

Senate Standing Committee on Environment and Communications
Legislation Committee
Answers to questions on notice
Environment portfolio

Question No: 199
Hearing: Supplementary Budget Estimates
Outcome: Agency
Programme: Clean Energy Regulator
Topic: EMISSIONS REDUCTIONS IN THE ELECTRICITY SECTOR
Hansard Page: N/A
Question Date: 29 October 2014
Question Type: Written

Senator Back asked:

The Renewable Energy (Electricity) Act 2000, has the following objectives:

The objects of this Act are:

- (a) to encourage the additional generation of electricity from renewable sources;
- (b) to reduce emissions of greenhouse gases in the electricity sector; and
- (c) to ensure that renewable energy sources are ecologically sustainable.

I referred to question number 92 regarding whether the CER would investigate emissions reductions in the electricity sector to which the CER replied that they would not comment and are not required to conduct studies into the impacts of the legislation it administers. When asked to advise again on this position, Ms Munro referred to the Government's Review of the RET and stated:

"They said that the renewable energy target has largely met its objectives and that includes an assessment of the emissions reduction that can be associated with the operation of the target to date and that can be forecast for it under current - and indeed some alternative - policy settings."

From the Executive Summary of the Review:

With the renewables industry now established in Australia, the main rationale for the RET hinges on its capacity to contribute towards the Government's emissions reduction target in a cost effective manner. However, the RET is a high cost approach to reducing emissions because it does not directly target emissions and it only focuses on electricity generation. It promotes activity in renewable energy ahead of alternative, lower cost options for reducing emissions that exist elsewhere in the economy. In the presence of lower cost alternatives, the costs imposed by the RET are not justifiable.

And further clearly states in the body of the text:

The second major objective of the REE Act is to reduce CO₂-e emissions from the electricity sector. The RET reduces CO₂-e emissions by providing an incentive for additional renewable energy which displaces electricity that would have been generated from fossil fuels. The CO₂-e emissions reductions achieved will depend on the emissions-intensity of the fuel source that would have otherwise been used. This counterfactual scenario cannot be observed, so the level of abatement can only be estimated, not measured.

And from the ACIL Allen Modelling Executive Summary:

"The RET policy delivers emissions abatement through displacing fossil fuel based generation with renewable generation."

This is the underlying assumption on which the emissions modelling is based, that 1 MWh of renewable generation displaces 1 MWh of fossil-fuel. However, the assumption is fundamentally incorrect.

- 1) In light of the above, will the CER please advise their updated position again?
- 2) Has the CER checked the apparent discrepancies between the theoretical desktop studies and the data I mentioned in question 92? (Refer to the peer-reviewed paper by Paul Miskelly, Wind Farms in Eastern Australia).

Answer:

1. The *Renewable Energy (Electricity) Act 2000* does not require the Clean Energy Regulator to calculate the amount of carbon dioxide equivalent (CO₂-e) abatement from the Renewable Energy Target and the Clean Energy Regulator does not have all the necessary data to make such a calculation.
2. No. The Clean Energy Regulator has neither the accountability nor the resources to review such papers. We note from the abstract that the paper addresses the topic of reliability and network integration which in the domain of the Australian Energy Market Operator. It would not be possible to draw any direct conclusion from the analysis in the paper about the level of emissions reduction that has been achieved by the Renewable Energy Target.