

Renewable Energy Target Review: Response to Issues Paper

1 Introduction

REpower Australia is a leading developer and turnkey constructor, operator and maintenance service provider of grid-connected wind farms in Australia. We directly employ around 170 people, and with over 1,000 megawatts of wind energy projects in Victoria, South Australia and New South Wales, either operating or under construction, we represent approximately a third of the market for wind turbines in Australia.

Our parent company, Suzlon Energy Limited, is the 5th largest wind energy supplier globally with operations in 32 countries.

We welcome the opportunity to provide a response to the Renewable Energy Target Review Issues Paper.

2 Summary of key points

- The Renewable Energy Target (RET) is a world-leading policy that has already delivered significant investment in new clean energy projects in Australia.
- Renewable energy has a critical role to play in increasing the diversity of Australia's energy supplies, and supporting the transition to a low carbon economy.
- Wind energy will make a significant contribution to Australia's clean energy future as it is a mature, proven and cost-effective technology.
- The RET has already delivered around \$18.5 billion of investment, and stands to deliver Australia a further \$30 billion of investment and thousands of jobs¹.
- The Large-Scale Renewable Energy Target (LRET) is designed to deliver renewable energy technologies at scale, and at least-cost. Complementary policy initiatives are needed to deliver other objectives, such as a diversity of renewable energy supply.
- The LRET will have a very small impact on energy prices relative to other cost drivers, such as upgrading transmission and distribution networks.
- It is critical that this RET Review does not result in changes that could impact on investor confidence in this sector.
- The scope of future reviews must be tightened in order to protect against the risk of significant policy change every few years.

¹http://www.cleanenergycouncil.org.au/dms/cec/policy/submissions/CEC-response-to-RET-Issues-paper-110912/CEC%20response%20to%20RET%20Issues%20paper%20110912.pdf



3 REpower Australia Position

Importance of renewable energy

Renewable energy has an important role to play in Australia's energy future by contributing to a diverse, and secure energy supply system, and reducing our reliance on fossil fuels.

An Investment Reference Group report to the Minister for Resources and Energy² estimates that by 2030 over \$240 billion investment in the domestic and electricity and gas sectors may be needed.

This investment will be required to:

- replace electricity supply from generation assets that have been retired;
- meet increased demand for electricity, linked to a growing population, increased appliance use, and an increase in electric vehicle use; and
- reduce the carbon intensity of the energy sector in light of the global imperative to reduce greenhouse gas emissions.

Investment in renewable energy has a critical role to play in supporting the transition to a low carbon economy, along with cleaner forms of fossil-fuel generation, and energy efficiency improvements across the economy.

Wind energy in particular is a mature, proven and cost-effective technology that will deliver the greatest gains in new renewable supply in the coming decades.

In its Global Wind Energy Outlook 2010³, the Global Wind Energy Council estimates that by 2030 the annual value of global investment in wind energy could reach over €200 billion and account for over 3 million jobs.

Australia has excellent wind resources, and with the right policy framework, could be well positioned to realise the benefits associated with securing a proportion of the rapidly expanding global wind energy market.

Based on our experience of delivering wind farms, we have seen that wind energy delivers significant benefits to regional Australia including providing local employment opportunities, and delivering economic benefits to farmers and local communities.

Clean Energy Council analysis found that a typical 50 MW wind farm contributes up to \$80,000 annually to community projects, and is constructed by workers who spend up to \$1.2 million locally.⁴

Role of the Renewable Energy Target

Delivering the scale of transformation required to reduce greenhouse gas emissions from the energy sector requires strong policy intervention.

A carbon price is one policy that will help Australia make the transition to a low carbon economy. However, a carbon price alone will not be enough to stimulate investment in new renewable energy projects in the short to medium-term.

A framework of targeted complementary measures is also needed to ensure that investment in clean energy generation occurs in conjunction with efforts to deliver least-cost greenhouse gas abatement through complementary measures to drive energy efficiency improvements.

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² http://www.ret.gov.au/energy/Documents/Energy-Security/IRG-report.pdf

³ http://www.gwec.net/fileadmin/documents/Publications/GWEO%202010%20final.pdf

⁴ http://www.cleanenergycouncil.org.au/cec/misc/gwd



A recent report to the Institutional Investors Group on Climate Change found that, in order to invest in new renewable energy projects, institutional investors need:

Policies supporting investment in renewable energy generation, including measures that support the access of electricity generated from renewable energy sources to electricity transmission and distribution infrastructure.⁵

The key driver of investment in large-scale renewable energy projects in Australia is the Renewable Energy Target (RET). It is an effective and efficient mechanism that creates a competitive market for the electricity produced from eligible generators. The RET has already delivered around \$18.5 billion of investment, and stands to deliver Australia a further \$30 billion of investment and thousands of jobs.

