

Delivering the benefits of the Renewable Energy Target

21 November 2014

2014 Renewable Energy Target Review Climate Change Authority GPO Box 1944 Melbourne VIC 3001

To whom it may concern,

Re. A strong Renewable Energy Target and industry certainty will deliver reduced electricity sector emissions and benefits for all Australians.

At a time when it is becoming more certain that we need to rapidly act to reduce climate change emissions, the Australian public have repeatedly called for renewable energy to play an increasing role in response. This was overwhelmingly demonstrated by a record numbers of submissions to the recent Warburton review¹, with over 99% supporting the current, or an increased, Renewable Energy Target (RET). There was a strong recurring argument for the RET's contribution to be used as a genuine response in tackling climate change. The results of modelling undertaken to date, including that undertaken by ACIL Allen² for the review panel itself, overwhelmingly supported the RET as a cost-effective way to continue the growth in renewable energy generation whilst reducing the reliance on fossil fuel sources of generation.

To date, the RET has been a highly successful scheme, delivering over \$20 billion of investment³, reducing electricity sector emissions, and lower wholesale electricity prices⁴ since 2001. With falling demand for electricity the current 41,000 gigawatt hour (GWh) target is expected to achieve around 27 % of the demand by 2020. This success is in line with the original intention of the legislation passed to ensure a minimum of 20 % and at the same time provide a certain target to ensure investment certainty. The future of Australia's renewable energy industry, however, is currently uncertain due to a lack of clear federal government renewable energy policy and rolling reviews of the RET. Consequently investment in renewable energy in 2014 has dropped by 70 % compared with the previous year. With renewed certainty and stability in its bipartisan support, it could easily deliver another \$14.5 billion in investment between now and 2020.

The RET has been the sole driver for the establishment of CWP Renewables (CWPR) in Australia, which has to date invested over \$30 million into the development of a portfolio of utility-scale wind energy projects across Australia. Moreover, this investment has been leveraged recently to a further \$360m invested in 2013 in constructing the Boco Rock Wind Farm project near Cooma. As construction concludes towards the end of 2014, that project has created a further 200 jobs in regional NSW alone.

pdf/Benefit%20of%20the%20Renewable%20Energy%20Target%20to%20Australia_s%20Energy%20Markets%20and%20Economy.pdf

¹ http://www.cleanenergycouncil.org.au/media-centre/media-releases/august-2014/140819-RET-submissions.html

² Ret Review Modelling, Market Modelling of various RET policy options, Acil Allen Consulting, August 2014

³ RET Policy Analysis, ROAM Consulting, April 2014.

⁴ SKM The Benefits of the Renewable Energy Target to Australia's Energy Market and Economy:

http://www.cleanenergycouncil.org.au/dms/cec/reports/2012/Benefit-of-the-Renewable-Energy-Target-to-Australias-Energy-Markets-and-Economy-

Since the repeal of the carbon pricing legislation in July 2014, the RET has now become critical to drive investment in new generation and deliver the emission reduction benefits of renewable energy to Australia, for now and into the future.

Modelling undertaken for the Warburton review panel and by other independent organisations show that, if left untouched, the RET will deliver further emissions reductions whilst easing the impact of the rising retail costs of electricity on consumers. In fact, the majority of modelling found that any reduction in the amount of renewable energy being developed would see an increase, not a decrease, in both the wholesale and retail cost of electricity in the long term, due primarily to rising gas prices, and their impacts on electricity prices⁵. The longer-term losers of a sustained RET are not bill-paying Australian households but the incumbent coal-fired power generators, much to the betterment of the environment and health of all Australians.

Our company, with the industry's help, are ready to deliver a further 1,088 megawatts (MW) [3,336 GWh p.a.] of high quality, utility-scale renewable energy projects if the RET remains unchanged. Combined, these projects will result in millions of dollars of regional investment, jobs, lower carbon emissions and a more diverse electricity generation sector nationally. We want to repeat the success we have achieved at Boco Rock Wind Farm across four other projects that can all be built over the next five years. We look forward to moving forward with these projects with the certainty that will flow from maintaining the RET and its bipartisan support.

The industry has the capability, the resources and the available finance for the infrastructure necessary to achieve the LRET target of 41,000 GWh per annum by 2020⁶. The future of this investment into Australian infrastructure now rests with a RET that sets a strong target and certainty for our industry. Given the proven economic benefits of the scheme, and the industry poised to deliver on them, we anticipate a favourable outcome of this review.

Yours Sincerely,

Alex Hewitt Managing Director of CWP Renewables and Director of Continental Wind Partners

Enc. Copy of RET Review (Warburton) Submission, May 2014

⁵ ACIL Allen, RET Review Modelling, August 2014 and RET Policy Analysis, ROAM Consulting, April 2014.

