Carbon price expectations, policy uncertainty and energy sector investment

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Electricity is key for domestic abatement.
Carbon pricing: changes in merit order

Figure 5-3 Indicative Short-Run Marginal Costs by Fuel Type Pre- and Post-Carbon Pricing

Source: AEMO “Carbon price – market review” Nov 2012
Carbon pricing: falling emissions intensity of power supply

Figure 7-1 Daily Average NEM Carbon Dioxide Equivalent Intensity Index 1 January – 13 October 2012

Source: AEMO “Carbon price – market review” Nov 2012
Power demand flat

Data: BREE 2012 Australian energy statistics data
Carbon prices

All prices are in nominal A$. EUA: EU Emissions Allowances for Dec 2012 delivery (2008-11) and Dec 2013 delivery (2012-13). CER: Certified Emissions Reductions for Dec 2012 delivery (2008-11) and Dec 2013 delivery (2012-13). Price data from PointCarbon. Exchange rate data from Deutsche Bank and Reserve Bank of Australia. Last data point is 23 January 2013. Price ceiling assumes an assessed market price of A$10/tCO2 in mid-2015; ceiling rises at 7.5% nominal per year (5% real, assuming 2.5% inflation). Price floor assumes an assessed market price of A$10/tCO2 in mid-2015; ceiling rises at 6.5% nominal per year (4% real, assuming 2.5% inflation). The price floor was removed from Australia’s Clean Energy Future legislation and replaced with a quantitative limit on CERs and linking to the EU ETS.

Australia price ceiling (if market price A$10/t)

Australia fixed price

California

EUA

CER

Australia planned price floor (no longer part of legislation)
CCEP Australia carbon pricing expert survey, June 2012

Survey period: 4-19 June 2012. Internet-based anonymous survey.

Report available at ccep.anu.edu.au, and see AusEcReview paper
Will there be a carbon price?
Yes-No-Yes

- 0%
- 10%
- 20%
- 30%
- 40%
- 50%
- 60%
- 70%
- 80%
- 90%
- 100%

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<th>No or Zero Carbon Price</th>
<th>Positive Carbon Price</th>
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Legend:
- Black: No carbon price or zero carbon price
- Green: Positive carbon price
Probability of repeal
Liable entities think repeal much more likely
Mean expected price, Australia

“not a clue”
Policy uncertainty has big costs

Has biased investment towards inefficient power generation options eg OCGT
Could restrict availability of capital to the electricity sector as a whole
Will only be resolved once a bipartisan agreement on carbon pricing is achieved