LRET is not designed to deliver least-cost greenhouse abatement in the short-term, but it is designed to deliver least-cost renewables. LRET is a cost-effective way to drive investment in the clean, renewable technologies needed for the long-term transformation of Australia's energy system.

As a market mechanism, LRET will deliver least-cost renewable energy projects (such as wind farms) ahead of more expensive technologies. This approach will not necessarily result in investment in a diverse range of renewable energy technologies – however, this was never the objective of LRET. Increasing the diversity of renewable energy technologies requires a separate policy focus, such as through the Clean Energy Finance Corporation or the Australian Renewable Energy Agency.

Minimal costs

Because the RET is a market mechanism, it delivers renewable energy at the lowest cost to consumers. The resulting competition within the renewable energy sector also drives innovation in renewable energy projects that act to drive down the cost of generation. For example, increasingly sophisticated rotor designs and control technologies in modern wind turbines are being developed to maximise wind farm output.

Increased investment in wind energy in Australia will have a very small impact on energy prices.

In November 2011, the AEMC released a report - *Possible Future Retail Electricity Price Movements:* 1 *July 2011 to 30 June 2014.* ⁶ This report found that the most significant driver of rising energy prices relates to investment in aging distribution networks and increases in wholesale electricity prices due to the introduction of the carbon price. These factors are expected to increase retail electricity prices by over 27%.

By contrast, the Large-Scale Renewable Energy Target is anticipated to have a very small impact on energy prices to 2014 (approximately a 1.4% increase on retail electricity prices)⁷. The Clean Energy Council indicates that by 2020, Government support for large-scale renewable energy will only make up around 2% of an average Australian household electricity bill.⁸

⁵ INVESTMENT-GRADE CLIMATE CHANGE POLICY: FINANCING THE TRANSITION TO THE LOW-CARBON ECONOMY, Report prepared by Dr Rory Sullivan for the Institutional Investors Group on Climate Change (IIGCC), the Investor Network on Climate Risk (INCR), the Investor Group on Climate Change Australia/New Zealand (IGCC) and the United Nations Environment Programme Finance Initiative (UNEP FI),

http://www.igcc.org.au/Resources/Documents/2011%20Investment%20Grade%20Policy%20Report.pdf

⁶http://www.aemc.gov.au/market-reviews/completed/possible-future-retail-electricity-price-movements-1-july-2011-to-30-june-2014.html

⁷http://www.aemc.gov.au/market-reviews/completed/possible-future-retail-electricity-price-movements-1-july-2011-to-30-june-2014.html

⁸http://www.google.com.au/url?sa=t&rct=j&q=clean%20energy%20update%20no.1%20-

^{%20}power%20prices&source=web&cd=1&cad=rja&ved=0CCMQFjAA&url=http%3A%2F%2Fwww.cleanenergycouncil.org.au%2Fd ms%2Fcec%2Ffactsheets%2FCEC_PRICE_FACTSv10%2FCEC%2520Energy%2520update%2520no1%2520-%2520power%2520prices.pdf&ei=2FVOUJ7MF6a6iAfPyoHAAw&usg=AFQjCNHxFetL0nfnS3FFNBKSdG11NqOQJQ&sig2=VOqwx GjLsQv-JK2CsSxkiw



Risk of change

The Renewable Energy Finance Project at Chatham House⁹ in the UK provides insights from financiers about the policy conditions that investors need to scale-up investment in renewable energy.

This work found that:

To be 'investment grade', policy needs to tackle all the relevant factors that financiers assess when looking at a deal. It must be embedded in wider energy policy, and be stable across the lifetime of projects. Investors need to be confident, in a policy-driven market, that governments are serious.¹⁰

The RET sets a clear, legislated target for renewable energy for the lifetime of large-scale generation projects. RET has demonstrated that it is investment-grade policy as it has already delivered significant investment in new renewable energy projects.

However, investors don't just look at the current policy environment when considering opportunities. The future policy environment is just as important, particularly for capital-intensive projects, such as renewable energy generators.

