

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

Question No: 95

Hearing: Supplementary Budget Estimates

Outcome: Outcome 7

Programme: Renewables Projections & Governance Division

Topic: Renewable Energy Target

Hansard Page: N/A

Question Date: 27 November 2013

Question Type: Written

Senator Urquhart asked:

The Climate Change Authority found that reducing the target to a real 20% would not increase electricity prices but would result in an extra 131 million tonnes of emissions in the years to 2030, is this a robust finding? How does the cost of the Renewable Energy Target relate to the presence of a carbon price? Does the carbon price make the compliance costs of the Renewable Energy Target cheaper? How much greater was renewable energy output in 2012/13 in the National Electricity Market from the levels in 2011/12?

Answer:

The Climate Change Authority's (CCA) finding referred to in this question is based on electricity market modelling. The modelling estimated that reducing the legislated annual targets under Renewable Energy Target (RET) scheme to deliver 20 per cent of electricity demand in 2020 based on latest forecasts would result in a total of 119 million tonnes of additional emissions from the electricity sector for the period 2012-13 to 2030-31 (page 55 of the CCA RET Review Final Report). As with any modelling exercise, the results are dependent on the assumptions and variables used to project outcomes under different scenarios.

Large-scale Generation Certificate (LGC) prices under the RET represent the top up on wholesale electricity prices required to make large-scale renewable energy projects commercially viable. In general, carbon taxes result in higher wholesale electricity prices, meaning large-scale renewable energy generation projects may be commercially viable at lower LGC prices. Conversely, a lower or zero carbon tax would result in higher LGC prices.

The carbon price does not affect the administrative cost for companies in complying with the RET scheme. With respect to LGC prices, the CCA modelling indicated that LGC prices are generally higher in the absence of a carbon tax.

In 2011-12, renewable energy generation in the National Electricity Market (NEM) was 19.9 terawatt hours (TWh). In 2012-13, renewable energy generation in the NEM was 24.8 TWh, an increase of around 5 TWh (source: information sourced from the NEM Review Tool, Global Roam Ltd).