⁶ Practical, Social and Financial Considerations for Meeting the 2020 Renewable Energy Target, CEC, October 2014

Background: CWP Renewables

CWP Renewables (CWPR) is a joint-venture between two leading renewable energy developers; Continental Wind Partners (CWP) and Wind Prospect Group (WPG) undertaking international standard wind farm developments and other renewable projects in New South Wales and Queensland. Both CWP and WPG are well established international renewable energy developers who are active in Europe and North America, as well as Australia. CWPR builds on the expertise and the experience of its parent companies that have a long and successful history in developing and constructing wind farms, including:

- The successful development of 950 megawatts (MW) of wind energy under construction or operating in Australia since 1999;
- Development and construction of the largest wind farm in Europe (the 600 MW Fantanele project in Romania); and
- Development and construction of over 5 gigawatts (GW) of wind farms worldwide.

Our staff in Newcastle manage CWPR's wind farm developments in NSW which include Boco Rock Wind Farm, a 113 MW wind farm currently under construction in south eastern NSW. CWPR successfully raised \$361m in June 2013 to fund the construction of that project. CWPR is now expanding into Asia from its Australian base and is currently involved in the project development of wind farms in Indonesia and the Philippines.

RET review submission

Key considerations identified by the CCA in this review of the RET are discussed below. We trust that this information will help clearly demonstrate the highly successful nature of the RET to date in cost-effectively transitioning to a low emissions economy at a time where rapid emissions reductions are required.

The need to reduce greenhouse gas emissions

The CCA itself has recommended that in order to remain consistent with international efforts, Australia should aim for a minimum 2020 emissions reduction target of 19 % below 2000 levels (taking into account Kyoto protocol carryover)⁷. Australia's greenhouse gas emissions are expected to rise to 685 Mt CO2e in 2020 or 17 % above 2000 levels if no action is taken. The newly legislated Emissions Reduction Fund (ERF) as part of the Direct Action Plan has been widely criticised as being insufficiently funded to achieve the current target of just 5% below 2000 levels. Without the RET, it will become even more uncertain that the ERF will be successful at achieving the target alone.

The RET has significantly contributed to the increased growth in renewable energy projects and reduced emissions with only a moderate impact on consumer bills. Analysis and modelling by SKM⁸ showed that the RET was responsible for reducing greenhouse gas emissions from the electricity generation sector by over 20 million tonnes since the scheme's inception in 2001. The RET is expected to reduce Australia's emissions by 13.2 million tonnes in 2020 at no cost to the Federal Budget. This is in contrast to the ERF which has a federal budget cost of \$4.95 billion by 2020. Three expert energy market consulting firms (SKM, Schneider Electric and ROAM Consulting) undertook modelling of the future cost of the LRET scheme for the Warburton review. Each forecast that there would be a small

⁷ CCA, Reducing Australia's Greenhouse Gas Emissions: Targets and Progress Review, Feb 2014

⁸ The Benefits of the Renewable Energy Target to Australia's Energy Market and Economy, SKM, August 2012

reduction in retail energy prices of between 0.5 % and 1.5 % for the first few years followed by a larger increase in retail electricity prices of 2.5 % - 6 % in the latter half of the decade and beyond.

To date, the RET has successfully driven investment in high quality, cost-effective renewable energy development and deployment across Australia. Since 2001, with bipartisan support, the RET has driven deployment of over 7,000 MW of renewable energy capacity, and over \$20 billion of investment.

More specifically, the RET has been the sole reason for the creation and continued expansion of CWPR in NSW. Boco Rock Wind Farm (BRWF), a CWPR development approaching the end of construction, is just one example of an exceptional renewable energy project that will be generating clean energy and reducing emissions as a direct result of the RET. Moreover, since 2000, CWPR and Wind Prospect Group (WPG), have developed a string of projects which now result in over 2 million tonnes of CO₂ savings per year from renewable energy developments as shown in Table 1.

Wind Farm	State	Turbines	Total MW	Status	CO₂ Saved (tonnes/p.a.)
Hallett I (Brown Hill)	SA	45	94.5	Operating	243,379
Snowtown (Stage 1)	SA	47	98.7	Operating	259,604
Canunda	SA	23	46	Operating	118,470
Mt Millar	SA	35	70	Operating	180,281
Hallett II (Hallett Hill)	SA	34	71.4	Operating	183,886
Hallett IV (North Brown Hill)	SA	63	132.3	Operating	340,473
Hallett V (The Bluff Range)	SA	25	52.5	Operating	135,210
Snowtown (Stage 2)	SA	83	166	Operating	695,369
Boco Rock (Stage One)	NSW	67	113.2	Under Construction	
Willogoleche Hill	SA	26	78	Approved	
Willogoleche Hill	SA	11	33	Approved	
Extension					
Green Point	SA	18	54	Approved	
Troubridge Point	SA	15	30	Approved	
Boco Rock (Stage 2 & 3)	NSW	55	94	Approved	
Sapphire	NSW	159	319	Approved	
Dandaragan	WA	151	514	Approved	
Totals		865	2072.7 MW		2,156,672 tonnes/p.a.

