

Review of the Renewable Energy Target

Submission from Grattan Institute

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Summary points

- The Renewable Energy Target (RET) scheme has operated as designed, although there is considerable disagreement as to whether this was what the designers intended. The RET has generally delivered the outcomes of its design, i.e., an increasing quantum of renewable energy into Australia's electricity supply mix.
- In the absence of an overall cap on greenhouse gas emissions, the RET has delivered significant abatement although not at least cost.
- Regardless of the forward target, existing arrangements should be 'grandfathered', or preserved, to honour existing contractual and related investment decisions made under the scheme. This is necessary to prevent the kind of unpredictable tampering and adjustments to support programs criticised in Grattan Institute's 2011 report, *Learning the hard way: Australia's policies to reduce emissions*.
- The current target, itself, has no underpinning policy rationale, so there is no correct answer as to what target should be recommended by the Review. The Panel will need to strike a balance between investor certainty and consumer costs.
- The energy and climate change policy environment has changed considerably since the RET was established and will change again as the Government implements its Direct Action Plan. The impact of the RET differs substantially under a fixed price emissions trading scheme (ETS), a market-priced ETS and the Government's Direct Action Plan. Therefore the Review's recommendations should be informed by the Government's policy commitment to reduce Australia's emissions by 5% below the 2000 level by 2020.
- Beyond 2020, uncertainty on climate change policy and the lack of bipartisan support for specific mechanisms to meet agreed climate change objectives constitute a major threat to efficient investment and create unmanageable risks for investors. A carefully crafted expansion of the RET to include non-renewable sources of emissions reduction could form the basis for a credible, long-term climate change policy with bipartisan support.

Introduction

Few energy and climate change policies have been as exposed to revisionism as has the RET. Some claimed aims of the scheme were not reflected in the design and the intent of the design is badly understood or miscommunicated. For example there are even distinctly different descriptions of the RET's intent between the Review's Terms of Reference and the Consultation Paper on the proposed approach to key modelling assumptions.

The RET scheme is designed to deliver a fixed amount of electricity by 2020 from a defined range of technologies at lowest cost. It does this, sometimes despite the many changes that have been made since its inception. This is the central strength of market mechanisms.

However, the original design incorporated key features that have been at the heart of the debate that has taken place prior to, and leading up to, the current Review:

- The fixed target was introduced, as the Review's documentation notes, "to provide certainty for market participants". Today's debate highlights why it is bad policy to design central features based on a forecast. A direct result of electricity consumption falling well below forecasts is that the desired certainty has not been achieved.

- The headline objective of “20% by 2020” was a fine marketing tool. However it had little analytical rationale. When the 2020 cliff face was some years in the future, this seemed benign. It is now anything but benign. Pushing the cliff out further would be a poor solution.
- A feature of the RET was that steadily rising intermediate targets initially had relatively little impact on consumer costs. However, as the targets have risen and other factors have driven consistently big electricity price increases over the last few years, the cost impact has come to the surface and is the major driver behind arguments for reducing the target.

Operation of the RET

The RET does deliver lowest cost renewable energy within the boundaries of the scheme. In the absence of an economy-wide cap on emissions, it also delivers GHG emission reductions.

The RET does not deliver new technologies or a diversity of technologies. In the Grattan Institute 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 current lowest-cost technology. Mostly, this has meant wind power. 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 tradable credit (REC) price eventually rises.

A direct result is that consumers are paying for rather expensive emissions abatement that an ETS or more broadly based climate change policy would have delivered at lower cost.

An option canvassed to address this concern 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.

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 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.

Impact of the RET

The RET contributes to higher prices for consumers because the electricity it delivers costs more than existing technologies and more than would be delivered with a more broadly based climate change policy such as a market-priced ETS.

There are claims that wind and solar electricity have acted to reduce wholesale prices, offsetting the impact on the retail prices. It is a feature of the gross wholesale pool market that operates in the Australian National Electricity Market (NEM) that an energy source with low, or even negative, short run marginal cost will have this impact. A simple calculation can show that a reduction in 100% of the price of supply in the wholesale market will offset a much bigger increase in 10-12% of the retail market. This effect is an unintended consequence of the interaction between the RET and the electricity market, although some argue that this is the intent of climate change policy. It acts as a tax on existing generators, delivering a benefit to consumers. However, the impact is transitory and not welfare enhancing across the economy.

The RET is delivering an increasing quantum of energy sources that are not exposed to primary fuel market price fluctuations such as coal and gas. In particular, reasonable projections of future gas price increases have been used to argue that the renewable energy delivered by the RET insulates consumers from such future price increases. The arithmetic may be correct if the projections are realised. However, there is a stronger argument that markets are better ways to deliver lowest cost supply than government's picking a winner. If wind or solar electricity is the cheapest source, then a well-designed market would deliver them without additional intervention.

Interaction within a policy framework

The policy context has become critical whereas once it was not so, and this defines the very nature of what the RET can or will deliver.

Current policy

Under an ETS, the RET does not reduce emissions, but rather forces reductions from particular sources, i.e., it acts as a form of industry policy. This would have been the case if the current fixed price ETS had moved to a market-based price from 1 July 2014 as proposed by the Labor Government. The RET increases the cost of reaching the emission reduction targets. If renewable energy in Australia is part of the lowest cost mix to reduce emissions, the market will deliver renewable energy.

