

Submissions  
Climate Change Authority  
GPO Box 1944  
Melbourne, Victoria 3001

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### **Clean Energy Council submission to Review of the Renewable Energy Target Scheme Issues Paper**

The Clean Energy Council (CEC) is Australia's peak industry body for the clean energy sector. We welcome the opportunity to provide comments in response to the *Review of the Renewable Energy Target Scheme Issues Paper*. We believe the Renewable Energy Target (RET) is the single most important policy for the development and deployment of renewable energy in Australia.

In summary, our submission outlines that:

- The RET is highly effective in delivering high volumes of investment into the Australian energy sector and thereby protecting Australian consumers against rising and volatile fossil fuel prices, whilst also driving the transformation of the Australian energy sector through the deployment of large and small scale renewable energy.
- The cost of RET is small and getting smaller, particularly in light of the significant benefits in terms of energy diversity and security, reduced energy demand (especially when combined with action on energy efficiency), reduced wholesale energy prices, jobs and carbon abatement that are generated.
- The RET is an investment grade policy that if left unchanged can deliver its target (20 per cent of Australia's energy from renewable energy sources by 2020), just as the industry delivered the MRET.
- Massive amounts of investment have already been made on the basis of the current policy settings. These investments, and Australia's credibility in attracting global capital for energy infrastructure, will be damaged if the RET is changed.
- The RET has undergone regular review since its inception, each time resulting in slowing or deferment of investment. Two yearly RET reviews present the single greatest risk to the achievement of the 20 per cent target by 2020, particularly as the review is considering changes to the overall target itself and not just the operation of the RET scheme.

This submission is in two parts. The first outlining overarching comments in relation to the RET, and the second addressing the specific questions raised in the Issues Paper. The CEC looks forward to discussing these matters further with the Climate Change Authority as it completes this review of the RET.



*Clean Energy Council*

Please contact Clean Energy Council Strategic Policy Manager Tim Sonnreich ( [REDACTED] ) if you wish to discuss any of these matters further.

Yours sincerely,

(Original signed)

**David Green**  
Chief Executive  
Clean Energy Council

## Section 1: Overview

Australia currently has one of the most carbon intensive energy sectors in the world. Yet we also have some of the best renewable energy resources anywhere in the world.

Taking advantage of these renewable energy resources is increasingly critical for two reasons.

As global action on climate change accelerates, transitioning our energy sector to a low carbon future is essential to Australia's own response. Investments in energy infrastructure are long lived. Only by deploying renewable energy now can we ensure a well-managed transition away from our most carbon intensive generation sources.

Secondly, our rapidly growing regional neighbours are increasingly hungry for our energy commodities. As a result Australia's gas reserves are increasingly in demand and the Australian energy sector has responded by ramping up exports. This has already resulted in substantial increase in the domestic price of these commodities as they compete with Asian countries like China, India and Japan who have massive energy demand and fewer renewable energy options. Domestic gas prices are only likely to rise further as they move toward parity with international markets. Reliance on these commodities for our own low cost energy supply is becoming an increasingly high risk energy policy.<sup>1</sup>

Australia's 20 per cent Renewable Energy Target (RET) by 2020 provides the foundation for transforming our energy supply and ensuring these risks are mitigated.

Taking advantage of our renewable energy resources will ensure the Australian economy prospers in the Asian century.

### **A proud renewable energy history**

For almost 100 years Australia has been exploiting its renewable energy resources. By the 1970s Australia's renewable energy production reached over 25 per cent of our total energy supply, predominantly from hydro power, with a small amount of bioenergy. This gradually declined as further renewable energy deployment slowed and accelerating demand was met with further investment in thermal coal plants.

Recognising the risks of a carbon intensive energy sector and need to develop a vibrant renewable energy sector, Prime Minister John Howard introduced the original Renewable Energy Target in 2001.

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<sup>1</sup> A recent review of the gas market in Queensland found that domestic buyers faced difficulty arranging supply contracts despite abundant capacity because resources were being sent offshore. Western Australia faced a similar situation and has legislated to require some resources be used domestically.  
[www.couriermail.com.au/news/queensland/queenslanders-face-rising-gas-prices-despite-states-massive-reserves/story-e6freoof-1226436147767](http://www.couriermail.com.au/news/queensland/queenslanders-face-rising-gas-prices-despite-states-massive-reserves/story-e6freoof-1226436147767)

Since then the scheme has been expanded and enhanced, resulting in the RET becoming the single most important policy measure for the entire renewable energy sector. It is a measure that has been globally replicated, including in the UK.

### **RET's achievements and successes**

As a market based measure, the RET delivers investment grade policy that underpins the deployment of the lowest cost renewable energy technologies. Since its introduction in 2001 it has achieved<sup>2</sup>:

- 13,700 GWh of large-scale renewable energy generation.
- Total investments to date have amounted to around \$18.5 billion.
- Another \$3.7 billion of projects are currently under construction.
- More than 1.7 million small-scale installations - solar panels and hot water.
- Large scale renewable energy is now powering the equivalent of over 2.1 million households.

Without the RET scheme emissions from electricity generation in 2012 would have been around 4 per cent higher. The additional emissions from electricity generation would have meant the national emissions level would have been over the levels required to meet the Kyoto Targets by around 2 to 3 percentage points.<sup>3</sup>

It has also driven ongoing reductions in the cost of renewable energy technology, to the point that some renewable energy technologies will soon become cost competitive with traditional fossil fuel based generation.<sup>4</sup> With this in mind it is not surprising that 90 per cent of Australians want more renewable energy. But delivering additional renewable energy requires stable investment grade policy.

### **Much more to come**

The RET has demonstrated the ability to accelerate and underpin the deployment of both large scale and small scale renewable energy in Australia. The extent to which it continues to do this will largely be determined by the willingness of decision makers to leave the RET scheme to stabilise, and

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<sup>2</sup> Based in part on analysis provided to the CEC by SKM MMA consultants.

<sup>3</sup> From analysis provided to the CEC by SKM MMA consultants.

<sup>4</sup> "By 2030 some renewable technologies, such as solar photovoltaic and wind on-shore, are expected to have the lowest LCOE of all of the evaluated technologies.' See; Australian Energy Technology Assessment 2012, Bureau of Resources and Energy Economics, Australian Government, p.5.

achieve its objective. In particular, any change to the GWh target of the scheme risks undermining investor confidence and the development of the entire industry. Further this would likely damage the returns on billions of dollars of renewable energy investment already made under the current policy settings and in turn damage Australia's reputation as a safe place to invest in energy infrastructure.