The Renewable Energy Finance Project at Chatham House found that:

Given the higher upfront costs and long payback periods of renewable energy, confidence in policy stability and clarity over circumstances that might lead to policy change are important.¹¹

The mere existence of the current RET review is already having an impact on investor confidence in the future of the scheme.

The Renewable Energy Finance Project at Chatham House work found that:

... review of the policy support system (or even the threat of a change) will itself increase the perception of policy risk, bringing a significant 'chill', if not halt, to investment, from the first sign of change to the adoption of any new legislation. ¹²

When considering investment opportunities, investors factor in all the risks, including policy risk. If there is a perception that the policy environment could change, then investors will price that risk accordingly, increasing the overall cost of the scheme.

There are currently a number of wind farm projects in Australia that we would have expected would have secured contracts for turbines by now in order to meet future RET targets. However, the RET review has resulted in a particularly cautious market for wind turbines.

Any review of the Renewable Energy Target needs to happen as quickly as possible – and with no change to the current system.

Unless the scope of future reviews is tightened significantly, then the renewable energy industry will have the ongoing risk of major policy change every couple of years.

⁹ http://www.chathamhouse.org/research/eedp/current-projects/renewable-energy-finance-policy

http://www.chathamhouse.org/sites/default/files/public/Research/Energy, % 20 Environment % 20 and % 20 Development/bp 1209 cleanenergy.pdf

http://www.chathamhouse.org/sites/default/files/public/Research/Energy,%20Environment%20and%20Development/bp1209cleanenergy.pdf

http://www.chathamhouse.org/sites/default/files/public/Research/Energy, % 20 Environment % 20 and % 20 Development/bp 1209 cleanenergy.pdf



4 Response to specific questions

Are the existing 41,000 GWh LRET 2020 target and the interim annual targets appropriate? What are the implications of changing the target in terms of economic efficiency, environmental effectiveness and equity?

Is the target trajectory driving sufficient investment in renewable energy capacity to meet the 2020 target? How much capacity is needed to meet the target? How much is currently committed? Has the LRET driven investment in skills that will assist Australia in the future?

In the context of other climate and renewable policies, is there a case for the target to continue to rise after 2020?

Should the target be a fixed gigawatt hour target, for the reasons outlined by the Tambling Review, with the percentage being an outcome?

Should the target be revised to reflect changes in energy forecasts? If so, how can this best be achieved — as a change in the fixed gigawatt hour target, or the creation of a moving target that automatically adjusts to annual energy forecasts? How should changes in pre-existing renewable generation be taken into account? What are the implications in terms of economic efficiency, environmental effectiveness and equity?

It is critical that the LRET target, and interim targets are not changed at this time.

Investor confidence in renewable energy projects in Australia depends on a stable policy environment. Altering the target fundamentally undermines the stability of the LRET. Any amendments to the RET would also create an expectation that the RET will be subject to further changes in the future.

There are some stakeholders who argue that the RET target should be changed. Reasons put forward include:

- a belief that lower than expected energy demand means that achieving the 20% target requires less renewable energy production;
- concerns that the industry does not have the capacity to deliver renewable energy projects to meet the target;
- a belief that the increase in renewable energy required to meet the target will not be acceptable to the community;
- · concerns about the cost of achieving the target.

In response:

Energy demand

There are many factors that impact on energy demand. Projecting energy demand is therefore very difficult, with a high degree of uncertainty. Constantly reviewing the target based on energy demand adds complexity to the mechanism, and will impact on investor confidence in RET.

The 2003 Tambling Review of the Mandatory Renewable Energy Target found that:

While acknowledging that several submissions called for a percentage target, the Review Panel became convinced during its consultations that any future target should continue to be expressed in terms of a fixed GWh level. By their nature, projections of electricity demand contain a degree



of uncertainty. The changes in projected electricity demand that have occurred since MRET was announced demonstrate that a percentage-based target would require the corresponding generation level to be regularly revised. This would adversely impact on market certainty. ¹³

Importantly, the current RET was never designed to limit renewable electricity generation to 20% by 2020. When the RET was split into two schemes focusing on large-scale projects and small-scale technologies, the Climate Change Minister Penny Wong was clear that:

Significantly, these changes are actually expected to deliver more renewable energy than the original 20 per cent target -- and will support new jobs and investment in both large-and small-scale renewable energy projects. 14

Industry capacity

Based on our company experience of delivering close to 20 GW of wind farms around the world, we know that the wind industry has the capacity to build and operate the high quality renewable energy projects needed to meet the LRET targets. A clear, stable and long-term policy framework for renewable energy is required to underpin the expansion of our local renewable energy industry.

