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Clean Energy Council

3 November 2009

The Renewable Energy Sub Group Secretariat
Department of Climate Change
GPO Box 854
CANBERRA ACT 2601

By email: RET@climatechange.gov.au

Dear Sir/Madam

COAG Review of Specific Renewable Energy Target (RET) Issues

The Clean Energy Council (**CEC**) is the peak body representing Australia's clean energy and energy efficiency industries. Its priorities are to:

- create the optimal conditions in Australia to stimulate investment in the development and deployment of world's best clean energy technologies;
- develop effective legislation and regulation to reduce energy demand and improve its efficient use; and
- work to reduce costs and remove all other barriers to accessing clean energy.

The CEC advocates the development of policies on behalf of its members at federal and state government levels and promotes understanding of the industry and its potential through channels such as industry events, forums, conferences, newsletters and publications. The clean energy industry includes generation of electricity using wind, hydro, solar, biomass, geothermal and ocean energy as well as the emerging technologies and service providers in the energy efficiency sector, which includes solar hot water and cogeneration.

The objectives of the renewable energy target

Any review of the specific design features of the Renewable Energy Target needs to reflect the fundamental objectives of this policy. The Government has pledged that by 2020, 20 per cent of Australia's electricity supply will come from renewable sources. It has also made allowance in the scheme for Solar Credits to assist household scale installation of solar panels and deeming provisions to support the installation of solar hot water systems

The objectives of the RET as described by the Australian government are to accelerate deployment of renewable energy technologies by providing a guaranteed market ahead of a full carbon price.

The CEC supports the development and implementation of the RET and any other policy that accelerates the research, development, demonstration and deployment of clean energy generation and energy efficiency technologies (here in 'clean energy technologies').

The purpose of these measures is to contribute to the broad suite of measures needed to address the threat of dangerous climate change by mitigating the emissions of greenhouse gases.

Decarbonising energy generation in Australia, and globally, is a time-constrained technology and investment challenge. New clean energy and energy efficiency technologies need to deliver large scale and reliable supplies of energy with the greatest efficiency possible. This efficiency needs to reflect actual abatement of greenhouse gases at the most efficient cost.

The CEC therefore welcomes the opportunity to provide a submission in response to the three discussion papers to inform the Review. The CEC has not attempted to answer all of the questions in the issues papers, as a number of them require detailed knowledge of particular technologies, much of which is commercially confidential and not available to the CEC.

If you would like to discuss any aspects of this submission in more detail please contact myself or the CEC's Policy Manager, Russell Marsh russell@cleanenergycouncil.org.au 03 9929 4100.

Yours sincerely,

Matthew Warren
Chief Executive

Introduction

The passing of the Renewable Energy Target (RET) legislation in August this year marked a significant milestone for the clean energy industry. The introduction of the 20 per cent RET is expected to unleash some $20 billion of investment in renewable energy technologies, and alongside the government's energy efficiency strategy, generate some 28,000 new jobs.

The main purpose of the RET is to develop the industry and support the deployment of a range of renewable energy technologies. Any changes to the RET market must be considered against this objective. Any changes must not impact on the ability of existing technologies to be deployed.

Priority for the clean energy industry: addressing the weak REC price

At the time of preparing this submission, the CEC believes the biggest concern to the RET delivering against its stated objectives is the weak price for renewable energy certificates (REC). These certificates are generated by approved renewable energy generation sources and must be surrendered by electricity retailers to meet their liability under the scheme. In effect, the value of RECs should act to bridge the short run gap in cost between the black energy price and the cost of green energy.

The REC price has been falling steadily since June 2009, and is currently trading around $30 – below what is currently needed to bridge the gap between black and green energy. From September 2009 to October 2009, the spot REC price fell from around $37 to $28. Previous to that, the spot price had been up around $50 in the first half of 2009 and had reached an all time high of $53.50 in April 2008.