Table 1 CWPR and WPG wind farm developments to date

The RET has clearly performed against its objectives, and it will continue to perform if given the opportunity. Given the emissions reductions being driven by the RET whilst attracting investment in regional areas and the potential benefit to Australian retail consumers, the industry looks forward to bipartisan political support and certainly over the RET trajectory towards 2020 and beyond.

Role of renewables in a decarbonised electricity sector in a low-emissions economy

A future low emissions economy will need to rely on low carbon electricity supplied by renewable energy or a mix of renewable energy and either Carbon Capture Storage (CCS) or nuclear power. In September 2014 ClimateWorks Australia and the Australian National University (ANU) released an initial report⁹ which included modelling of various deep decarbonisation pathways including renewable energy, CCS and nuclear. All three scenarios modelled included a dominant share of renewables, driven by the decrease in cost of renewable technologies such as solar and wind over recent years with a minimum penetration of 48 % by 2030 and 71 % by 2050. Renewables are regarded as the lowest cost technologies to achieve decarbonisation until penetration requires significant additional costs for the management of variability.

The current RET requires 41,000 GWh in 2020 which is expected to make up around 27 % of Australia's electricity mix. Considering the likely prominence of renewables in a future decarbonised electricity sector, having an operational market mechanism to drive early penetration of new generation in an oversupplied market is more important than ever. A key challenge for the market however will be to provide a mechanism to allow for the exit of coal fired power stations in line with new renewables coming online. The Clean Energy Council discusses this topic in a recent paper¹⁰ arguing that market uncertainty has meant that coal fired power assets are continuing to operate in the market well beyond their operational lives and that reducing the deployment of renewable energy is not the answer as it would act against the long-term need to reduce carbon emissions in the electricity generation sector – ultimately requiring greater action through other policies. More work needs to be spent in this area and we would suggest the CCA make a recommendation in the findings of this review that the government commission a review of the most efficient way this could be achieved.

The current Large-scale RET (LRET) is a market-based, technology-neutral scheme that encourages least-cost renewable generation to be deployed. Except for the RET, there is no scheme or proposed mechanism that will deliver material reductions in carbon emissions in Australia's electricity generation sector. In a decarbonised world, Australia's abundant renewable energy resources are well placed to form the basis of a new comparative advantage in low carbon electricity generation, replacing the existing comparative advantage derived from fossil fuels. The RET is important to ensuring that Australia is positioned to capture global opportunities as the countries of the world set increasingly ambitions emission reduction targets.

To ensure that renewables are part of our future energy mix, we require an end to the rolling review of the scheme and would recommend an immediate extension of the scheme out to 2040, with higher targets for the deployment of renewable energy to provide investor certainty, and continue the transition to deep decarbonisation.

It is clear that increasing the proportion of renewable energy in the generation mix will be the most significant contributor to achieving decarbonisation, and CWPR is committed to playing our part in achieving that goal through the roll-out of clean energy technology. CWPR is eager to work with Government through the RET reviews to ensure an unchanged RET will convert into a low carbon economy.

⁹ Pathways to Deep Decarbonisation in 2050, Climateworks and ANU, Sept 2014

 $^{^{10}\,}$ Australia's Power Generation Sector at the Crossroads, CEC, Sept 2014



16 May 2014

Renewable Energy Target Review Department of the Prime Minister and Cabinet PO Box 6500 Canberra ACT 2600

To Whom it May Concern,

Re. A strong Renewable Energy Target and industry certainty will deliver benefits for all Australians.

CWP Renewables (CWPR) welcomes the opportunity to conclusively demonstrate that the Renewable Energy Target (RET) will deliver economic and environmental benefits if left untouched or expanded.

To date, the RET has been a highly successful scheme, delivering over \$20 billion of investment¹ and lower wholesale electricity prices² since 2001. With renewed certainty and stability in its bipartisan support, it could deliver another \$14.5 billion between now and 2020.

The RET has been the sole reason for the establishment of CWPR in Australia, which has to date invested over \$30 million into the development of a portfolio of utility scale wind energy projects. Moreover, this investment has been leveraged recently to a further \$361m invested in 2013 in renewable energy infrastructure at the Boco Rock Wind Farm. Under construction this year, that project has created a further 200 jobs in regional NSW.