Community acceptance

Surveys consistently show strong support for wind energy in Australia.

In January 2012, Pacific Hydro released survey results looking at the support for wind farms in regional Australia¹⁵. The research found that community support for wind farms is very high. Close to 70% of people surveyed preferred building wind farms compared to a new gas or coal fired power station.

In April 2012, the Clean Energy Council released a Wind Energy Community Research in Victoria, New South Wales and South Australia report¹⁶. This report found that 77% of people surveyed supported wind farm developments, and 75% of people agreed that generating electricity through wind farms is a good idea. The majority of people surveyed also recognised the benefits that wind farms bring to local communities, including income for farmers, as well as employment and regional investment opportunities.

Costs

The Large-Scale Renewable Energy Target is anticipated to have a very small impact on energy prices to 2014 (approximately a 1.4% increase on retail electricity prices).

Clean Energy Council indicates that by 2020, Government support for large-scale renewable energy will only make up around 2% of an average Australian household electricity bill.

REpower Australia recommends that:

- the LRET target is kept as a fixed GWh target
- the level of the LRET target and interim targets remain unchanged.

What are the costs and benefits of increasing, or not increasing, the LRET target for Clean Energy Finance Corporation-funded activities? What are the implications in terms of economic efficiency, environmental effectiveness and equity?

 $^{^{13}\} http://pandora.nla.gov.au/pan/121641/20101007-1302/www.mretreview.gov.au/report/pubs/mret-review.pdf$

http://www.climatechange.gov.au/~/media/Files/minister/previous%20minister/wong/2010/opinion-pieces/may/sp20100503.pdf

http://www.pacifichydro.com.au/files/2012/01/2011-Community-Polling-Presentation-Results.pdf

¹⁶http://www.cleanenergycouncil.org.au/dms/cec/reports/2012/120507-Qdos-Wind-Polling-report/Wind%20Energy%20Community%20Polling%20Report.pdf



REpower Australia recommends that the impact of CEFC investments on the effective operation of the RET should be considered and managed on a project-by-project basis through the CEFC assessment process.

Is the calculation of individual liability using the Renewable Power Percentage the most appropriate methodology?

Is it appropriate to set the Renewable Power Percentage by 31 March of the compliance year?

Is the shortfall charge set at an appropriate level to ensure the 2020 target is met?

Are there other issues relating to the liability or surrender framework the Authority should consider?

No comment

What are the costs and benefits of the current exemption arrangements? Are they appropriate?

The self-generator exemption pre-dates the emissions intensive, trade exposed partial exemptions – are both required? If so, why?

What, if any, changes to the current exemption arrangements should be made? What would be the impact of those changes on directly affected businesses and the broader community?

No comment

Is a list approach to 'eligible renewable sources' appropriate?

Are there additional renewable sources which should be eligible under the REE Act?

Should waste coal mine gas be included in the RET? Should new capacity of waste coal mine gas be included in the RET?

What would be the costs and benefits of any recommended changes to eligible renewable sources?

As a general principle the RET should be designed to deliver on its objective of encouraging the additional generation of electricity from renewable sources

REpower Australia recommends that new capacity of waste coal mine gas should not be included in the RET.

Are the LRET accreditation and registration procedures appropriate and working efficiently?

No comment

What do you consider to be the costs and benefits of having a separate scheme for small-scale technologies?

Should there continue to be a separate scheme for small-scale technologies?

It is critical that the support mechanisms for large-scale projects and small-scale renewable energy technologies remain separate.



The original separation of the RET into the LRET and the SRES was an important recognition of the very different characteristics of the markets for small-scale technologies and large-scale infrastructure projects.

REpower Australia recommends that the two schemes for large-scale projects and small-scale renewable energy technologies remain separate.

Is the uncapped nature of the SRES appropriate?

What do you see as being the costs and benefits of an uncapped scheme in terms of economic efficiency, environmental effectiveness and equity?

Is the SRES driving investment in small scale renewable technologies? Is it driving investment in skills?

No comment

What is the appropriate process for considering and admitting new technology to the SRES?

Should any additional small-scale technologies be eligible to generate STCs?

Is it appropriate to include displacement technologies in the SRES?

Should additional eligible technologies be limited to generation technologies?