Cause of the weak REC price

The price of RECs has been driven down by an oversupply of certificates. It is estimated there will be a surplus of around 10 million RECs by the end of this year. This will take at least two years to clear, if not longer. Some project developers believe this REC bubble, if not addressed, could delay the commencement of new large scale generation projects until 2014.

One driver of this oversupply is the range of state and federal government initiatives to support the installation of solar hot water systems (SHW) and to a lesser extent the scale up of orders for solar panels in the last weeks of the Solar Homes and Communities Program. The SHW sector generated around 55 per cent of the RECS created to date in 2009 – more than double the number of RECs created in 2008 which in turn was more than double the number of SHW RECs created in 2007.

Around 20 per cent of the SHW RECs generated in 2009 will come from installations of commercial heat pumps. This has increased from a relatively negligible supply from this sector of the market two years ago.

Recent measures have already been put in place to correct commercial heat pump sales, which as of August 2009 require the owner of the premises to make a statutory declaration before applying for RECs. The size of the government rebate for heat pumps was also reduced from $1600 to $1000 in September 2009. The SHW industry has reported a sharp reduction in sales following this adjustment, with some suppliers reporting a 70 per cent drop in sales.

The success of SHW and the accelerated deployment of the technology across Australian households is welcome. It will play an important part in reducing the energy costs of Australian households with the inevitable increases in energy costs in the coming decade.

Effect on the Renewable Energy Industry

As stated above, the low REC price is a product of the oversupply of RECs caused by the various State and Federal initiatives to support the installation of SWH. Unless the oversupply is addressed, it will continue to cause a stalling of investment in a wide range of technologies: from large scale projects like biomass, wind and hydro as well as the sale of solar panels on household rooftops. The Solar Flagships program is unlikely to make any substantial headway until the REC price recovers.

This has significant consequences. The Solar PV industry is busy installing systems ordered under the Solar Homes and Communities Program. This is expected to take until February or March 2010. According to many in the industry, at this stage the industry will "fall off a cliff" unless they can start developing new business behind the Solar Credits scheme. This depends significantly upon a recovery in the REC price.

Large scale generation projects including wind, bio-energy and hydro are also stalled. Financing is not possible at this REC price. As reported recently in the media this has material consequences for the sector.

The principle objective of developing a competitive, world class clean energy industry in Australia will not proceed until this REC price recovers.

Possible solutions

Whilst the source of the oversupply is self-evident, the solutions are less clear cut. The new REC market is only a few weeks old, and is still incomplete. The value of RECs and the operation of the market will be influenced by the timing and design of a Carbon Pollution Reduction Scheme (CPRS). All the regulations that underpin the market are not yet in place and may not be for some time. While the government may want more time to assess the extent to which this is a one-off short run oversupply or a more significant structural problem in the scheme design, the industry is being materially affected right now.

As part of this review the Department of Climate Change needs to carry out an immediate and more fundamental review of the current market dynamics and identify solutions to remedy the problem.

In the CEC's view there are three basic options to correcting an oversupply:

1. change the eligibility criteria of the RET to reduce current oversupply;
2. increase the target to increase demand; and,
3. direct intervention in the market to remove the short-term over supply of RECs.

<u>Reducing supply</u>

This will require changes to the RET scheme by either reducing the eligibility of certain technologies or the rules by which it operates.

Excluding technologies from eligibility, or changing the rules under which they operate, is the most obvious form of reducing the supply of RECs. This will disadvantage any industry

excluded unless alternative measures are created in parallel to provide commensurate support.

Excluding an existing technology from the RET may help to firm up the forward price as the market responds to the reduction in RECs expected from the previously eligible technology. However, it is unlikely to reduce the over-supply in the short-term as the RECs are either already in the system or will be by the time any changes to the RET are in place.

