



## SUBMISSION COVER SHEET

**Please complete and submit this form with your submission:**

**Via email**

[submissions@climatechangeauthority.gov.au](mailto:submissions@climatechangeauthority.gov.au)

**Or via post**

Submissions  
 Climate Change Authority  
 GPO Box 1944  
 Melbourne VIC 3001

<b>Organisation or individual</b> (this will appear on our web site):					
Hepburn Wind					
<b>Principal contact</b> (name of person wishing to receive confirmation of submission and future updates about the review):					
Taryn Lane					
<b>Email address:</b>	taryn.lane@hepburnwind.com.au				
<b>Telephone (BH):</b>					
<b>Postal address:</b>	PO BOX 225				
<b>Suburb/City:</b>	Daylesford	<b>State</b>	VIC	<b>Postcode:</b>	3460

**Please note:**

- For submissions made by individuals, all personal details other than your name and the state or territory in which you reside will be removed from your submission before it is published on the Climate Change Authority's web site.
- Copyright in submissions resides with the author(s), not with the Climate Change Authority.
- The Climate Change Authority prefers that all information presented in submissions can be made available to the public. Submissions will be placed on the Authority's web site shortly after receipt, unless prior contact has been made concerning material supplied in confidence. **Submissions will remain on the web site as public documents indefinitely.** Submissions using inappropriate language will not be published by the Authority.

**Please indicate if your submission (tick one):**

- contains NO material supplied in confidence and can be placed on the Authority's web site
- contains SOME material supplied in confidence (please provide any such material in a separate section of your submission, and clearly mark it as COMMERCIAL IN CONFIDENCE, or PERSONAL IN CONFIDENCE)



Submissions  
Climate Change Authority  
GPO Box 1944  
Melbourne VIC 3001

email: [submissions@climatechangeauthority.gov.au](mailto:submissions@climatechangeauthority.gov.au)

14 September 2012

Dear Authority,

**RE: Submission to the Climate Change Authority review of the Renewable Energy Target scheme.**

Hepburn Wind welcomes the opportunity to provide a submission to the Climate Change Authority's Renewable Energy Target Review.

## **Background**

On 22 June 2011, the two turbines of the Hepburn Community Wind Farm began generating, almost seven years after the project was conceived by Danish-born local builder, Per Bernard.

In response to a local community's initial negative response to a large commercial wind farm development, Per catalysed the development Australia's first community-owned wind farm at Leonards Hill in Central Victoria.

The 4.1 MW wind farm, owned by community co-operative Hepburn Wind, is sized for the needs of the local community – its annual projected output exceeds the annual demand of the houses in nearby Daylesford and much of the surrounding area.

The Hepburn Community Wind Farm is owned by almost 2000 members, the majority of whom are local. Many shareholders have never owned shares before. With massive volunteer effort and nearly \$10m of community capital, the members of Hepburn Wind have shown that under the right conditions, wind energy can overwhelmingly be seen as an opportunity, and not a threat.

The 'Hepburn Model' has inspired many other communities to pursue their own dreams of harnessing local energy resources for community benefit.

The project has educated not only its membership, but many in the community and around the country. While the nascent community energy sector will likely remain a relatively small fraction of the Australian energy scene, it is hard to imagine many other sectors that can so effectively deliver the social licence required for the transition to a zero carbon future.

## Questions

**Q. 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?**

**A. The RET must not be weakened.**

In terms of emissions intensity, Australia's stationary energy sector is among the most polluting in the world. It is widely accepted that we must transform the sector to zero net emissions by the middle of the century.

The legislated annual and (generally) increasing interim annual targets provide a steady roadmap for industry to undertake this transition. Policy stability will facilitate the innovation required to continue to lower the costs of the transition.

Significant uncertainty surrounds the carbon pricing framework. Investors in low carbon technology must factor in the risk of legislative repeal, as threatened by the Coalition, as well as the great uncertainties around future carbon pricing.

Carbon pricing and the RET are complementary policies. If the carbon pricing framework is dismantled, watered down or fails to deliver the pricing signals required by investors, the RET will continue to provide the required economic drivers for deployment of renewables. On the other hand, if the carbon price provides the strong signals required for investment the LGC market will respond with reducing prices. A prolonged period of very low LGC prices would indicate that the RET was superfluous, however up until such time the RET would be complementing the carbon price to jointly facilitate the least cost decarbonisation of our stationary power sector.