The current government is in the process of abandoning various support mechanisms for renewable energy infrastructure. These initiatives, including the CEFC, ARENA and the carbon tax, however, have not been the main drivers of renewable energy deployment. It has been the RET that has driven the benefits of renewable energy to Australia over the last decade. And it is the RET that can continue to drive benefits over the next decade. These benefits include lower prices in the future, a balanced mix of generation, and lower emissions.

Recent modelling shows that if left untouched, the RET will ease the impact of the rising retail costs of electricity on consumers. In fact, the modelling found that any reduction in the amount of renewable energy being developed would see an increase, not a decrease, in both the wholesale and retail cost of electricity in the long term, due primarily to rising gas prices, and their impacts on electricity prices³. The modelling clearly shows that the longer term impacts of a sustained RET are positive for bill paying Australian households.

Our company, with the industry's help, are set to deliver a further 1,088 MW [3,336 GWh p.a.] high quality, utility scale renewable energy projects. Combined, these projects will result in millions of dollars of regional investment, jobs, lower carbon emissions and a more diverse electricity generation sector nationally. We want to repeat the success we have achieved at Boco Rock Wind Farm across four other projects that can all be built over the next four years. We look forward to moving forward

- http://www.cleanenergycouncil.org.au/dms/cec/reports/2012/Benefit-of-the-Renewable-Energy-Target-to-Australias-Energy-Markets-and-Economypdf/Benefit%20of%20the%20Renewable%20Energy%20Target%20to%20Australia_s%20Energy%20Markets%20and%20Economy.pdf
- pdf/Benefit%20of%20the%20Renewable%20Energy%20Target%20to%20Australia_s%20Energy%20Markets%20and%20Economy.pdf ³ RET Policy Analysis, ROAM Consulting, April 2014.

¹ RET Policy Analysis, ROAM Consulting, April 2014.

² SKM The Benefits of the Renewable Energy Target to Australia's Energy Market and Economy:

with these projects with the certainty that will flow from maintaining the RET and its bipartisan support.

The industry has the capability, the resources and the available finance for the infrastructure necessary to achieve the large-scale target of 41,000 GWh per annum by 2020. The future of this investment into Australian infrastructure now rests with this RET Review. Given the proven economic benefits of the scheme, and the industry poised to deliver on them, we anticipate a favourable outcome of the review.

Yours Sincerely,

Alex Hewitt Managing Director of CWP Renewables and Director of Continental Wind Partners

Background

CWP Renewables (CWPR) is a joint-venture between two leading renewable energy developers; Continental Wind Partners (CWP) and Wind Prospect Group (WPG) undertaking international standard wind farm developments and other renewable projects in New South Wales and Queensland. Both CWP and WPG are well established international renewable energy developers who are active in Europe and North America, as well as Australia. CWPR builds on the expertise and the experience of its parent companies that have a long and successful history in developing and constructing wind farms, including:

- The successful development of 950 megawatts (MW) of wind energy under construction or operating in Australia since 1999;
- Development and construction of the largest wind farm in Europe (the 600 MW Fantanele project in Romania); and
- Development and construction of over 5 gigawatts (GW) of wind farms worldwide.

Our staff in Newcastle manage CWPR's wind farm developments in NSW which include Boco Rock Wind Farm, a 113 MW wind farm currently under construction in south eastern NSW. CWPR successfully raised \$361m in June 2013 to fund the construction of that project. CWPR is now expanding into Asia from its Australian base and is currently involved in the project development and construction of wind farms in Indonesia and the Philippines.

RET review submission

Questions posed in the RET Review Expert Panel Call for Submissions paper have been responded to below. We have focussed on the most pressing issues facing the industry, and trust that this detail will clearly demonstrate the highly successful nature of the RET to date, and the significant risks posed to the industry and our investment potential, should it be reduced or removed.

How has the RET performed against the objectives in the Renewable Energy (Electricity) Act 2000?

To date, the RET has successfully driven investment in high quality, cost effective renewable energy development and deployment. Since 2001, with bipartisan support, the RET has driven deployment of over 7000 MW of renewable energy capacity, and over \$20 billion of investment.

More specifically, the RET has been the sole reason for the creation and continued expansion of CWPR in NSW. Boco Rock Wind Farm (BRWF), a CWPR development currently under construction, is just one example of an exceptional renewable energy project that will be generating clean energy and reducing emissions as a direct result of the RET. Moreover, since 2000, CWPR and Wind Prospect Group have delivered the exceptional renewable energy projects listed in Table 1.