Increasing demand

Increasing the size of the RET will increase demand and should increase REC prices. Changing the trajectory of the target in the next two years may assist but the impacts are likely to be diminished by the full banking and borrowing provisions of the scheme, which the CEC supports. The CEC has advocated all year the need to replace the "phantom" RECs created by the multiplier under the Solar Credits scheme as another distortion in the scheme design that needs to be addressed. During its passage through Parliament the CEC provided a set of simple amendments to the RET legislation that would remove this distortion. They were not accepted. This review should look again at the need to take action to address phantom RECs.

Market Intervention

It is possible to address the bubble in the REC market - by removing it. Purchasing RECs will remove the surplus from the market, while giving the government a strategic buffer against future REC price spikes, which are equally unwelcome. Alternatively the government could set a floor in the REC price. It has already capped the price. The issue here would be how to phase out the floor over time and what impacts this transition would have on investors.

There is no agreed position on these issues within the CEC membership. Some of these options are supported by some companies, but not others. We are continuing to work with our members to develop appropriate solutions.

Issue Paper Questions

The CEC has not attempted to answer all the questions presented in the issues papers. The answers to these questions must also be seen in the context of the previous discussion and an urgent need for a more fundamental review of the market.

Discussion Paper 1: Eligibility of new small-scale technologies and heat pumps

Question 1: Are there any new small-scale renewable energy technologies not currently eligible under the RET which may be considered for eligibility to participate in the scheme? Details are sought on:

- a description of the technology and how it works (including how it uses renewable energy to generate or displace electricity); and
- the extent to which the technology has been or is ready to be deployed to the market, such as industry size, capacity and market penetration.

In principle the CEC supports the development and deployment of all renewable energy technologies. However, this support is on the basis that the technology is genuinely renewable and can prove it is delivering actual and measurable abatement of greenhouse gases and the displacement of fossil fuel based electricity.

One of the concerns of sections of the clean energy industry is the potentially weak proxies used to measure the performance of technologies that use renewable heat, like solar hot water systems and heat pumps.

While the electricity from a wind turbine or hydro dam can be measured precisely, the actual value of the energy displaced by a solar hot water system is less clear. It is dependent on a range of factors including the amount of hot water used and the type of energy that it is displacing. They are highly varied in design to suit a range of different climactic conditions and need to be installed correctly if they are to operate correctly.

Question 3: Should heat pumps continue to be eligible under the RET? How cost-effective are heat pumps compared to solar hot water systems and conventional systems such as gas and electric systems? In particular, details are sought on:

- the capital cost, including installation;
- annual running costs, including maintenance;
- the effective life of the system; and
- annual savings compared to using fossil fuel based energy such as gas or electricity.

Heat pumps should continue to be considered an eligible form of solar hot water providing each installation can demonstrate it is operating efficiently and not merely complying with the rules of the RET. Some members of the CEC will advocate the exclusion of heat pumps under the RET, while others will advocate the exclusion of all renewable technologies that do not generate electricity. The manufacturers and suppliers of heat pumps wish to remain included in the RET scheme. Either way, what is crucial is that the most energy and greenhouse gas efficient hot water system type is installed in each Australian household.

Heat pumps and solar hot water technologies are an important technology in helping households to reduce both their energy costs and contribution to greenhouse gas emissions, and their accelerated deployment must continue to be actively supported.

Question 6: Would including new small-scale technologies or amending the eligibility of heat pumps have a major impact on the deployment of existing eligible technologies?

Currently any new source of REC generation will have a material impact on the deployment of other existing eligible technologies by exacerbating the current oversupply of RECs. This is not grounds to exclude their introduction, as all eligible renewable energy technologies should be entitled to generate RECs. It does reinforce the need to address the current market oversupply.

Any new technology considered for inclusion in the RET must be genuinely renewable and able to accurately measure its contribution to the reduction in fossil fuel based electricity and greenhouse gas abatement.

Before including a new technology in the RET, the full impact of its introduction needs to be understood and considered, and appropriate action taken to protect the integrity of the existing market.