In June 2009 the introduction of the solar multiplier resulted in the creation of a massive surplus of certificates. (A significant number of these certificates were 'phantom RECs' and therefore were not associated with abatement.) The market has yet to work through the surplus, and it would be fair to say that the resulting prolonged period of soft pricing has put many projects under financial stress, undermining the RET itself.

In the context of such market volatility coupled with sovereign risk, commercially acceptable Power Purchase Agreements have been generally unavailable. In this context, Hepburn Wind is fully exposed to merchant risk.

Almost 2000 members of Hepburn Wind, many of whom hold no other investments, made personally significant investments prior to the introduction of the solar multiplier and have therefore had to ride out the poor market conditions for certificates.

Along with the millions of Australians who are investors in renewable energy infrastructure through their superannuation funds, the members of Hepburn Wind have a reasonable expectation that no more changes that weaken the RET are implemented.

**Q. 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?**

**A. Industry and the community have embraced the 2020 target and are ready to deliver projects that will create significant social, environmental and economic benefits.**

As discussed above, the certificate market has not yet recovered from the significant influx of solar credits. The prolonged period of uneconomic market conditions has retarded growth in the sector, yet despite this, a renewable energy industry with a large number of players has proven itself capable of growing to a size that would have been unimaginable at the introduction of the MRET in 2001.

Each new project is built on the experience of the projects that have come before. With now more than a decade of experience building larger renewable energy facilities under the RET, dozens of

companies and thousands of Australians have acquired the broad range of skills and experience required by the sector. As we progress through this decade, thousands more will be trained. Coupled with significant technological innovation in the sector, Australia will be well placed to continue the transition required for the coming decades.

Over the course of the project, many of Hepburn Wind's local staff and volunteer directors have acquired a range of new and valuable skills. The community energy sector is well placed to train many more Australians with the skills required to develop renewable energy projects.

With skills, jobs and increased economic activity, many Australian communities have already experienced significant social and economic benefit. The community energy sector will greatly increase the number of communities that experience these benefits.

Meanwhile the target is already delivering massive emissions reductions, with SA experiencing a 27.4 % reduction in the last five years alone.

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

**A. In order to facilitate the gradual and necessary transition to a zero carbon future, the target must continue to rise from 2020.**

The 41,000 GWh target is a great start, but even with carbon pricing, it is insufficient to guarantee that we decarbonise our energy sector at the required rate.

Construction of generation infrastructure generally takes 5 – 10 years from conception to commissioning. With increasing expectations for community engagement and less supportive planning environments, project timelines are getting longer.

As such it is likely that the vast majority of projects required to reach the 2020 target will need to be in development in the next year or two.

The legislated RET is set to ensure that significant additional capacity will be deployed as the target increases by 4.6 TWh for the 2017 - 2019 years and by another 6.6 TWh for 2020, yet, as it stands the target itself will deliver no incentive for additional capacity past 2020, meaning that developers must commit very soon to a sector with strong fundamentals in the back half of this decade followed by great uncertainty around the carbon price a decade from now.

We propose that the target be modified to increase by 5 TWh each year from 2020 - 2029 and 7.5 TWh for the next decade. At AEMO's conservative 1.66% growth rate this would see renewable energy provide approximately 40% by 2030 and 60% by 2040.

The global transformation of the energy sector will continue to deliver cost reductions relative to fossil fuel alternatives. A combination of supply chain innovation and technological breakthroughs will ensure that the cost to the economy of this policy will steadily reduce over time.

With an increasing target, hundreds of communities will benefit from the transformation of the energy sector.

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

**A. Yes, a fixed target provides clear signals to drive the market.**

An energy target expressed in gigawatt hours provides transparency and certainty, both of which are required for markets and investors to deliver optimal outcomes.

While expressing the target as a percentage of generation might be convenient for 'marketing' the policy, legislating it as such would introduce unnecessary uncertainty and complexity.

The ultimate goal of the RET must be to gradually decarbonise the stationary energy sector at the least cost, not to meet some arbitrary round number target in a given year.

**Q. 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?**

**A. The target should only be revised in the context of bringing forward the timeline of decarbonising the stationary energy sector.**

As stated above, an effective RET will oversee the gradual decarbonisation of the stationary energy sector at least cost.

