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Senate Standing Committee on Economics
PO Box 6100
Parliament House
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Dear Senators

Additional Estimates Hearings – 23 February 2011 - Clarification

The Department of Innovation, Industry, Science and Research appeared before the Senate Standing Committee on Economics at the Additional Estimates Hearings on 23 February 2011.

During the Hearings on 23 February, Senator the Hon Richard Colbeck asked about “the COAG decision to go to a six-star rating for mandatory energy efficiency and how that decision was made in the context of the cost-benefit analysis that was done in the RIS, which indicated that that would have a negative cost benefit of \$440 million” (Proof Hansard, E58).

In response, I said that the cost benefit analysis showed overall a marginal cost-benefit analysis for introducing the measures. It was positive for increasing the energy efficiency regulations for commercial buildings. I went on to say that across the whole of Australia it was marginal for residential.

On reviewing the Hansard, I thought it useful to provide some clarification on the issue of the regulatory impact statement of the six-star energy efficiency measures for residential buildings.

The Final Regulation Impact Statement for Decision, for the Proposal to Revise the Energy Efficiency Requirements of the Building Code of Australia for Residential Buildings – Classes 1, 2, 4 and 10, December 2009 (‘the RIS’) includes Table 4, at page 20, on the present value of net impact, economy wide, which I have attached to this letter.

On net impact, the RIS comments:

“In net terms, under a 5 percent discount rate, the community will gain a net estimated benefit from all the provisions of approximately \$300 million in present value terms, with a benefit-cost ratio of 1.13... However, under a 7 percent discount rate, as estimated in the Final RIS, net benefits are reduced to net costs of \$259 million and a BCR of 0.88.” (p 19)

On discount rates, the RIS comments:

“There is no necessarily correct discount rate. What is clear from the analysis above is that the results are highly sensitive to the discount rate used. Over a plausible range of discount rates, the benefits change from positive to negative.” (p 23)

In conclusion, the RIS comments:

"The initial estimates provided in the Consultation RIS indicate a small potential net economic gain nationally... Following direction from the Office of Best Practice Regulation on the methodology ... [t]he final RIS has utilised a 7% discount rate instead of the 5% ... used in the Consultation RIS. The impact of this change is to alter the final result from an estimated benefit to cost ratio of 1.13 to 0.88, indicating likely net costs to be imposed from the proposed changes."

"Overall, based on the evidence as it now stands, the proposal outcomes point towards ... a strong possibility of imposing net costs nationally." (p 25-6)

The COAG Best Practice Regulation Guidelines say that decisions about whether regulatory action is in the public interest should be informed by an assessment of the effectiveness of the proposed action in meeting the identified objective, and the costs and benefits of the proposed action for the community as a whole.

The objective agreed by COAG as part of the National Strategy for Energy Efficiency was to set higher energy efficiency standards to deliver a substantial growth in the number of highly energy efficiency homes and buildings. Specifically, Australian Governments agreed to "increase minimum energy efficiency requirements in the 2010 version of the BCA, so that new buildings and major renovations must achieve a six-star rating or equivalent for thermal performance of the building shell, noting that changes are subject to regulatory impact analysis." Energy efficiency requirements for hot water systems and lighting were also part of the National Strategy, again subject to regulatory impact analysis.

The results of that regulatory impact analysis are that the benefit to cost ratio of introducing the residential energy efficiency measures is 1.13 at a 5% discount rate and 0.88 at a 7% discount rate.

The RIS analysis only accounted "for new buildings that are built within 10 years of the adoption of the new standards assumed to occur in 2011" (p 17). In discussing discount rates, the RIS comments that "if the effects of the regulation are being evaluated at a social level, where there is potential for benefits accumulating for a number of years, as well as to future generations, there is scope for these benefits to hold a greater value..." (p 23)

Informed by the RIS and mindful of the COAG commitment as part of the National Strategy for Energy Efficiency, the Building Ministers' Forum, comprising Commonwealth, State and Territory Ministers responsible for building regulation policy, took the decision to proceed with the introduction of the measures. The Minister for Innovation, Industry, Science and Research, Senator the Hon Kim Carr and the then Acting Environment Minister, Senator Penny Wong, announced the decision in a joint media release on 22 January 2010.

Yours sincerely



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11 April 2011

4 Present value of net impact, economywide, \$million

	5 per cent discount rate		7 per cent discount rate	
	Net impact	Benefit Cost	Net impact	Benefit Cost
	\$ million	Ratio	\$ million	Ratio
		BCR		BCR
Class 1				
<i>Thermal</i>				
<i>performance</i>	-4	1.00	-441	0.78
<i>Lighting provisions</i>	230	na	165	na
<i>Water heating^a</i>	11	3.69	11	3.69
Total	237	1.11	-265	0.87
Class 2				
<i>Thermal</i>				
<i>performance</i>	46	1.25	-3	0.98
<i>Lighting provisions</i>	13	na	9	na
Total	59	1.32	6	1.03
Residential buildings				
<i>Thermal</i>				
<i>performance</i>	42	1.02	-444	0.8
<i>Lighting provisions</i>	243	na	174	na
<i>Water heating</i>	11	3.69	11	3.69
Total	296	1.13	-259	0.88

^a Water heating benefits accrue only to those States that do not currently have water heating provisions.

Notes:

Thermal performance measures include the impact of requiring smaller appliances. A BCR for lighting provisions cannot be estimated, as it has been estimated that the provision will involve zero costs.

Thermal performance net benefits include \$259 million of net benefits accruing through electricity network sourced benefits.

Source: CIE estimates based on data provided by ABCB (refer appendices for details).

Source: The Final Regulation Impact Statement for Decision, for the Proposal to Revise the Energy Efficiency Requirements of the Building Code of Australia for Residential Buildings – Classes 1, 2, 4 and 10, December 2009 ('the RIS'), Table 4, page 20.