Discussion Paper 2: Self-generation provisions

Changes to the self generation provisions are unlikely to have a significant impact on the RET. However, any exemption of RET liability must not diminish the overall expanded RET target and/or the total electricity industry obligation of 45,000GWh. As previously mentioned, the RET's objective is to create the investment certainty necessary for renewable electricity project development.

Any additional incentive for businesses to purchase and consume electricity with low or zero emissions footprint is supported by the CEC. In the case of on-site generation, it may therefore be appropriate to amend the conditions to provide such exemptions, including supporting more flexible ownership and commercial structures of the generation assets. Ascertaining a strict legal interpretation of 'self-generation' can be complex. It is therefore important to ensure that appropriate action can be taken to protect the integrity of the Act.

Discussion Paper 3: Support for small scale off-grid renewable generation

Question 1: Solar Credits currently apply up to the first 1.5 kilowatts (kW) of capacity installed. Should Solar Credits or a similar 'REC multiplier' mechanism under the RET be used to provide further incentives for off-grid renewable generation? If so, what level of eligible capacity (such as 20 kW) should apply? How would this compare with the level of support under the RRPGP and what size 'REC multiplier' would be appropriate?

The Remote Renewable Power Generation Program (RRPGP) was very successful in supporting off-grid renewable energy deployment and, in many cases, provided an essential service (a sustainable, affordable supply of electricity) to families and communities who live in off-grid locations. The closure of the programme means that a large number of families and communities will be forced to rely on diesel generators to provide their electricity.

The CEC therefore supports the development of a programme that provides continued long-term support for the deployment of off-grid renewable generation. However based on discussions with our members, we do not believe that a REC multiplier mechanism, similar to the Solar Credits scheme, is the appropriate mechanism to provide support for the deployment of off-grid renewable energy.

Analysis has indicated that to deliver the same level of support as was available through the RRPGP (a 50% contribution to the upfront cost) would require a cap of around 30 kW and a REC multiplier in the region of 30, based on a REC price of $30. To ensure that the level of support to off-grid systems is consistent (ie. it continues to provide a 50% contribution to the up-front cost) would mean that the multiplier would have to vary to reflect any change in the REC price.

The complexity and uncertainty that introducing this type of mechanism would create means that the Clean Energy Council does not support the use of a multiplier mechanism to provide specific support to the off-grid market.

Continued support for the deployment of off-grid renewable energy is essential, particularly for families and communities without access to an affordable grid connection. The government needs to move quickly to introduce a programme outside of the RET that delivers the appropriate long-term support for the deployment of off-grid renewables.

The CEC is aware that MMA have been commissioned by DEWHA to carry out a review of the off-grid market to feed into this review. We would urge you to make this analysis public as a useful input to the ongoing discussions as to the appropriate support mechanism for the off-grid renewable energy market.

Question 3: Are the RRPGP program parameters still relevant if incentives for off-grid renewable generation are provided under the RET? Views are sought on:

- whether 1km from a main grid is an appropriate definition for remote 'off-grid';
- whether the $30,000 connection costs threshold is appropriate for sites that are considered close to a main grid; and
- whether support equivalent of up to 50 per cent of the cost of the renewable generation and essential enabling equipment is appropriate

From input the CEC has had from its members, it is clear that the original parameters of the RRPGP are still valid. In particular, it is clear that up-front capital support is essential to bridge

the gap between the cost of good quality off-grid renewable energy systems and the diesel equivalent.

As outlined above we do not believe that the appropriate support can be provided through the RET.

Question 5: Would providing incentives for off-grid renewable generation have a major impact on the deployment of existing eligible technologies?

As indicated above, the level of support needed through the RET to provide adequate support to the off-grid market, would have a significant impact on the operation of the RET market and on the deployment of existing technologies. The CEC therefore does not support the provision of specific incentives for the off-grid market through the RET, through the use of a multiplier type mechanism.