The 20 per cent target can be achieved and at low cost, only if the scheme does not undergo further and continuing change. This could deliver the following<sup>5</sup>:

- An extra 7,000 MW of new renewable energy capacity will be required to meet the LRET target (above what has already been committed), resulting in around \$13.8 billion in additional investment for the period from 2012 to 2020. Of this, only around \$2.1 billion could be expected to occur with carbon pricing alone.
- Total emissions abatement from renewable generation in the period to 2030 is around 380Mt CO<sub>2</sub>e with carbon pricing (250Mt without). The level of generation from small scale PV is projected to increase from around 1,300 GWh in 2011 to around 8,200 GWh in 2020 – representing an additional investment of \$18 billion.
- Renewable energy's share of total generation capacity in Australia would be around 9 per cent in 2020 without the RET.

The renewable energy industry has consistently outperformed expectations, forecasts and previous targets. The 20 per cent target by 2020 is therefore just the beginning. While now is not the time to legislate any amended target, industry is preparing to deliver a much greater level of renewable energy investment beyond 2020, at even lower cost.

### **The cost of the scheme is small and getting smaller**

The cost of the RET on electricity consumers is relatively small, and getting smaller, particularly when delivered alongside effective investment in energy efficiency. The cost of the scheme contributes just 7 per cent to the average Australian electricity bill, and this is forecast to reduce to just 4 per cent by 2020.<sup>6</sup>

The RET has helped to reduce the cost of renewable energy technology in Australia, most substantially in the case of solar PV.<sup>7</sup> As was recently acknowledged by Federal Resources and Energy Minister Martin Ferguson, this has resulted in lower overall electricity demand and lower wholesale energy prices.

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<sup>5</sup> Based on analysis provided to the CEC by SKM MMA consultants

<sup>6</sup> Based on analysis provided to the CEC by ROAM Consultants.

<sup>7</sup> "The scale and opportunity provided by the programs [RET, etc] were crucial factors in providing confidence for solar industry players to order products at previously unheard of levels and to leverage better deals from manufacturers." See; Solar PV Industry Report 2011, SunWiz Consulting & Solar Business Systems, Report for the Clean Energy Council, p.22.

While the recent boom in the uptake of small scale solar systems resulted in higher costs from the Small scale Renewable Energy Scheme (SRES) than had been anticipated a reduction in the multiplier ahead of schedule, coupled with reduction or elimination of state based feed-in tariffs has seen a significant reduction in the cost of the SRES liability.

### **Impact of the review itself**

The RET has undergone regular and substantial reviews since it was first designed in the late 1990s. The 20 per cent target was legislated in 2009 and enhanced in 2010, and now has 18 years left to run. A wholesale review of the scheme at this stage is both premature and potentially risks slowing or deferring investment in renewable energy and undermining the delivery of the 20 per cent target.

This now makes the two yearly review itself – ignoring any change to the scheme – the single largest barrier to delivering the 20 per cent target by 2020.

## Section 2: Response to Issues Paper

### Questions p.25

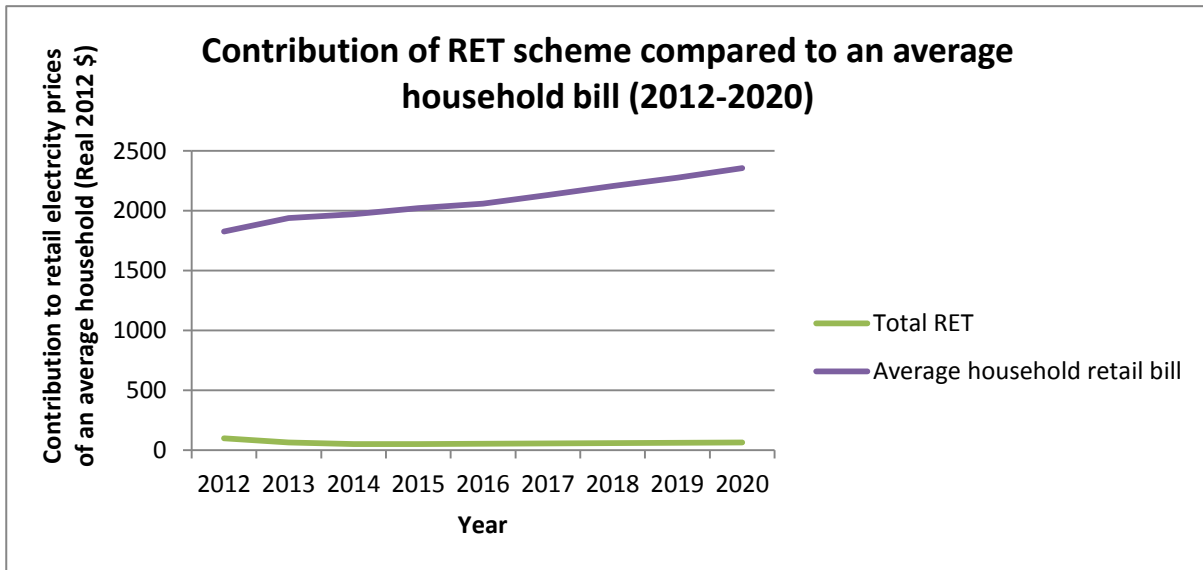
**Are the existing 41,000 GWh LRET 2020 target and the interim annual targets appropriate? What are the implications of changing the target in terms of economic efficiency, environmental effectiveness and equity?**

The clean energy industry supports the current 2020 target and the interim annual targets and is confident that these targets can be achieved. The next few years are the critical window for new investments to be financed and approved if the RET is to be achieved.

Altering the targets, even in ways which seem ostensibly to help the industry, would only serve to increase uncertainty, delay investment and jeopardise the efficient achievement of the target. This must be considered in the context of the recent changes to the RET as well as broader instability in the energy policy landscape (primarily carbon pricing). The 20 per cent RET was committed to during the 2007 election campaign, legislated in 2009 and then enhanced – by splitting the scheme into the SRES and Large scale Renewable Energy Target (LRET) – in 2010. While the clean energy industry supported these changes, it has contributed to a level of ‘change fatigue’ within the clean energy investment community, and the consequent impact this has had on investment sentiment.