Wind Farm	State	Turbines	Total MW	Status	CO ₂ Saved (tonnes/p.a.)
Hallett I (Brown Hill)	SA	45	94.5	Operating	243,379
Snowtown (Stage 1)	SA	48	100.8	Operating	259,604
Canunda	SA	23	46	Operating	118,470
Mt Millar	SA	35	70	Operating	180,281
Hallett II (Hallett Hill)	SA	34	71.4	Operating	183,886
Hallett IV (North Brown Hill)	SA	63	132.3	Operating	340,473
Hallett V (The Bluff Range)	SA	25	52.5	Operating	135,210
Snowtown (Stage 2)	SA	90	270	Operating	695,369
Willogoleche Hill	SA	26	78	Approved	
Willogoleche Hill Extension	SA	11	33	Approved	
Green Point	SA	18	54	Approved	
Troubridge Point	SA	15	30	Approved	
Boco Rock (Stage 1)	NSW	67	113.2	Construction	
Boco Rock (Stage 2 & 3)	NSW	55	94	Approved	
Sapphire	NSW	159	319	Approved	
Dandaragan	WA	151	514	Approved	
Totals		865	2072.7 MW		2,156,672 tonnes / p.a.

Table 1 CWPR and WPG wind farm developments to date

The RET has clearly performed against its objectives, and it will continue to perform if it is given the opportunity. The primary hindrance to the success of the RET has been the two-yearly reviews which have created immense uncertainty, hampering progress and investment under the Act. Given its success to date, and the numerous reviews already undertaken, the industry looks forward to continued bipartisan support and certainty over the RET trajectory towards 2020 and beyond.

Are there more efficient and effective approaches to achieving these objectives?

The RET is a highly effective market-based instrument which has demonstrated strong delivery, in spite of policy instability. It is the single most important and effective policy in Australia in driving private sector investment in the deployment of lowest cost renewable energy technologies.

Boco Rock Wind Farm (BRWF), which reached financial close in 2013, is testament to the strong force the RET effectively places on competitive tendering, through pressure on and from retailers. In developing the BRWF project, the turbine supply, the construction contract, project debt and project equity as well as all ancillary services and contracts were competitively tendered. The result was the lowest construction cost and the lowest cost of finance. Even the project size was reduced in order to cherry pick the highest wind areas to achieve the lowest generation cost for the project.

CWPR's parent companies are also active in Europe where other mechanisms exist including feed in tariffs and variations of the RET scheme such as certificate regimes with floor prices, government buy back schemes and recycle mechanisms on the penalty. The RET in Australia is more efficient by far than these approaches because of the level of competition it demands. With effective competition comes lowest cost power for the end consumer. For utility scale wind projects, long term power purchase agreements (PPAs) are necessary to raise project finance and competitively priced equity. PPAs are competitively tendered by the three major retailers. In order to win a PPA from a retailer the developer of the wind farm has to achieve the lowest cost of power.

Once costs are accounted for against the revenue stream of a project, residual enterprise value (or development margin) is what drives developers to tender competitively and efficiently, to reward initial investment and development risk. The size of this residual value is a direct reflection of the economic efficiency of the support scheme. If the residual value or development margin is very large the scheme is arguably "too generous" and the end consumer will pay more. It must be noted that the development margin per megawatt that we have observed in Australia is the lowest of all the markets in which we operate. This demonstrates that the Australian renewable energy market is fiercely competitive, largely as a result of the design of the RET. There is no way that an alternate approach alone can compete with the established success of the RET in achieving the end goals of the legislation.

Do the objectives of the Act remain appropriate in light of falling electricity demand and the Government's target and policies for reducing greenhouse gas emissions?

Not only do the objectives of the Act remain appropriate but any reduction in the target will result in significant sovereign risk concerns regarding development expenditure to date as a direct result of Commonwealth legislation. Over \$20 billion worth of investment has been made in the sector since the Act was introduced in 2001. Major Australian and international investors have made these investments on the basis of the scheme operating as it was legislated out to 2030.

Any change to the RET now raises issues of confidence in government legislation, and concerns over change to future projected earnings. A change to the target will change future value of large-scale generation certificates (LGCs), as it will change LGC demand. This will affect existing and future investments. Stable policy will continue to provide a clear pathway for expenditure to be leveraged, while threats of policy changes only create risk. Long term investment will always price risk. At best, regulatory risk adds cost to projects and at worst prevents investment outright. The RET has been reviewed, and found to be both appropriate and successful. Further meddling will only undermine the potential to leverage substantial equity investment off the policy.

CWPR have invested over \$30 million in our NSW development portfolio to date, geared solely towards meeting the current fixed 41,000 GWh p.a. large-scale target. That development expenditure, however, was spent to leverage the significant investment potential in our projects. At BRWF a \$10 million development expenditure was used to win a long term offtake agreement, leverage \$361 million, engage a foreign investor new to the Australian market, and negotiate risks of the project with five banks.

