8 per cent is over 40 years. In terms of the Productivity Commission analysis, you are quoting from a report that I am not familiar with and I am not sure of the time horizon.

CHAIR: Maybe you could take it on notice and give us your perspective on it.

Ms Quinn: A change of 2.5 per cent in one year would be significant.

CHAIR: Thank you. Take it on notice.

Answer

The Productivity Commission found that productivity and price changes in selected key infrastructure sectors over the course of the 1990s increased Australia's GDP by 2.5 per cent (page XVIII, *Review of National Competition Policy Reforms,* Productivity Commission, 2005).

The Treasury modelling undertaken for the Government's *Strong Growth, Low Pollution: modelling a carbon price* (SGLP) report finds that carbon pricing will cut Australia's emissions by 80 per cent compared to 2000 levels while GDP will grow at an average rate of

2.6 per cent per year with carbon pricing compared to 2.7 per cent per year without carbon pricing. The estimate of 2.8 per cent referred to in the question is the cumulative effect on GDP over almost four decades to 2050, a substantially longer timeframe than the Productivity Commission result.

Furthermore, the Treasury modelling undertaken in the SGLP report does not take into consideration the economic, environmental and social impacts of climate change itself and the benefits of reducing global emissions. The costs of climate change mitigation need to be evaluated alongside these considerations. The Productivity Commission's estimated gains from productivity and price changes in selected infrastructure industries were based on removing impediments to efficiency and enhancing competition.