Any further changes to the RET targets in the short term are likely to further aggravate this and ultimately result in higher risk premiums and overall higher costs to deliver the target, or delays in the necessary investment that could undermine achievement of the target. This also has an impact on Australia’s overall security of supply because the RET review affects not just decisions about clean energy investments, but also influences decisions about broader energy generation investments; their timing and costs.

Analysis commissioned by the CEC indicates that the 2020 target can be met under current market conditions *if the market has confidence* in the policy settings. The analysis, completed by ROAM Consulting also shows that the cost of delivering the LRET (analysis of the costs of SRES are detailed elsewhere in this submission) is fairly modest and stable in real terms and makes up a tiny part of the average household electricity bill.



Forecast cost of LRET on an average residential consumer annual electricity bill (\$) (assumes usage of 7300 kWh pa)										
Carbon Price Trajectory	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
CPT -5%	\$31	\$38	\$38	\$34	\$37	\$40	\$44	\$48	\$51	\$54

In ROAM’s words, the above table

*“demonstrates that the cost of the LRET to retail electricity customers is relatively minimal. Even in the case where no carbon price enters and LGC prices increase above the effective cap, the target of 41,000 GWh of renewable energy (meeting the majority of the 20% by 2020 target) can be achieved at a cost of \$70 per year per household in 2020.”<sup>8</sup>*

When we look at the same analysis from the perspective of the percentage of a consumer’s electricity bill that comes from the LRET, the ROAM assessment shows that the costs are very stable and low, potentially as low as 1 per cent of consumer bills in the second half of the decade.

Percentage of retail bills due to LRET <sup>9</sup>									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Australian total (mid projection)	2%	2%	2%	2%	2%	2%	3%	3%	2%
Low-high range	2-3%	2-3%	2-3%	1-3%	1-3%	1-3%	2-3%	1-4%	1-3%

<sup>8</sup> Based on analysis provided to the CEC by ROAM Consultants.

<sup>9</sup> Based on analysis provided to the CEC by ROAM Consultants.



What these figures show is that the LRET continues to be an economically efficient mechanism for supporting renewable energy. It is bringing forward the lowest cost renewable energy technologies and is driving down the cost curve as the annual targets increase, allowing for an essentially stable or falling cost impact to consumers in percentage terms.

From an equity perspective this is a very reasonable level of impact on consumers given the enormous benefits delivered by the RET in terms of protection against volatile fossil fuel prices, emissions abatement, jobs and investment and the additional security of a diversified energy generation base. Moreover the LRET is lowering wholesale electricity prices in the National Electricity Market although it is important to note that the flow through benefits of this to consumers are not captured in the direct costs indicated above.

**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?**

The LRET target trajectory has been effective at driving sufficient investment to meet the current targets. This has been complemented by ongoing growth in the deployment of small scale systems (under the SRES) which means we are well on track to meet the 2020 target. While the LRET scheme had an initial oversupply of certificates (carried over from the inclusion of multiplied solar PV credits) this has largely been rectified with a more balanced supply/demand scenario emerging. Modelling completed by ROAM Consulting for the CEC shows that most liable parties will need additional LGCs around 2015 and beyond to meet their annual liabilities. Given the lead time to construct large scale renewable energy projects it is therefore anticipated that this will continue to trigger off-take agreements being reached and ultimately the development of additional capacity to meet these future liabilities.

The critical issue now is to ensure that both markets are given a significant period of policy stability to effectively bed down the changes that have come into effect over the last 18 to 24 months.

So far the RET has driven the deployment of 13,700 GWh of large-scale renewable energy generation, and more than \$18.5 billion of investment in small scale systems. In terms of future investment, there is a significant pipeline and drivers for increased deployment that can all ensure the 20 per cent target is ultimately achieved. These include:

- Some 15,000MW of wind farms are already approved or proposed throughout Australia. While it is unlikely that every one of these projects will be completed, this is more than enough approved capacity to meet the LRET targets, before considering a range of technologies and projects beyond wind energy that are also well developed and awaiting policy stability and the necessary price signal to continue to development.
- Public support for wind energy projects remains high, despite a vocal campaign by a very small number of anti-wind campaigners. Polling conducted for the CEC indicates that nearly

4 out of 5 people support wind farms, including those living in areas that already have wind projects in their area. The wind industry is focused on ensuring this strong community support continues and local communities understand the true impact and benefits of wind farms.

- The Australian Renewable Energy Agency (\$3.2 billion of total funding) and Clean Energy Finance Corporation (\$10 billion) have substantial amounts of allocated and unallocated capital to leverage even greater levels of private investment into demonstration and commercial stage projects. While the specific focus of these institutions and the outcomes likely in terms of generation output and REC production remains unclear, it is clear they will complement the delivery of the RET.
- Recent sharp increases in retail electricity prices (due largely to rising costs associated with transmission and distribution infrastructure) are likely to continue for the next few years at least. This is driving interest in the benefits of small scale renewable energy systems – namely solar hot water and solar PV – to mitigate against these rising energy prices. This has translated to continued growth in demand for and the deployment of small scale systems.

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

With the substantial changes that have been enacted in recent times (splitting the RET, accelerating the reduction in the Solar Credits Multiplier (SCM), etc) coupled with the uncertainty about the impact and longevity of the Clean Energy Future package, the question of whether the RET's post-2020 obligations should continue to rise should be considered in the future when there is greater clarity about the status of the energy sector broadly.

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

Yes. As the issues paper notes, this issue has been considered previously and the strong consensus has been that a fixed gigawatt hour target is essential to ensure that the policy framework is sufficiently transparent and predictable to drive investment. The potency of this argument has not changed, and if anything the tightening of financial markets in the wake of the Global Financial Crisis mean that investors need even greater levels of clarity before committing to projects with high capital costs and long investment and operational lives.

**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?**

Investing in a 15-plus-year energy project requires long term certainty about the policy settings that will have a material impact on the revenue sources for the investment. *This is achieved by a fixed target that provides the highest level of certainty to investors.*

As our response to the previous question makes clear, the clean energy industry urges the Climate Change Authority and the Commonwealth to avoid any alteration to the target at this time, regardless of whether the motivation for those changes is to drive more or fewer renewable energy investments. Investment decisions made in the next 12 to 24 months will likely determine the extent to which the 20 per cent RET is met.

