



AUSTRALIAN
INDUSTRY
GREENHOUSE
NETWORK

21 September 2012

Mr Bernie Fraser
Chair
Climate Change Authority
cc Ms Anthea Harris, CEO
submissions@climatechangeauthority.gov.au

Dear Mr Fraser

Renewable Energy Target Review

The Australian Industry Greenhouse Network (AIGN) welcomes the opportunity to provide comment to the Climate Change Authority (Authority) review under the *Renewable Energy (Electricity) Act 2000* (REE Act) of the operations of the Renewable Energy Target (RET). We do so conscious that the policy environment and indeed the energy sector, has changed considerably since the expanded RET was first announced, particularly with the introduction of Clean Energy Future (CEF) legislation to establish a carbon price. We express our appreciation for the briefing that Ms Harris provided to our members on the Review in Perth on 12 September.

AIGN is a network of industry associations and individual businesses which contribute to the climate change policy debate, and see value in joint industry action on climate change, in order to promote sustainable industry development within Australia. Our broad range of members results in a wide diversity of views on greenhouse and energy policy. This submission accords with the views of AIGN members in general, but it does differ from the positions of some individual member associations and companies. Therefore it is important that the Authority takes on board AIGN's feedback alongside submissions made by members, in which they highlight the issues of greatest importance to them.

AIGN's preference with regard to greenhouse gas mitigation strategies is for the application of market solutions to market failures where they exist and when, with intervention, it is reasonably assured that there will be substantial net benefits. Noting the key justification of the RET as a component of the Government's greenhouse response strategy, members of AIGN are vitally interested in the proposed review.

Commentary on the RET Principles

It is noted that in undertaking this review, the Climate Change Authority must have regard to ensuring that the RET is:

- economically efficient;
- environmentally effective;
- equitable;
- in the public interest, taking account of the impact on households, business, workers and communities;

Australian Industry
Greenhouse Network
ABN 93 108 941 117

Unit 3,
4 Kennedy St
Kingston ACT 2604

PO Box 4622
Kingston ACT 2604

T +61 2 6295 2166
F +61 2 6232 6075
E info@aign.net.au
W www.aign.net.au

- support the development of an effective global response to climate change and be consistent with Australia’s foreign policy and trade objectives.

These principles are consistent with the Climate Change Policy Principles of AIGN.

In particular AIGN highlights that Australia’s greenhouse policy measures should:

- Be consistent with the strategic national approach and *take* a national approach – there is no place for state based mitigation policies
- Not discriminate against new entrants to Australian industry nor disadvantage “early movers” in Australian industry who have previously implemented greenhouse gas abatement measures
- Take account of differing sectoral circumstances
- Be trade and investment neutral
- Be based as far as practicable on market measures
- Address all greenhouse gases
- Be least cost in application
- Address all emission sources and sinks
- Be technology and fuel neutral
- Balance, in a cost effective way, abatement and adaptation strategies – both of which should be based on sound science and risk management practices.

In the context of the above principles, AIGN has significant reservations with the Renewable Energy Target and has consistently made submissions to that effect since its inception.

In AIGN’s view the policy argument for the RET has been overtaken by the changed environment where CEF carbon pricing mechanism is the principal driver of abatement in Australia.

These views are not limited to AIGN. Professor Ross Garnaut noted in his 2008 Climate Change Review that with the advent of a broad based emissions trading scheme, other emissions reduction policies become largely redundant – the role for additional policies of this kind should be specific to reducing the effect of market failures. Prof Garnaut stated in his 2011 update report¹,

Unlike economy-wide carbon pricing, the Renewable Energy Target does not necessarily encourage the lowest-cost means of reducing emissions. Nor does it encourage innovation: it favours the lowest-cost established technologies that are eligible within the scheme.

With a carbon price in place, current climate change mitigation policies would not be a cost-effective way to reduce emissions. Most, including the Renewable Energy Target and feed-in tariffs, should be phased out. The Renewable Energy Target could be phased out by fixing the established price for not meeting the requirements at its current dollar level.

In May 2008, the Productivity Commission claimed the MRET would drive up energy prices and would do little to cut greenhouse gas emissions.

