

Simon Mathis Managing Director Sinovel Wind Group (Australia) p/l Level 40. 100 Miller Street North Sydney

Response to the Renewable Energy Target Review

Sinovel Wind Group (Australia) p/l is the Australian subsidiary of Sinovel Wind Group Co., Ltd. one of China's and the world's largest manufacturers/suppliers of wind turbines.

Sinovel recently established on office in Australia, attracted by the opportunities presented by the Large-scale Renewable Energy Target to supply technology to large scale wind farms in Australia.

Given our dedication to the supply of large scale wind farms I have limited our response only to areas of direct interest and knowledge i.e. parts A, C & D.

A) Large-scale Renewable Energy Target

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?

The 41,000 GWh LRET 2020 target is achievable at a stretch and will result in the development of much of Australia's better wind farm sites. The best wind farm sites deliver the lowest cost renewable energy and it is important that the target incentivizes the exploitation of these resources to ensure economic efficiency and environmental effectiveness.

Sinovel strongly endorses the efficient development of Australia's renewable resources in a manner that ensures that the pace of development creates an industry with a long-term viability; where the best resources are developed first and at a scale that doesn't stress associated or dependent industries. Sinovel believes that the 41,000 GWh LRET 2020 target presents a sensible trade-off.

All wind farms constructed to meet the target will be generating electricity beyond 2030 and the end of the scheme. Whilst the interim targets of the scheme have been adjusted to remove the expected roof top solar overhang it has been well publicized that the 'bank' of LGC's is still creating a bust/boom scenario. Pushing out construction to later in the decade means wind farms delayed create fewer LGC's in total which all things being equal will drive prices higher to achieve the same returns. Sinovel believes that the interim targets should be further adjusted to bring forward investment and ensure the scheme operates as originally intended.

• 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?



If the entire 31,500 GWh (ignoring adjustments) of additional renewable energy from 2011 to 2020 were to be delivered from 35% capacity factor, 97% annual availability wind then 10,592MW must be constructed in ten years or 1,059MW a year.

So far 826.3 MW has/is being constructed and a further 898.5 MW is fully committed. These will all be operational by 2014 i.e. with 4 years of the LRET scheme complete we will be 2,511 MW behind and the run rate will need to increase to 1,267MW a year for the seven years from 2014 to 2020.

At the date of this response another 477.5 MW is construction ready but pending commitment and round 1339 MW is in tendering. If all of these projects proceed expeditiously then we will still have 7,080 MW to construct over the second half of this decade.

It is our opinion that the market has the opportunities, skills and resources to construct in excess of 1,500 MW of wind a year to 2020. This means that the target is deliverable but that the economics of delay make removing all barriers to early commitment critical.

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

National and International climate objectives support the case for a significant reweighting of our power generation system away from large centralized fossil fueled generation towards centralized and distributed renewable generation. MRET and LRET have proven a flexible and responsive scheme to start this reweighting.

Whilst a continuously rising target may be superficially attractive today a better approach may be to defer such a commitment pending a deepening understanding of the competitive landscape beyond 2020 vis a vis competing energy sources, the structural changes occurring to the energy landscape and future constraints to renewable energy development which may differ from todays (cost and route to market).

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

Yes! The target should be fixed to ensure all parties in the very lengthy cycle of development, construction and operation of a renewable energy project have investment certainty. The availability of great wind farm sites and access to grid infrastructure is much more appropriately supported through a fixed MW target at the current low percentage penetration levels. In future years (beyond 2020) as penetration levels rise alternative approaches may be more appropriate.

• 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?

See above and consider how inconsistent this methodology would be with current contracting models both in Australia and overseas that typically pass all volume risk onto the "retailer". A



dynamic target would require the "retailer" to look to push some volume risk back onto the wind farm owners with significant consequences for leverage, capital availability and cost.

- 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?
 - See above and note that the opportunities, skills and resources are available for the wind sector alone to deliver the LRET target without support from the CEFC. CEFC funded activities can be genuinely additional to the LRET target only if the target is adjusted.
- Is the calculation of individual liability using the Renewable Power Percentage the most appropriate methodology?
 - Yes. This methodology has proven a fair method of converting a fixed interim target to a proportional compliance liability. The challenges of accurately forecasting annual energy demand a year ahead are but nothing when considering potential inequity of other methods of allocating liability.
- Is it appropriate to set the Renewable Power Percentage by 31 March of the compliance year?

 Yes
- 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?
 - All exemptions increase the burden on the un-exempted. EITE have successfully argued for exemptions to ensure there are no impediments to international trade. These exemptions need to be regularly reviewed and justified to ensure the transfer of burden is equitable and genuinely in the national interest.
- The self-generator exemption pre-dates the emissions intensive, trade exposed partial exemptions are both required? If so, why?
 - No, self generator's that are EITE can obtain a partial exemption that is based on removing an impediment to international trade. Self generators should otherwise shoulder their share of the cost of the RET and be incentivised to invest in renewable technology where viable.
- 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?
 - Limit exemptions to EITE and ensure that these exemptions reduce in line with the merit order effect of increased renewable generation.
- Is a list approach to 'eligible renewable sources' appropriate?

Yes



- Are there additional renewable sources which should be eligible under the REE Act?
 No
- Should waste coal mine gas be included in the RET? Should new capacity of waste coal mine gas be included in the RET?

Waste coal mine gas should not be included in LRET and costs associated with the "transitional assistance" saved. Waste coal mine gas is catered for under the CPM and many owners are EITE. If compensation is really required due to the early closure of the NSW GGRS then that is a matter that should be considered directly rather than corrupting the LRET.

- What would be the costs and benefits of any recommended changes to eligible renewable sources?
 No comment.
- Are the LRET accreditation and registration procedures appropriate and working efficiently?
 No comment.

B) Small-scale Renewable Energy Scheme

- 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?
- 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?
- What is the appropriate process for considering and admitting new technologies to the SRES?
- Should any additional small-scale technologies be eligible to generate small-scale technology certificates?
- Is it appropriate to include displacement technologies in the SRES?
- Should additional eligible technologies under the SRES be limited to generation technologies?
- Is deeming an appropriate way of providing certificates to SRES participants?
- Are the deeming calculations for different small-scale technology systems reasonable?
- What are the lessons learned from the use of multipliers in the RET? Is there a role for multipliers in the future?
- Is the Small-scale Technology Certificate 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?
- Are the SRES administration arrangements appropriate and working efficiently?

C) Diversity of renewable energy access

- 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 costeffectively addressed through other means?
 - Leave the RET as is. New RET generation is dominated by large scale wind and roof top solar because this is where value for money lies.
- What would be the costs and benefits of driving more diversity through changes to the RET design?

 The RET has been established to achieve the 2020 target at least cost. Any change to the scheme's objectives may have unintended consequences. Lessons learnt from the different support schemes for residential solar imply any "diversity" support should be limited, clearly and transparently capped and probably delivered through tender as a fairer method of allocation than first in.

D) Review frequency

- What is the appropriate frequency for reviews of the RET?
 - The next RET review should be in 2018 when the 2020 target will be insight. The RET legislation, built as it is on MRET has been functioning effectively for 11 years and should be left to deliver the outcomes as intended.
- What should future reviews focus on?
 - A review in 2018 should focus on targets post 2020. By 2018 it should be clearer the institutional arrangements required and appetite to support additional renewable generation beyond 2020. If earlier reviews are agreed they should be limited purely to process issues to remove any investment uncertainty.