The issues paper makes clear that the phraseology of “20 per cent” is essentially a public communications tool to help the public understand the scale of the commitment. But in practice the target has always been expressed in legislation and regulations as a fixed amount, which will likely equate to approximately 20 per cent by 2020. The term “20 per cent” is meant as an aspiration and an indication of scale, not a cap on ambition. In fact when announcing the decision to separate the RET into LRET and SRES, then Minister for Climate Change Penny Wong stated that...

*“These changes are expected to deliver more renewable energy than the original 20 per cent target and will ensure we build the clean energy future Australia needs”.*

There are a number of factors that will ultimately determine how closely the GWh target aligns with 20 per cent. These include:

- Future electricity demand which is inherently difficult to predict, particularly at a time where the Australian energy market, production and consumption of electricity are undergoing quite substantial reforms and change.
- Natural variability in output of renewable energy generation that will mean REC production and therefore actual output in any given year may vary.
- The output of pre-existing renewable energy generation. This is predominantly hydro based output reliant on rainfall. Ongoing changes in weather systems, impacts of climate change, drought and natural weather variability all contribute to uncertainty about the actual level of renewable production.
- The nature of small scale renewable energy demand and the impact that consumer preferences and broader market drivers, for what are essentially consumer products, have on the continued uptake of small scale renewable energy systems and their REC production by 2020.

Altering the target to conform to any one of these factors and any short term change would be a highly subjective basis for change. Each of these factors are difficult to forecast, over both short and long term periods.

A range of projections have been made public by different parts of the energy industry. Origin Energy, for instance, who have now changed their long held view on the need for policy certainty by publicly supporting a reduction in the RET due to potential for continued demand reduction.

The original 20 per cent by 2020 target was based on expected total electricity demand of 300TWh in 2020. This would require 60TWh of renewable electricity to be supplied by renewable sources. Existing renewables, mostly existing hydro-electricity projects, are expected to supply 15TWh, with 45TWh of additional renewable generation needed to meet the target.

Origin claims that electricity demand will now be just 250TWh in 2020. This would only require 50TWh of renewable energy to meet a 20 per cent target.

While the recently published ESAA document *Electricity and Gas Australia 2012* has electricity demand in 2020 at 275TWh. This would require 55TWh of renewable energy by 2020 to meet a 20 per cent target. The ESAA figure excludes off-grid demand in WA (which is included in the calculation of the RET). Including this would make final demand in 2020 277TWh requiring around 56TWh of renewable generation by 2020. Both of these projections are not significantly different from the legislated target.

Estimating electricity demand is an inherently uncertain task. Altering the policy framework that underpins billions of dollars in investment because current mid-term AEMO projections might suggest continued demand reductions would seriously undermine the policy certainty that needs to be at the heart of any effort to attract and sustain investment to Australia.

As various experts have noted, average and even peak demand rates in recent years have been much lower than expected, in part because of the impact of the La Nina weather patterns which have resulted in cooler and wetter summers. However this cycle is temporary and the next few years may see a sharp increase in demand:

“Who knows just how many air conditioners there are out there in suburbia that have never been turned on? And that’s the rub for government and utilities. When our weather cycle breaks back into the El Nino conditions and summer temperatures start to soar, who knows what demand we will likely expect?”<sup>10</sup>

Similarly, weather patterns can have other substantial impacts on actual demand occurring in any given year. It should be noted that the 15TWh of existing renewables is primarily hydro-electricity generation. In drought years the level of output from hydro power stations is likely to be lower and means that the 15TWh from existing renewables is not guaranteed. These are likely to be the same years that are characterised by higher electricity demand, highlighting the essential need for the persistence of the legislated target in order to offset this uncertainty.

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<sup>10</sup> Prof. Mike Sandiford, The problem in the grid, The Conversation, 16/8/12, <http://theconversation.edu.au/the-problem-in-the-grid-8868>

Furthermore, electricity demand is impacted on by other forces which are difficult to predict, such as the economic strength of our major trading partners (affecting exports), the strength of the Australian dollar and commodity prices (which could substantially effect electricity demand in WA, remembering that the RET includes the SWIS, DKIS and off-grid markets), etc. Demand forecasts therefore can be a useful guide to policy makers but should not provide any justification for altering the RET at this time.

#### **Question p.26**

**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?**

The objectives of the CEFC are to accelerate the deployment of emerging clean energy technologies. This by definition is likely to result in bringing forward forms of renewable energy generation that may not otherwise have been commercial and producing renewable energy. This is likely to have some impact on the supply of LGCs in LRET, particularly in the latter half of this decade, and therefore risks presenting some uncertainty for investors of other least cost technologies that do not enjoy the support of the CEFC. The extent of this impact will not be determined until the CEFC is established and begins making decisions about the type, scale and timing of investments.

It is also clear that CEFC projects should be eligible under the RET and to create LGCs. Interaction with the REC market will provide an important lesson for CEFC project proponents, not to mention a critical source of revenue to commercialise these projects.

Notwithstanding these risks and concerns, it is critical that the RET is not amended at this stage. The CEFC and future reviews of the RET may consider this matter once the CEFC is fully operational and beginning to make investment decisions. This impact and risk may also be addressed by considering increases in the RET target beyond 2020. Again, this should be done at a later stage.

Indeed amending the RET target at this stage to facilitate CEFC projects is likely to undermine the policy clarity that needs to be at the heart of the RET and therefore the commercialisation of those same CEFC projects.

#### **Questions p.27**

**Is the calculation of individual liability using the RPP the most appropriate methodology?**

**Is it appropriate to set the RPP 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?**

The CEC will focus our response to the issues paper on matters relating to the efficient and effective deployment of renewable energy projects to achieve the RET, therefore we are not commenting on matters related to the allocation of RET liabilities as these do not materially affect the deployment rate of projects.

The shortfall charge is an important driver for the delivery of renewable energy projects and achievement of the ultimate target. It must be noted that the cost of renewable energy is trending downward much quicker than anticipated. This is likely to continue as a result of a number of factors including:

- Technology innovation and development that deliver lower costs in manufacturing or installation.
- Increased knowledge and scale that driver greater efficiency and lower cost.
- Increased global production.