Put simply, long term investments in renewable energy infrastructure cannot be made efficiently, if at all, with a moving target. An income stream that takes on a step shift due to a change in a legislated target is difficult, if not impossible, to finance. At best the risk associated with a moving RET target will be priced into the financing of the project. This will likely mean:

- Banks will run lending terms from base line projections that account for the risk;
- Lower leverage potential and high cost finance;
- Terms such as debt service reserves will be more onerous, again leading to high cost; and
- Equity investment hurdles will be higher.

In financial markets, higher risk demands higher returns, and this will be the impact of any change to the RET. As the price of future renewable energy projects increase as a result of changes to the RET, the end consumer will bear this cost through higher electricity bills.

Falling electricity demand, and the resulting potential for the target to be exceeded, is by comparison a benefit, not a cost. Further penetration of the market by renewables will only put downward pressure on wholesale electricity prices, and increase the diversity of our energy mix. This will put Australia in a stronger position in the medium to long term.

How has the RET influenced the development of the renewable energy industry?

The RET has been the fundamental driver of the emergence of the renewable energy industry in Australia over the past 13 years. The strong market-based competition that is established by the RET has directly resulted in lowest cost, innovative renewable energy development. And that development has been created by a growing industry, with proven job creation in development, construction and operation of projects. As it stands, the RET has driven a ramp up of development towards the 2020 deadline and has created a strong and successful industry that stands poised to realise the potential of that investment for all Australians.

More specifically, CWPR and Wind Prospect Group are established in Australia solely because of the RET. Since 2001, the RET has been the driver for the development of the 16 wind farms listed in Table 1. These projects, and our companies, are here solely because of the RET. No other mechanism in Australia - whether it be ARENA, the CEFC or the carbon pricing mechanism - has influenced our presence or the success of the industry to the same extent. It is that simple.

At a local level, the impact of the RET has had an even greater positive influence. This year at BRWF, 200 people are currently employed through construction and over \$15 million has already been spent locally since construction began in August 2013. More broadly, of the \$361 million that the project is worth, it is estimated that 40 % has been spent in Australia. Through the operations phase, jobs and continued regional investment will also be created.

Should the LRET abolished, reduced or increased? If retained, what level should it be? What would be the impact of such changes?

It is critical that the LRET be maintained, if not increased, re-establishing certainty for the industry. Jobs, development expenditure and future investment all rely on clear, sustained support for the large-scale target of 41,000 GWh p.a. Right now, the industry is focussed on and ready to deliver on that target, which was legislated just five years ago. The potential to capitalise on the opportunities to build the industry and a diverse energy mix beyond the target will only be realised if certainly in the target is maintained.

As discussed previously, significant concerns regarding sovereign risk will be raised if the billions of dollars invested to date are threatened as a result of changes to the mechanism. CWPR alone has invested over \$30 million in our development portfolio, guided by the reassurance of bipartisan support for the RET. Furthermore, off the back of the \$10 million invested in BRWF alone, CWPR leveraged \$361 million, stimulating local and regional investment, jobs and a community fund for the life of the project. These leveraged benefits would simply not have occurred without the RET driving the initial development expenditure. BRWF recently won Project Finance Magazine's Wind Finance Deal of the Year award which recognised both the complexity of the financing, and the success that was achieved in attracting lenders and an international investor.

Any reduction to the target will have the immediate result of the loss of existing development expenditure and potential leveraged investment from Australia. Once lost, certainty in the industry and investor confidence will not readily be re-established, leaving Australia without its current strong and successful renewables sector.

In real terms, for CWPR and Wind Prospect Group alone, that equates to the direct loss of 26 jobs in NSW, Victoria and South Australia, and millions of dollars of development expenditure that has already been committed. These losses would have flow on effects including the indirect loss of up to another 75 jobs. And CWPR is only one of a number of renewable energy developers in Australia.

The significance of this loss cannot be underestimated. The renewables sector has been built over the last 14 years as a direct response to the RET legislation. That sector isn't merely represented by the clean energy industry, but the myriad of flow on industries that have worked on renewable energy projects, and are set to continue that work. That sector is a collection of trained people, established and reputable companies, workshops and machinery tailored for the job at hand as well as an investment sector that has built templates and processes to assess risk and investment. It has taken 15 years to build this industry in Australia. If the RET is abolished or materially curtailed the industry will not re-emerge quickly if needed in the future. This mature and efficient industry is ready and waiting to deliver on the legislated target of 41,000 GWh p.a. by 2020.

The uncertainty over this RET review already has companies wavering in their commitment to the Australian market. Uptake of new developments has stalled while Australia awaits the outcome of this review. What is required now is certainly through policy stability.