Regular revision of the target based on forecasts would introduce additional uncertainty that could undermine the sector's ability to deliver. Instead, the target could be periodically reviewed to determine whether reviews should only focus on troubleshooting market failures or lifting targets.

**Q. 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?**

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

**A. Technological diversity should be delivered by other policies, however, for social reasons there is room for diversity of project scale to be considered.**

#### **Technological diversity**

The RET is well placed to deliver the decarbonisation of the energy sector at least cost. As such it is a development policy and not an innovation policy. In a well functioning electricity market and LGC market, current policy settings will deliver the deployment of commercial technologies.

There are many exciting technologies that show great promise for Australia but are, as yet, not competitive with existing renewable technologies. Some of these technologies will come down the cost curve to the point where they will be competitive with existing renewable energy technologies.

There has been talk of restructuring the RET to promote distinct targets for specific technologies that are not yet commercial – this is sometimes referred to as 'banding'. The UK experience with banding shows that in practice it is very complex to implement and runs the risks that overall targets are not met.

While diversity of the technologies enhances energy security, the energy market will reward technologies that are generating when others are not, and relatively penalise technologies that are 'over-represented' in the generation mix.

Policy aimed at encouraging research, development and innovation are best placed to ensure that promising technologies reach their potentials.

#### **Scale diversity**

An unintended consequence of the RET is the trend toward 'mega-projects'. With increasing project complexity, developers have moved from projects in the 30 - 50 MW range to project many times larger. Whether or not the trend towards larger and larger projects unlocks real economies of scale remains to be seen. However it is clear that larger projects can be very challenging for the communities around them.

Faced with mega-projects, for example wind farms with hundreds of turbines, communities can justifiably hold great concerns about the change in their local environments. We suggest that significant social benefit may be realised by enabling smaller projects. As many other countries have found, a thriving community energy sector has delivered broad community acceptance for renewable energy.

While the general benefits to the sector of smaller projects are easy to demonstrate, it is more challenging to design policy to encourage such development.

Some countries have stimulated the community energy sector with special tariffs – Ontario has developed a ‘community bonus’ scheme whereby community-owned projects receive a small premium in the market. Other countries have developed specific tax breaks, such as tax exemption for community wind farm income in Denmark.

These policy levers do not translate to the current Australian context where the RET is our dominant tool to drive the development of renewable energy.

We propose the introduction of a ‘Community Power Builder’ whereby a modest LGC multiplier of 1.5 be applied to community energy projects – meaning that 1.5 LGCs would be created for each MWh generated by a community energy project.

Under such a scheme, a clear definition of ‘community energy’ needs to be developed. The criteria could be built upon existing definitions from other jurisdictions and in consultation with participants in the Australian community energy sector.

With the impact of the solar multiplier still very much front of mind, it is important the the implementation of the Community Power Builder does not materially affect the deployment of larger scale renewables:

- unlike the SRES, community power projects would operate under the LRET with no deeming provisions
- caps could be introduced, such as a limit in any given year of no more than 1% of the LRET interim target to be multiplier credits, and no more than 1% of those credits to be issued to any one project
- community power projects can take several years to build, so there would be ample time to review the sector’s progress
- at each review, determine whether the constraints are appropriate for the sector

With careful design of simple constraints, the impost on the LRET would be insignificant, yet by stimulating the community energy sector, the Community Power Builder would be instrumental in the development of significant social licence for renewable energy at all scales.

**Q. What is the appropriate frequency for reviews of the RET? What should future reviews focus on?**

**A. Periodic reviews should be limited in scope to troubleshooting market failures and lifting targets.**

Keeping in mind the goal to gradually decarbonise the stationary energy market, the LRET should be periodically reviewed to investigate:

1. whether any issues are holding back the development of the sector and how these issues may be addressed
2. whether there are grounds for increasing the targets to accelerate low carbon transition.

By keeping within this narrow scope, participants will be subject to significantly less sovereign risk than they have been over the past decade of the RET. After riding through a very volatile political environment, not to mention volatile environmental markets, participants need certainty that changes to the scheme will not undermine the economics underpinning the sector.

Regards,



Simon Holmes à Court  
Founding Chair  
Hepburn Wind