There can however be short term aspects which can either stall this trend or even momentarily increase the cost of renewable energy projects. This might include shifts in global demand for various technologies, Australian or international currency movements or changes in related policies (such as planning which may increase the cost to deploy particularly technologies). In addition to these factors, the actual price of RECs necessary to deliver the 20 per cent RET over time will also be impacted by the wholesale energy price. This is driven by a broad range of factors and uncertainties, not least of which is the current and future carbon pricing policy and its subsequent impact.

Ultimately the CEC supports the establishment of the penalty price at a level above the expected maximum REC price to deliver the 20 per cent RET with the lowest cost renewable energy technologies. As outlined above this is dictated by many factors and great care should be taken in trying to anticipate this cost over time.

Analysis commissioned by the CEC demonstrates that the current 20 per cent target can be achieved, and that it can be achieved within the current prescribed penalty. Further, the RET has undergone dramatic changes in recent times, and a period of stability is required. Altering the shortfall price, either up or down, would likely have a material impact on the LGC price as the market adjusts to new incentives. This would further contribute to undermining investor confidence in the scheme and ultimately increase the overall cost to deliver the scheme or stall investment and undermine its achievement.

That said, it is worth noting that there are other potential barriers to the achievement of the RET target beyond the direct scope of this review, such as:

- State based planning laws which restrict the location (and therefore the viability) of certain projects, particularly wind farms.
- Challenges related to network connections for domestic and commercial scale projects. This can take the form of limits on system size and location of embedded small scale generation, or the cost (and lack of transparency on costs) of connecting commercial scale systems.
- Limits on the availability of a sufficiently skilled workforce.
- Challenges related to the design of the national energy market which limit the ability of embedded generators to fully monetize all the benefits which their systems provide.

The CEC would encourage the CCA and governments to consider these and the extent to which complementary policies or processes - such as the current Transmission Frameworks Review (TFR) or up-coming Energy White Paper - could help in addressing them.

#### **Questions p.29**

**What are the costs and benefits of the current exemption arrangements?**

**The self-generator exemption pre-dates the EITE partial exemptions – are both required?**

**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?**

As stated above, the CEC will avoid commenting in detail on elements of the RET that do not materially influence deployment rates. Exemption rates are a question of equitable sharing of costs, which are important insofar as they are fair to the community, which will ensure continued strong public support for the RET. The critical aspect for the deployment of renewable energy is that the target and therefore liability remain unchanged in total.

#### **Questions p.31**

**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?**

Any change to the current list of eligible renewable energy sources is likely to impact the overall supply of RECs and therefore impact on the level of investor confidence in the current scheme. Technology eligibility has been debated on numerous occasions and over a long period of time. Any call for this to be re-examined on the basis that a new source of (currently ineligible) technology seeks the incentives of the current RET, should be resisted.

In particular the Renewable Energy Sub Group (RESG) of COAG considered this issue in detail and found; *“RESG’s recommendation is to not extend eligibility under the RET to any new small-scale technologies”* going on to say that to do so would *“mean an unacceptable level of uncertainty regarding the potential impacts... particularly on electricity prices”*.<sup>11</sup>

Making additional allowances for waste coal mine gas (beyond current provisions) would be inappropriate and reduce the ability of RET to deliver on its core objective of increasing deployment of low cost renewable energy technology. The existing rules regarding waste coal mine gas were created to avoid a perverse environmental outcome, but expanding those rules would itself now create a perverse outcome by skewing investment away from clean energy technologies.

Again, the RESG report considered this issue carefully; *“RESG recommends not extending eligibility to new waste coal mine gas (WCMG) generation under the LRET... WCMG is not a renewable energy source and existing WCMG generation was originally included in the RET as a transitional assistance measure...”*<sup>12</sup>

### **Question p.31**

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

There are some issues in regards to these procedures, at least in relation to wind farm connection and REC accreditation with the Climate Energy Regulator (CER).

Generally speaking there is a significant level of duplication between departments/agencies in terms of the information sought and procedures required of proponents. For example, operators have to meet certain conditions in order to receive a generation licence from AEMO and then undergo a further phase of information and assessment to be accredited as a generator under ORER. This lack of coordination is an area worthy of further consideration by the CCA.

Specifically in relation to accreditation, there is some ambiguity in the regulations governing when and how back-dating can occur once accreditation is approved CER.

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<sup>11</sup> Renewable Energy Sub Group, COAG Review of Specific RET Issues, Report to the Council of Australian Governments’ Select Council on Climate Change, March 2012, p.35.

<sup>12</sup> Renewable Energy Sub Group, COAG Review of Specific RET Issues, Report to the Council of Australian Governments’ Select Council on Climate Change, March 2012, p.67.



The accreditation process requires a wind farm to have gone through its commissioning phase in order to provide all documentation required for CER (because some required information is not available in advance of commissioning being completed). In effect, even though the wind farm may be generating for a number of months and creating renewable energy that goes into the NEM, there is no clear point identified for REC accreditation to apply retrospectively. This ambiguity, coupled with the fact that CER does not have an administrative timeframe that they are required to adhere to, the wind farm operator can be caught out by the process and be forced to forego revenue until the certification is finalised and a “REC start date” identified.

One of the obstacles appears to be that AEMO will grant conditional approval, whereas the CER requires that full documentation be provided in order to submit the request for REC accreditation.

CEC members have also raised concerns with the lack of a clear definition from CER on the point at which generation data is recorded – such as whether it is at the turbine, at the switchyard or at the point of connection to the grid. It would be helpful to have a consistent approach that aligns with the way this issue is treated by AEMO.

#### **Questions p.34**

**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?**

The uncapped SRES is designed to drive household level uptake of clean energy systems and to support the industries covered by the scheme through a stable policy support. If the scheme were to be capped you would see installations of small scale systems pulled forward (to avoid being outside the cap) which would create a cycle of boom and then bust, as once the cap was reached demand would plummet until the cap reset the following year.

This is an entirely different market dynamic than the large scale sector where the timelines for projects are influenced by a variety of factors (such as relevant planning approvals) and can then be initiated at a suitable time. Household demand is uncoordinated and often driven by external events (such as the need to replace a hot water system). The uncapped scheme, with the rolling over of excess STCs, is a mechanism that has provided a relatively stable platform for industry (notwithstanding instability from changes to state-based Feed-in Tariffs (FiTs) or shifts in the SCM, both of which are unlikely to create future problems).