The RET does not address market failures or barriers that might prevent the ETS delivering a low-emissions future efficiently over time. This is because, like the ETS, it delivers today's lowest cost solution within the defined sector. Neither policy brings forward technologies that could be lowest cost in the longer term. When faced with uncertainties such as global climate change policy and future technology developments, best practice is to develop a suite of options that can respond to changing circumstances. Neither the RET nor the ETS do this.

Complementary policy should improve either the efficacy or the efficiency of the primary policy, the ETS. The RET does neither.

Industrial policy always creates winners and losers. The RET review has created an opportunity and both sides have come out swinging. After all, who wouldn't want a government-guaranteed market share for their product? Who wouldn't object to a government-guaranteed market share for their competitors?

Evaluated as industrial policy, the question now is whether the assistance has delivered a viable set of technologies with better prospects for economic growth than would have been delivered in its absence. An associated consideration is how to balance costs to consumers against certainty for investors. Thirdly, there is a strong argument that the certainty created by setting a target in absolute energy terms should not be discarded lightly.

In the context of a climate change policy environment framed by the ETS, the ideal outcome would be to phase out the RET and grandfather or preserve contractual and related investment decisions made under the scheme. This is necessary to avoid repeating the unpredictable program tampering criticized in previous Grattan Institute reports. The ETS should then be supported by truly complementary policies.

Proposed policy

Under the Coalition's Direct Action Plan, there is a target for emissions reduction, but no binding cap. Therefore the two primary mechanisms, the emissions reduction fund (ERF) and the RET will both contribute to emissions reduction. Other things being equal, changes to the RET change the emissions reduction load that would have to be delivered by the ERF.

The plan to repeal the ETS by the Coalition Government is put forward as a reason to leave the RET alone because it might then contribute to emissions reduction in a meaningful way. This hypothetical is difficult for the Review, to the extent that its recommendations need to address matters such as meeting the 2020 emissions reduction target.

Mid-stream policy review is always fraught with challenges. In the case of the RET review, using the wrong framework is to risk delivering the right answer to the wrong question.

The future of the RET

Effective climate change policies are should be major determinants for investment decisions in key supply infrastructure such as power stations. Whilst there is general political consensus on accepting the global commitment to avoiding more than two degrees warming, there is no such consensus on medium-long term policy under which Australia would contribute to the achievement of that

commitment. The current government shares its predecessor's 2020 emissions reductions targets, but currently has no comprehensive climate change policy beyond 2020. This represents a major threat to efficient investment and creates unmanageable risks for investors.

In this context, it is strongly desirable to develop a basis for a credible, long-term climate change policy beyond 2020, with bipartisan support and capable of meeting future targets that governments may adopt. An expansion of the RET to broaden the eligible technologies might be the beginning of such an alternative. In the short term, such an approach could retain the essence of the Direct Action Plan and the ERF, but address the limitations that may emerge beyond 2020.

The following elements could be considered in such an approach:

- Leave the ERF to deliver reductions in relatively straightforward areas where baselines are clear and delivery can be addressed.
- Return to the Coalition's 2007 concept of a Clean Energy Target (CET), based on expanding the RET.
- The CET could progressively become the central climate change policy, as international political positions become clearer and provide a pathway beyond the ERF.
- The CET could be a single target or banded for particular segments.
- The CET target could be set in relation to the current 5% target and the ERF, but also within the context of a future, more aggressive target if a future government makes such a commitment.

The advantage of this approach would include:

- The Government's 5% target becomes more achievable, even if the assumptions currently underpinning the ERF turn out to be challenging.
- It does not require major changes to the ERF framework.
- There is no budgetary impact.
- The RET currently has bipartisan support, and the CET could form the basis of future bipartisan support.
- It could be effectively sold to other parties, including the Greens.
- If structured appropriately, it could gain the support of both the renewable energy sector and the broader industry that would prefer to see lower cost options to reduce emissions.
- No additional administrative burden is imposed as the mechanisms are already in place.
- It would blunt the criticism of the RET as high cost and delivering only wind farms.

Specific questions raised by the Review

- The RET has encouraged the additional generation of electricity from renewable sources and has reduced emissions of greenhouse gases in the electricity sector. We are not in a position to comment on the ecological sustainability of these sources.
- The RET has been effective in achieving both of these objectives. It has been efficient in meeting the first, but there are almost certainly alternative, lower-cost approaches to achieving the second.

- The fundamental policy drivers behind the objectives of the Act were always poorly defined as outlined in this submission and should be revisited in a broader policy framework.
- The RET has been the major influence on the development of the wind industry in Australia and has combined with state-based, tariff-support schemes to influence the development of the solar PV sector.
- The question of abolishing or changing the level of the RET had been addressed above. Investment certainty, sovereign risk and cost to consumers should determine the outcome, with grandfathering being strongly recommended.
- The impact of the RET on the retail and wholesale electricity markets has been addressed above.
- The interaction of the RET with existing and proposed policies, particularly in the climate change area has been addressed above.
- This submission puts forward an argument for including other low-emission technologies in the RET.
- In terms of future reviews, the critical issue is to get the balance right between what is firm and what is open for review. The current RET process is seriously flawed and delivers high levels of uncertainty across the energy supply sector.