For all Australians, recent modelling by ROAM Consulting⁴ has demonstrated that any reduction in the target will have a significant negative impact on future wholesale and retail electricity prices. It was found that growth in renewables acted to reduce power price rises that would otherwise be occurring over the next decade. In fact, if the RET is repealed, average residential electricity bills would be \$50 a year higher in 2020 and as much as \$140 higher beyond 2020.

⁴ RET Policy Analysis, ROAM Consulting, April 2014.

What impact is the RET having on electricity markets and energy markets more broadly? How might this change over time?

The RET has a complex interaction with the electricity market directly and the energy markets more broadly. Nationally, the Australian Energy Market Commission (AEMC) estimated that the cost of the RET to consumers accounts for approximately 4 % of residential retail prices⁵. In NSW, IPART (NSW Independent Pricing and Regulatory Tribunal), in a price determination, recently concluded that the RET accounted for approximately 5 % of the average electricity bill in 2013/14⁶ (Figure 1).



Note: Network charges include contributions towards the Climate Change Fund. The energy, carbon and green costs include losses. Typical bills calculated assuming consumption of 7MWh per year.

Figure 1 Change in the annual bill of a typical residential customer in NSW on regulated retail prices (between 2007/08 and 2013/14) (\$nominal) (IPART)

As well as only making a very minor contribution to the cost of retail electricity bills, the RET also puts downward pressure on the wholesale component of electricity bills (Figure 2). This minimises price rises in the medium to long term in two primary ways:

- The fuel is free! Wind and solar have very low Short Run Marginal Costs (SRMC), making their electricity cheaper, and allowing them to displace higher cost coal and gas power during peak demand. This merit order effect substantially reduces the amount of highly priced peak electricity that needs to be purchased, reducing the average wholesale prices.
- More renewable energy generation will defer the need for new gas generation, the price of which is set to triple this decade.

 ⁵ AEMC, Residential Electricity Price Trends 2013, p.12 (from the Review of the RET 2014, Call for Submissions)
⁶ IPART Draft Report - Review of regulated retail prices for electricity 2013 to 2016 - April 2013

http://www.ipart.nsw.gov.au/Home/Industries/Electricity/Reviews/Retail Pricing/Review of regulated electricity retail prices 2013 to 2 016/23 Apr 2013 - Draft Report - Review of regulated retail prices for electricity 2013 to 2016/Draft Report -Review of regulated retail prices for electricity 2013 to 2016 - April 2013



Beyond the findings of IPART and ROAM Consulting, wholesale price suppression by renewables is well documented and understood by regulators and the industry. The most recent findings by ROAM Consulting simply consolidate the conclusion that the RET is an effective hedge against the rising price of gas because it improves competition in the wholesale electricity market and encourages generation sources like wind and solar which displace gas-fired electricity on the wholesale spot market.

How should reforms to the RET be implemented? What transitional issues could arise and how might they be addressed?

As per the conclusions of a number of RET reviews carried out, no substantial changes to the RET mechanism should occur, other than to remove the provision for two-yearly reviews which undermine investor confidence in the RET. The RET is working well, and should be left alone to continue to deliver on clean energy, reduced emissions, and economic benefits for all Australians.

A change to the review period, or the abolition of the review, would be a simple legislative change needing no transition measures. This change would create further confidence which would result in lower financing costs for future projects. It would be seen by all investors as a positive step that would reduce risk and therefore reduce costs.

If material changes were to occur, serious consideration must be given to the impact on the significant investments that were made in good faith under the current policy settings.

How does the RET interact with other government policies that have, or will have, an impact on the operation of the RET, or that impact on renewable energy or energy markets more generally? What can be done to improve the efficiency and effectiveness of those interactions in delivering intended policy objectives?

The RET is complementary to other existing or proposed government policies, and will in fact lower the cost of meeting our international obligation to a 5 % emissions reduction target.

One of the strengths of the RET policy design is its ability to operate effectively alongside any number of energy and climate change policies. For example:

- The RET was implemented prior to any carbon pricing mechanism and operated effectively for almost a decade prior to any form of carbon pricing;
- The RET continued to operate effectively alongside the Clean Energy Future package. The impact of a carbon price, and the subsequent increase in wholesale energy prices, would result in a corresponding reduction in Large-scale Generation Certificate (LGC) prices. This is part of the elegance of the RET design in that its competitive market-based approach ensures the LGC price adjusts naturally to a level required all other things being equal to deploy the next most competitive project; and
- The RET will continue to operate effectively following the likely repeal of the Clean Energy Future package and the implementation of the government's Direct Action policy.