The economic and practical cost and benefits are discussed in response to the next tranche of questions below. However from an equity perspective the uncapped nature of the scheme reduces

the pressure on consumers to make quick decisions and therefore generally results in purchasing decisions that are more fully considered and therefore deliver better overall outcomes for householders.

SRES has been extremely successful in driving uptake in small scale technologies. Around 1.7 million households have a solar PV system, including those that have installed other eligible technologies like solar water heating systems and small wind systems. All of this has required the development of a skilled workforce to meet consumer demand. The number of CEC accredited installers has grown from just a few hundred five years ago to over 4000 today.

That said, we have seen a quite sharp reduction in demand for solar hot water units in the last year or two and this has resulted in a contraction in the industry and its workforce. The dual impact of FiTs and the solar credits multiplier, along with other factors, has meant that while PV has experienced strong growth in recent years, demand for solar hot water has declined. With FiTs and the multiplier largely gone we will hopefully see a recovery in the solar water heating market, but the loss of the Renewable Energy Rebate Scheme (REBS) has complicated that situation and we may see a continued contraction in the size of the manufacturing and retail base of the local industry. Again this is further reason not to alter the SRES at this time as any further policy uncertainty would only hurt those industries like solar hot water which are experiencing the greatest difficulties at present.

#### Questions p.34

**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?**

Investment in large scale and small scale renewable energy is fundamentally different for the following reasons:

Differing factors	Large Scale	Small scale
Investment	Utility scale investment	Consumer goods
Financing	Equity or institutional debt financing	Cash, consumer credit or bundled with electricity billing
Other market drivers	Wholesale energy market	State based feed-in tariffs, consumer awareness about electricity prices
Investment horizons	15+ years	6-10 years
Price discovery	Market based determined by least cost new entrant renewable energy project.	Capped at \$40
Scheme objectives	Deliver lowest cost renewable energy projects	Provide a stable incentive for consumer uptake

These factors created significant challenges for both small scale and large scale technologies when combined in a single scheme. This was critical in determining to split the RET into SRES and LRET – something the CEC fully supported in 2010. None of these factors have fundamentally changed since 2010 and therefore the CEC believes SRES and LRET should remain separate schemes, continuing to recognise the fundamentally different nature of both schemes.

The division of the RET into two schemes has been absolutely critical in stabilising the markets for both large and small scale investment. Separate schemes allow for different policy structures to exist for small scale technologies (such as deeming) without disadvantaging large scale technologies.

Moreover, the uptake of small scale technologies (particularly solar PV) has invariably been higher than anticipated by the regulator, and separate schemes avoid the risk of certificates from small scale technologies crowding out investment in larger scale projects.

In terms of small scale renewable energy systems the RET has been an enormous success so far. The boom in small scale solar installations has seen more than 1.7 million small-scale installations (PV and solar hot water) installed.

For sufficient large scale projects to be delivered to meet the target there needs to be a high degree of investment certainty, which is why it is necessary for the LRET to be separated from SRES.

Finally, separate systems allow for the small scale scheme to be uncapped, which is appropriate given the high level of interest by the community in these technologies, but in a way where liable parties have a degree of predictability about their total exposure in a given year.

The economic costs of the SRES are well documented and what the figures show (below) is that 2012 is the peak year for SRES costs. Costs are forecast to more than halve in 2013 and continue to fall steeply in most projection scenarios. There are a number of reasons for this including:

- The cost of solar PV has fallen dramatically allowing the multiplier to be reduced ahead of schedule and phased down from 5 to 1 by June 30 next year.
- Feed-in tariffs which also play a crucial role in determining the level of deployment of small scale solar PV, and subsequently the STC supply/liability, have been reduced or eliminated in every state in Australia over the past year. This has resulted in slowing of the uptake of PV and therefore reduction in the overall cost of SRES.
- The boom in solar PV generated by the combination of SRES and generous feed-in tariffs in most states created a large oversupply of STCs that had to be added onto the Small Technology Percentage (STP) in 2012. This is simply a catching up of costs from 2011 rather than a spike in installations this year. Once that 2011 surplus is cleared the installation/STC creation rate falls back and costs to consumers fall.

It is also worth noting that SRES comes with significant benefits to the community (on top of the obvious benefits to the individual household). The rapid adoption of domestic scale PV has been one

of the major factors in the recent, unprecedented, decline in overall electricity demand. This was not forecast by AEMO or other credible energy industry analysts, and while it is too early to tell whether this decline will continue, it has helped to ensure that market is well supplied which has helped to suppress average NEM wholesale prices (along with the impact of other factors, such as the LRET and seasonal weather effects). More work needs to be done on ensuring that the market structure allows for the full benefits of lower wholesale energy prices to be transferred to consumers.

<b>Cost of SRES - on electricity tariffs and annual consumer bills<sup>13</sup></b>									
Cost of STCs on retail tariff (c/kWh)									
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Average	0.84	0.33	0.21	0.18	0.16	0.15	0.14	0.14	0.14
Cost of STCs on annual bill (\$) (assumes average household usage of 7300 kWh pa)									
Average	\$61	\$24	\$15	\$13	\$12	\$11	\$11	\$10	\$10

### Questions p.36

**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?**

Since its inception the SRES has presented challenges in terms of projecting consumer demand for small scale systems and subsequently resulting in volatile STC prices. Partly this has been the result of changing policy support (changes to FiTs and the SCM), but it has also been the result of the great difficulty in accurately predicting the rate at which technology costs have fallen (particularly for solar PV). Therefore the CEC would urge that caution be taken in any consideration of changes to the SRES. Recent interventions by policy makers have contributed significantly to the cycles of boom and bust that the small scale sector has had to endure. In just the last few months the STC market has begun to stabilise. Further changes to SRES at this stage would undermine this stability.

At this time there should not be any changes to the eligibility of particular technologies to participate in the SRES. Whether other policy mechanisms, such as a National Energy Savings Initiative (NESI), should complement or replace the SRES as a form of assistance for specific technologies cannot be determined at this stage given there is still great uncertainty about the form and scale of those alternative schemes.

<sup>13</sup> Based on analysis provided to the CEC by ROAM Consultants.

