

RET: an efficient solution to the wrong problem?

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Australia must rapidly transform its power sector to meet its emission reduction targets. This means large-scale change in our electricity generation sector. According to Treasury modelling, renewables will need to grow from less than 10 per cent market share to Australia's largest source of power.

In the absence of carbon pricing, the renewable energy target has been effective in delivering new renewable energy and emissions reduction. It has done so at reasonable cost. So, should it not continue as the right policy to support renewable energy?

The answer lies in the way the question is framed. Carbon pricing via the emissions trading scheme forms the central platform for reducing emissions. Other policies should be complementary to this platform to deliver emissions reduction at lowest long-term cost. The RET is one of those policies.

To understand the problem, it is instructive to revisit the nature of the underlying policy objective.

The right policy problem

Pricing carbon is the primary economic platform for delivering reduced emissions at lowest cost. In the Grattan Institute report, *No easy choices: which way to Australia's energy future?*, we described market failures and barriers that could prevent the required transformation in the energy sector being achieved. We showed it is still too early to identify the best mix of low-emissions power technologies for the long-term. All of the major candidates face significant technical and economic challenges.

Moreover, there are two market failures that might prevent energy companies from developing the technologies and local capabilities that are needed.

Firstly, developers need a long-term, credible and predictable carbon price to underpin their investments. But the carbon price is uncertain, at least for the early period of the emissions trading scheme, because it depends on the decisions of governments now and in the future. If governments do not maintain their commitment to constrain emissions, the carbon price will stay low, and investment in low-emissions technologies will remain critically inadequate.

Secondly, companies that might move early receive little reward for taking additional risk. Finance costs are higher for technologies that are not well understood. New infrastructure, technical expertise, supply chains and regulatory structures must be developed. But developers cannot charge more for low-emissions power, because it provides the same service to consumers as emissions-intensive electricity. The costs and risks of taking these technologies to market are too high, the potential returns too low.

Once an ETS is in place, targeting these market failures is very much in the public interest. In practice, this means that complementary policy should focus on reducing the costs and risks of multiple energy technologies.

It is common practice in industry to deal with uncertainty by developing a portfolio of options, and to dynamically adjust these as more information comes to light. This approach should be central to any policy response. Government should focus on reducing the costs and risks in a range of technologies, to the point where private investors can choose which technologies to take forward in the market.

It is a genuine problem that neither the ETS nor the RET is designed to solve.

The RET is the wrong policy solution

In our report, [*Building the Bridge: a practical plan for a low-cost, low-emissions energy future*](#), we reviewed the performance of RET-type schemes around the world.

RET-mechanisms maximise deployment of the current lowest-cost technology. In the US and Australia, overwhelmingly this has meant wind power. In England, other technologies have dominated. The policy leads companies to defer investment in other technologies that are more expensive today, but have potential to be lower cost over the long-term.

Moreover, if the cost of that cheapest option isn't moving fast – as the price of on-shore wind hasn't for some time – the RET doesn't switch focus to a different technology. It subsidises companies to rinse and repeat, building project after project, until the REC price eventually rises.

Consumers are paying for rather expensive emissions abatement that the ETS would otherwise have delivered at lower cost.

An option is to 'band' the RET, that is, make it support multiple technologies, via multipliers or target carve-outs.

Some governments have tried banding. History suggests that it is very hard to get it right. Arrangements turn out to be too generous, as they were for the solar PV multiplier in Australia, or so tight that few if any projects happen, as in several US states. Further changes are likely to be needed, but are difficult to implement. This means ongoing uncertainty for all participants.

The right answer to the right problem

For the reasons described above, it is unlikely that enough capital will be invested in the short-term to deploy new, low-emissions technologies that are likely to be the lowest cost source of emissions reduction in the future.

In our report, [*Building the bridge*](#), we describe a proposal for government to enter into long-term contracts with project developers to buy electricity at a price that makes low-emissions technologies commercially viable. It awards these contracts through a series of six-monthly reverse auctions held over 10 years.

The contracts would have two key parts. The first part would be a contract-for-difference between the actual carbon price and a forward price to which the government could commit. This would address the carbon policy risk. The second part would be a premium on the wholesale electricity market price, determined by the competitive bidding and paid on output. This would address the early mover technology risk.

The reverse auction proposal uses the market to discover costs, the forward series of auctions to drive down costs, contracts to address key market and technology risks and the portfolio concept to deliver a lowest-cost set of options over time.

The lowest cost solution to climate change requires market mechanisms such as emissions trading. It also requires truly complementary policies to deliver technology solutions over the long haul. The RET was not designed for this task, and so alternatives are required.

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