As a general principle the RET should be designed to deliver on its objective of encouraging the additional generation of electricity from renewable sources

REpower Australia recommends the inclusion of new technologies should be tested against the objective of RET to encourage the additional generation of electricity from renewable sources

Is deeming an appropriate way of providing certificates to SRES participants?

Are the deeming calculations for different small-scale technology systems reasonable?

No comment

What are the lessons learned from the use of multipliers in the RET? Is there a role for multipliers in the future?

The use of multipliers adds complexity, and cost, to what is otherwise a relatively straightforward scheme.

The Chatham House Renewable Energy Finance Project found that:

Financiers consistently emphasize a preference for straightforward policies, support mechanisms and regulations. The greater the complexity and number of policy variables, the greater the risks that need to be managed.

REpower Australia recommends that multipliers not be applied to technologies in the RET.



Is the STC Clearing House an effective and efficient mechanism to support the operation of the SRES?

Should changes be made to the Clearing House arrangements? If so, what would be the costs and benefits of any suggested alternative approaches?

Is \$40 an appropriate cap for small-scale certificates given the recent fall in cost of some small-scale technologies, particularly solar PV?

No comment

Are the SRES administration arrangements appropriate and working efficiently?

No comment

Should the RET design be changed to promote greater diversity, or do you think that, to the extent that there are barriers to the uptake of other types of renewable energy, these are more cost-effectively addressed through other means?

What would be the costs and benefits of driving more diversity through changes to the RET design?

The primary objective of RET is to encourage the additional generation of electricity from renewable sources. As a market mechanism, LRET will deliver the most competitive renewable energy projects ahead of other, less viable projects. In practice, this means that mature, proven and cost-effective technologies such as wind turbines, can be expected to play a substantial role in delivering LRET.

Bringing forward investment in more expensive technologies will also add costs to the RET, which will be borne by electricity consumers.

Trying to add additional objectives to RET, such as encouraging a diversity of renewable sources, risks complicating the mechanism. If a diversity of renewable energy sources is seen to be a worthwhile objective beyond what the RET will deliver, then this should be tackled through other, more targeted policy mechanisms, such as the Clean Energy Finance Corporation, or the Australian Renewable Energy Agency.

REpower Australia recommends that the scheme is not changed to promote greater diversity.

What is the appropriate frequency for reviews of the RET?

What should future reviews focus on?

Open reviews of the RET undermine its effective operation.

The Issues Paper states that "the legislative provisions covering the review are broad." The Issues Paper then describes how the Climate Change Authority has chosen to interpret the scope of the review. This level of ambiguity about what is subject for review creates significant uncertainty for the market. The fact that this Issues Paper is seeking feedback on so many aspects of the scheme sends a signal to investors that the RET could be significantly changed following this review, or later in subsequent reviews.



To that end, we recommend that the provision for scheduled reviews be removed from the scheme entirely, and that reviews only be triggered by specific circumstances.

If scheduled reviews remain a part of the scheme, then it is critical that they have a clearly defined scope to minimise the impact on investor confidence in the scheme.

REpower Australia recommends that the provision for scheduled reviews be removed from the scheme. Failing that, the scope of future reviews must be clearly and tightly defined.

5 Summary of recommendations

REpower Australia recommends that:

- the LRET target is kept as a fixed GWh target;
- the level of the LRET target and interim targets remain unchanged;
- the impact of CEFC investments on the effective operation of the RET should be considered and managed on a project-by-project basis through the CEFC assessment process;
- new capacity of waste coal mine gas should not be included in the RET;
- the two schemes for large-scale projects and small-scale renewable energy technologies remain separate;
- the inclusion of new technologies should be tested against the objective of RET to encourage the additional generation of electricity from renewable sources;
- multipliers not be applied to technologies in the RET;
- the scheme is not changed to promote greater diversity;
- the provision for scheduled reviews be removed from the scheme. Failing that, the scope of future reviews must be clearly and tightly defined.

6 Conclusion

Renewable energy has an important role to play in Australia's energy future.

New renewable energy projects will deliver clean jobs and investment, particularly in regional Australia.

Investors in renewable energy are looking for a clear, stable and long-term policy framework.

The RET is investment-grade policy, that has already delivered cost-effective renewable energy projects around Australia.

It is critical that the RET review does not result in significant changes to the RET as this will undermine investor confidence, increase compliance costs, and create the perception that there could be further policy changes in the future.