## Questions p.37

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

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

Deeming is an effective way to provide consumers with an incentive that overcomes the upfront expense of a small scale system. The CEC believes that deeming is also a necessary and fair way to avoid the administrative burden of a production-based incentive through the RET. The issues paper suggests the possibility of a production-based payment outside of the RET, namely a feed-in tariff (FiT). Several points need to be made in relation to replacing SRES with a FiT;

- (1) The SRES and FiTs are very different policy mechanisms. The former seeks to lower the upfront cost of small scale technologies, and the latter providing on-going payments over the life of the installation. Reducing the upfront costs of small scale technology has been absolutely critical to their recent success. In the case of solar PV it has allowed the technology to be affordable to a large proportion of Australian households, which is why analysis of the postcodes data of where PV systems are being installed, reveals the most popular areas are those lower socio-economic communities like Dubbo (NSW) and Caloundra (Qld).<sup>14</sup> FiTs do not have the same effect even if they create the same or better pay-back periods because the upfront cost is the greatest barrier to uptake.
- (2) Notwithstanding the point above, a FiT is only applicable as a support measure for generation technologies, not displacement technologies like solar hot water (our response to the questions on page 34 of the issues paper explain why solar hot water must continue to have the support of a scheme like SRES and not be folded into a single RET). Therefore a FiT scheme cannot be a viable replacement for the entire SRES and collapsing even part of the SRES into LRET would be enormously damaging to all the affected technology types.
- (3) It is important to differentiate between different types of FiTs when considering their use as policy tools. There are 'incentive based' schemes, where the tariff level is deliberately set to be an incentive for consumers to invest, rather than calculated as a value (economic/environmental) of the energy generated. The various state-based FiTs of 60c, 44c (etc) were examples of this type of FiT. The second form of FiT is a 'value based' scheme which looks to set the tariff rate at an unsubsidised and 'fair and reasonable' rate. Several states have undertaken inquiries recently to determine this rate although the industry has disagreed with the definition of the proper 'fair value tariff' proposed by various state regulators as they have tended to ignore the benefits to distribution networks of embedded generation.

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<sup>14</sup> Australians embrace solar to tackle rising power bills, Media Release, Clean Energy Council, 11/4/12, [www.cleanenergycouncil.org.au/mediaevents/media-releases/April-2012/110413.html](http://www.cleanenergycouncil.org.au/mediaevents/media-releases/April-2012/110413.html)

- (4) A national value based FiT would be welcomed by the industry if it was a true reflection of the fair and reasonable value and not simply a codification of the various state-based determinations which to varying degrees have under-estimated the economic value of exported PV. However, the States are all moving in the direction of implementing value based FiTs and so a national FiT would not provide much additional assistance to the industry to compensate for the loss of the SRES, which would mean that the upfront costs of solar PV would rise, which would push many potential consumers from lower - and fixed - income households out of market. This would reduce the equity of the RET and remove one of the most effective policy tools the Commonwealth has available to assist lower-income households to managing rising electricity prices.

Finally, on the issue of the effectiveness of deeming rules, these are reviewed regularly and have been adjusted for some technologies like solar hot water. The CEC understands that the Clean Energy Regulator has conducted studies of PV performance in the Canberra area and found their actual output to be closely aligned to the deeming provisions. We also believe that similar work has been done in South Australia looking at the performance of solar hot water units. So there is currently no evidence that the industry is aware of that would indicate any significant divergence between the expected performance of small scale technologies under the deeming provisions and their actual performance.

### **Question p.38**

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

The solar credits multiplier was a success in terms of driving the uptake of domestic PV systems. The combination of the SCM and state-based premium FiTs meant that PV was aggressively supported just at the point at which the underlying cost of PV technology was about to fall rapidly. The combination of all of these factors led to a market that expanded very rapidly and this had consequences for the functioning of the RET (leading to the RET being split into two schemes) and for the costs of policies to consumers.

The accelerated uptake has led to major development of the PV industry in Australia and reductions in costs of the technology. It was obviously difficult to anticipate the PV technology cost reductions and governments have acted to address the situation effectively by reducing incentives at both state and federal government levels.

The reduction in the SCM has been accelerated and will be all but gone by the time the Commonwealth responds to the recommendations of this review. The CEC does not recommend any further changes to the timeline for the phase-down of the SCM, or for there to be any new roles for multipliers to be created as a result of this review. This includes any consideration of the use of multipliers as a form of “banding” (discussed further below), for example in the UK where the

technology ‘bands’ are not expressed as GWh requirements but rather as positive or negative multipliers.

### Questions p.39

**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?**

While the Clearing House has not necessarily played the role that it was intended to play as part of SRES, it is nevertheless now an important part of the scheme. The challenges in forecasting the uptake of small scale systems has limited the extent to which the clearing house has played an active role in the market to date.

The CEC believes the Clearing House should remain in place and will over time play an increasing active part in the functioning of SRES. If the Clearing House were to be changed or abolished, or if the \$40 price were to be adjusted, the impact on the small scale technology market would be highly detrimental.

Firstly the value of STCs in the spot market would likely fall dramatically, as the expectation that the Clearing House will eventually come into play in a significant way over the next 12 to 24 months would be removed and this would lower estimates of the longer term value of STCs.

Many investors, from the major banks to solar PV business and dedicated certificate trading businesses are holding substantial quantities of STCs. Material changes to SRES or the Clearing House could devalue those assets and undermine the viability of those businesses. As these certificate trading businesses help to provide cash flow to PV businesses anything that harms these businesses or discourages new entrants into the STC market will harm the PV sector more broadly. At the very least it would reduce the value of their asset which is unfair to them. The presence of REC traders has improved the liquidity of the SRES market and helped technology companies with cash flow and business planning. These businesses should not be undermined by changes to the Clearing House of its STC price. Even seriously considering this option will have an impact on market sentiment and the value of STCs until that uncertainty is resolved.

While the cost of PV has fallen, this has been compensated for in the SRES by the (accelerated) reduction in the multiplier. Lowering the \$40 price or altering the Clearing House would be overkill and very detrimental to businesses that have built on models that incorporate the impact of the Clearing House on the price of STCs in the private market.

## Questions p.41

### **Are the SRES administration arrangements appropriate and working efficiently?**

Broadly speaking the CEC believes that the SRES is well administered. Some changes have been made in the last year to the timing of release of the non-binding STP and these have helped the market prepare for the likely level of demand for STCs. Small changes like that have been achieved without changes to the RET legislation and we see no outstanding issues that cannot be resolved in a similar fashion over the coming years.