However, recognising the publicly stated commitments by both the Government and Opposition to a continuation of the RET to at least 2020, the review provides a

¹ <http://www.garnautreview.org.au/update-2011/garnaut-review-2011/chapter11.html>

critical opportunity to re-assess the intent, design, operation and likely impact of the RET as a complementary measure to the Clean Energy Future legislation.

AIGN has taken the opportunity to make a number of suggestions to improve the RET. In particular, we are concerned with the cost of the RET on trade exposed industries, particularly at a time when the operating environment is challenging for many sectors.

We have offered comments on specific issues associated with the RET and look forward to more detailed discussions with the Authority as the review process continues this year.

RET- The Target

In the transition from MRET to the RET, the Australian Government set a goal that in 2020, 20% of Australia's electricity would be generated from renewable sources. In order to establish the expanded RET, this 20% goal was converted to a fixed GWh target. Based on market modelling, it was assumed that 2020 demand would be 300TWh, therefore the 20% goal would represent 60TWh from renewable sources. Following the MRET, the existing renewables baseline was 15,000GWh, so the RET was set at 45,000GWh (45TWh) of new/ additional renewables by 2020. The 2020 target has since been split into the LRET (45TWh) and SRES (4TWh).

However total demand in 2020 is now estimated to be less than 300TWh. The Australian Energy Market Operator (AEMO) has significantly revised down its forecast of annual energy demand over the next 10 years across the National Electricity Market (NEM).

The AEMO Outlook Report² of 29 June 2012 highlights evidence for slowing demand growth. In fact, actual demand dropped in the NEM in 2011-12 and is expected to be flat in 2012-13. AEMO observed that across the NEM, annual energy in 2011-12 was estimated to be 2.4% lower than in 2010-11 which is 5.7% lower than forecast in the 2011 Electricity Statement of Opportunities (ESOO). AEMO's updated forecast for 2012-13 NEM annual energy is zero growth, which represents an 8.8% reduction from the 2011 ESOO.

AEMO's forecast of average growth in annual energy use for the next 10 years is now forecast to be 1.7%, down from 2.3% forecast in the 2011 ESOO. Modelling by Origin Energy, ACIL Tasman (on behalf of TRUenergy) and the Commonwealth Treasury of NEM energy (GWh) all suggest slowing demand growth out to 2020.

The drivers behind this decline in demand include:

- A greater uptake of rooftop solar power as a result of the SRES and generous feed-in tariffs and other subsidies reducing demand from the network
- The economic pressures on Australian manufacturing, including energy intensive minerals processing, resulting in falling electricity demand
- Milder seasonal weather patterns; and

²

http://www.aemo.com.au/en/Electricity/Forecasting/~/_media/Files/Other/forecasting/2012_NEFR_Executive_Summary%20pdf.ashx

- A greater than expected demand-side response from households to higher electricity price rises.

Potentially this reduction in demand will mean that the combined LRET and SRES targets as currently designed will deliver more than the goal of 20% renewables in 2020 – some estimates suggest an market share of about 26%. This presents a major risk for both electricity market participants and end-users. Falling demand growth coupled with the maintenance of the existing RET will create pressure on fixed and regulated costs and highlight the distortions caused by the RET. Such an outcome will result in higher costs to electricity customers as a result of the significant wealth transfer through regulated subsidies to the renewable industry.

While the objective of the RET is to encourage the additional generation of electricity from renewable sources, the cost to electricity users must be contained. AIGN also recognises that investments have been made on the basis of the current RET rules and that these investments should not be “stranded.”

Maintaining the current LRET will add unnecessary costs to business and householders and continue to distort investment decisions. Addressing this problem provides an opportunity to reduce the burden upon industry generally, and specifically the electricity-intensive trade exposed industries.

As the Minister for Resources and Energy the Hon Martin Ferguson noted “we must ensure the market framework continues to provide the right signals for investors to make decisions.”³

In this context if the RET is to be retained there needs to be some flexibility to adjust the legislated 2020 target to one that is a more accurate reflection of expected levels of demand by 2020.

There appear to be two options

- As a result of this RET review, recalibrate the 20% target based on up-to-date forward projections of national demand in 2020 and legislate a fixed target expressed in GWh and adjust annual targets from 2015-2020. Under this approach, it is not anticipated that the target would be further reviewed.
- As a result of this RET review, re-commit to a 20% target and vary the LRET in line with demand projections in 2014, 2017 and 2020. The target would still be expressed in GWh but would represent a “real” 20% target by adjusting the targets in line with demand projections.