Budget figures for 2014 / 2015 have outlined the early costs associated with the centrepiece of the government's Direct Action policy, the Emissions Reduction Fund (ERF). The ERF has a long way to go in meeting our emission reduction obligations, and has a fast-diminishing window of opportunity, with 2020 looming.

There is over 1,500 MW of renewable generation at the committed stage of development, the majority of which is wind⁷. As has been modelled, given certainty and policy stability, the RET can deliver on this and more at a rate that can meet our 2020 goal. With the maturity of the industry, and the investment in developments to date, the RET provides a very inexpensive, highly efficient way to reduce our dependence on the ERF as the sole mechanism to reduce emissions.

What should be the frequency of statutory reviews of the RET?

CWPR suggests that the next review of the RET under the Act be pushed back to 30th June 2020, with a subsequent minimum of five-yearly reviews in recognition of its ongoing success, and the comprehensive reviews it has undergone over the past decade.

Two yearly RET reviews present the greatest significant risk to the achievement of the 41,000 GWh p.a. target, particularly if the overall target itself, and not just the operation of the RET scheme are up for debate. This modification would create much needed certainty for the renewable energy industry, greatly increasing investor confidence, unlocking billions in equity investment, and seeing a significant improvement in the deployment of renewable energy in Australia.

Submission Summary

The RET has been repeatedly reviewed and refined, and operates as a highly efficient policy mechanism. It has maintained continuous popularity, with surveys repeatedly finding an overwhelming majority of Australians (>75 %) supportive of renewable energy generation. Its success is based on a range of factors and has resulted in:

- Wholesale electricity prices as much as \$10 / MWh lower⁸;
- Over \$20 billion investment in renewable energy technologies;

⁷ Bureau of Resources and Energy Economics, *Electricity Generation Major Projects*, October 2013, p.22, adjusted for power stations that have been accredited under the RET since date of publication.

⁸ SKM The Benefits of the Renewable Energy Target to Australia's Energy Market and Economy:

http://www.cleanenergycouncil.org.au/dms/cec/reports/2012/Benefit-of-the-Renewable-Energy-Target-to-Australias-Energy-Markets-and-Economypdf/Benefit%20of%20the%20Renewable%20Energy%20Target%20to%20Australia_s%20Energy%20Markets%20and%20Economy.pdf

- Over 24,000 Australians employed in the renewable energy sector in 2012; and
- Around 7,000 MW of renewable energy capacity installed, that in 2012 contributed to total renewable energy generation of over 13 % of the total electricity generated across Australia⁹.

Moving forward, recent modelling¹⁰ by leading energy market experts ROAM Consulting has highlighted that maintaining the RET will:

- Deliver over 18,000 jobs over the next six years, many of those in regional areas;
- Deliver an additional \$14.5 billion of investment between now and 2020 in addition to the \$20 billion invested since 2001;
- Result in a consistent trend of low-bidding renewables reducing wholesale prices, at the very low cost of 3 5 % of consumer electricity bills in the short term, to get a significant hedge on fossil fuel prices in the future. Wind and solar fuels are free regardless of future commodity pricing; and
- Compliment the government's Direct Action Plan, and will assist in achieving the government's emissions reduction targets on time and on budget.

ROAM Consulting modelling also demonstrated that any reduction in the RET would:

- Threaten millions of dollars already invested in clean energy projects to date. This will raise serious issues of sovereign risk, with flow on effects to all infrastructure investment, not just clean energy;
- Cost Australian households an extra \$50 / year for electricity by 2020, and up to \$140 / year extra for electricity beyond 2020; and
- Will make it more expensive for Australia to meet its international commitment of reducing carbon emissions by 5 % of 2000 emissions levels by 2020.

While any reduction in the RET would be detrimental to regional economies and future electricity prices, there are two changes to the RET that would bring further certainty to the market. Firstly, removing two yearly reviews will go a long way to ensuring investment certainty, and therefore the flow of benefits as projects are developed and financed towards 2020. CWPR recommend pushing out the next review of the scheme to June 2020, at which point extensions to the scheme could be determined. Secondly, an extension of the scheme out to 2040, with higher targets for the deployment of renewable energy, would also provide investor certainty and would see the realisation of even greater benefits.

Increasing the proportion of renewable energy in the generation mix will be the most significant contributor to achieving the Government's emissions reduction targets, and we are committed to playing our part in achieving that goal through the roll-out of clean energy technology. CWPR is eager to work with Government through the RET review to ensure the benefits of leaving the RET unchanged are realised for all Australians.

 ⁹ CEC Clean Energy Australia Report 2012: <u>http://www.cleanenergycouncil.org.au/cec/resourcecentre/reports/cleanenergyaustralia</u>
¹⁰ RET Policy Analysis, ROAM Consulting, April 2014.