## Questions p.45

### **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 LRET has been highly effective in driving the deployment of the lowest cost renewable energy technology, while SRES ensures the parallel deployment of small scale technology. The form of this lowest cost technology has indeed changed since the scheme was first put in place in 2001, and is likely to continue to change as different technologies mature and reduce in cost.

A stable and effective RET is critical to providing a long term price signal to developers and investors in technologies that are still progressing through the research and development and demonstration phases of the technology life cycle. Without an effective market to deploy these technologies into – once they are proven – early stage investors will question the value and return of investments in such technology. As discussed elsewhere in this submission, ongoing changes to the RET will undermine this long term market signal and impact - directly or indirectly - all renewable energy technologies at differing stages of their development.

Continuing to develop a portfolio of clean energy technologies is however an important objective, particularly if Australia is to go far beyond 20 per cent of our generation from renewable sources, at increasingly lower cost. These earlier stage technologies face a range of market and non-market barriers and impediments that do however require policy intervention.

The Australian Government is to be congratulated for acknowledging the importance of this objective and the challenges these technologies face, and committing to the establishment of the Australian Renewable Energy Agency and Clean Energy Finance Corporation. These institutions are expected to provide funding and financial support for these earlier stage technologies, to see them through the challenging research and development and demonstration phases. With the support of these institutions, they will reach commercialisation at which stage they may compete freely with



other least cost and proven renewable energy technologies to deliver on the RET as the market may determine over time.

The CEC does not therefore support any changes to the design of the RET at this time. As we have argued above, even changes ostensibly designed to promote particular clean energy technologies would simply introduce greater uncertainty into the market, harming investor confidence and jeopardising the industry's ability to deliver on the RET target.

In any case, a production based incentive such as the RET is often of little value to technologies that face a range of challenges and funding hurdles before they reach production stage of their development.

Introducing mechanisms into the RET to promote specific technologies (such as 'banding') carry additional risks on top of the general risk of undermining confidence in the RET. Banding requires a level of foresight and prediction into the specific timelines and capabilities of emerging technologies that is near impossible to do accurately. This presents great risk.

If the RET were banded to provide a band for a particular technology, it may be that this technology would not be technically capable of delivering that scale of deployment in the timeframe required. This would put achievement of the 20 per cent target at risk. Alternatively, the band could be designed with a sufficiently high penalty price that it forces in projects that are not commercially ready. This would drive up the cost of the RET substantially. Efforts by government to 'tinker' with the band to compensate for these problems in future reviews would simply lead to more uncertainty and risk for investors.

The UK's experience with banding illustrates all of these points. The UK Renewables Obligation Scheme grew from zero to now 23 different specific technology bands, with a further six technologies included under one of those bands over a 10 year period.<sup>15</sup> The level of complexity that results is enormous, with different band levels (which essentially act as a certificate multiplier) in different parts of the country, and endless reviews aimed at tinkering with the bands including one underway at present which considered even greater complexity by adding in 'bands within bands' (higher multipliers for the first few projects in some technology classes and then lower multipliers for additional projects). The complexity deepens because once a band has been created for one technology it is difficult to deny additional bands for other technologies.

The effect of these bands is to add complexity and risk for financiers, and to risk boom/bust cycles for proponents and has resulted in the UK adopting a ever more intensive set of interventions in the market many of which are now fundamentally altering the market based approach to energy policy that the UK led.

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<sup>15</sup> Government response to the consultation on proposals for the levels of banded support under the Renewables Obligation for the period 2013-17 and the Renewables Obligation Order 2012, UK DECC, 25/7/12, p14-15.

By comparison the RET is divided in two schemes based on technology scale, but is neutral on technology type. This is the most efficient and effective at driving low cost deployment at each scale and reward mature and commercially proven technologies.

#### **Question p.46**

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

The RET policy was first announced in 1997, and was followed by a rigorous and protracted process – including technical experts, market analysts and substantial consultation with renewable energy businesses – to investigate the most effective design and implementation of the scheme. Following its commencement in 2001, a comprehensive review was conducted in 2004. The 2007 commitment to expand the target to 20 per cent by 2020 followed further substantial review and consultation. This occurred again in 2010 when the scheme was enhanced. Each time the many key design elements of the scheme have been analysed and assessed with a general conclusion that the scheme is functioning as required and driving additional renewable energy into the Australian energy sector.

Each time these reviews or changes are undertaken, investment in renewable energy deployment stands still. The uncertainty and changes proposed through such process simply undermine investor confidence and result in deferment of investment decisions.

The legislated review is likely to take approximately one year from official commencement until Government response, and potentially longer should change be regulated or legislated. Assuming that during this period investment slows or is deferred, then the very nature of these reviews presents the most substantial risk to the achievement of the 20 per cent target.

While the renewable energy industry welcomes scrutiny of the RET, the impact of the reviews – ignoring the materiality of any subsequent scheme change – are a critical concern for the industry. The CEC recommends less frequent reviews of the scheme.

At the very least the scope of future such reviews should be narrowed such that many and substantial aspects of the scheme, particularly where these have been reviewed repeatedly over the past decade and there has been no material change in related circumstances, should be removed from the scope. Other aspects should include a narrower scope, such as that a future review could only consider increasing the target (rather than any reduction).

#### **Conclusion**

The RET is a highly effective policy that is driving the transformation of the Australian energy sector through the deployment of large and small scale renewable energy and in doing so delivering high

volumes of investment into the Australian economy, whilst protecting Australian consumers against rising and volatile fossil fuel prices.

The RET is an investment grade policy that if left unchanged can deliver 20 per cent of Australia's energy from renewable energy sources by 2020, just as the industry delivered the target under MRET and will do so again

Massive amounts of investment have already been made on the basis of the current policy settings. These investments, and Australia's credibility in attracting global capital for energy infrastructure, will be damaged if the RET is changed.

The cost of RET is small and getting smaller, especially when combined with action on energy efficiency

The RET has undergone regular review since its inception, each time resulting in slowing or deferment of investment.

The CEC urges the CCA and the Federal Government to complete this review as quickly as possible and to ensure policy stability that drives the transformation of Australia's energy sector.