Under both of these approaches, the target would be reduced in terms of GWh.

Under the 2nd option, if demand projections increase in the latter half of this decade, then the target can be revised upwards again.

Although there has been a surplus of LGCs in the market in the initial phase of the enhanced RET, meeting the annual targets from mid-decade will be significantly harder. This has been shown in various analyses (for example by ACIL Tasman for

³ Keynote Address, Bureau of Resources and Energy Economics, Canberra, 18.09.2012

TRUEnergy⁴ and the Australian Energy Market Commission [AEMC]⁵), which demonstrate the large scale of expansion in wind capacity that will be required within a few years to meet the LRET target. Grant King, Managing Director of Origin Energy, highlighted in a recent interview⁶ that in order for the current LRET to be met, nearly 2,000MW of wind capacity must be built in each of a few years, when barely more than 600MW has ever been installed in a single year. Even if investors could raise the necessary capital, there are other constraints, for example planning approvals, regulatory uncertainty including carbon pricing and stagnant demand, that would indicate that it would very challenging and costly to mandate this investment.

Either option would provide a reduction in the cost burden to end-user. It would provide industry with cost relief at a time of great pressure whilst minimising any changes to investment decisions. Estimates suggest that for a manufacturing business which receives no assistance under the RET the introduction of the RET represents a 35% increase in the cost of generation. A real 20% LRET could save large business customers in the order of \$7 MWh in 2020.⁷

AIGN suggests that the option that is least likely to impact on investment certainly is to reduce the fixed target. A decision could be made on the “real” target of 20% in 2015 after appropriate economic assessment of the level of demand for electricity and its extrapolation to 2020. This would provide plentiful notice for both industry and investors.

Partial Exemption Certificates

Partial exemption certificates (PECs) provide some support for emissions-intensive, trade-exposed (EITE) businesses that compete internationally and are impacted by the cost of carbon and rising electricity costs.

The introduction of PECs was welcomed by AIGN and its members. Now that we have the opportunity to review the operation of PECs, it is timely to highlight some of the limitations of the partial exemption framework.

The administration associated with PECs is onerous and could be simplified. At present the PEC administration is a real barrier to seeking competitive bids and potentially changing electricity suppliers.

PECs are not tradeable; they name a particular liable entity (ie electricity supplier). The PEC can only be traded to the named liable entity and the value is negotiated between the EITE business and its electricity supplier.

The current absence of a market price for PECs, together with these administrative arrangements, present significant difficulties to parties assigning a value aligned to the true opportunity cost of trading PECs. This is further exacerbated in those instances

⁴ <http://www.truenergy.com.au/downloads/20120905-Achieving-20percent-RET-Final-ACIL-Tasman.pdf>

⁵ http://www.aemc.gov.au/Media/docs/Final_Report-fa753e05-2d7c-44ee-94b9-c2981b93e08a-3.PDF

⁶ <http://reneweconomy.com.au/2012/five-things-we-learned-from-origin-energys-grant-king-32125>

⁷ Origin Energy submission to Climate Change Authority Renewable Energy Target Review, September 2012

where a PEC holder only has one potential buyer to contract with and the balance provided by a competitive marketplace is missing.

One option to ensure the full opportunity value of PECs is realised is through access to an open market – potentially by formally linking the value of a PEC to the value of a LGC. This will lead to more efficient price discovery, avoid value destruction and allow the intent of the PEC to be met.

AIGN would be pleased to establish a working group with the Authority to explore this option in more detail. We would also welcome the opportunity to work with the Authority to streamline the administration associated with the partial exemption framework.

Ability to ‘Opt In’ to the RET Scheme

Some large energy users have successfully negotiated with their electricity supplier to remove the RET charge from their electricity bill and to independently source the appropriate number of certificates and deposit them into their supplier’s RET account.

In order to create more liquidity and efficiency in local markets AIGN supports a discussion for an ‘opt in’ process for large on-grid electricity users, similar to the Clean Energy Legislative Package’s opt in scheme for large liquid fuel users. In doing so the Government would be successfully providing for:

- *Market liquidity*: through increasing the number of buyers and (possibly) sellers that are covered under the RET, leading to lower cost of compliance and efficient market outcomes
- *Flexibility*: for energy users to evaluate the most cost efficient solution to manage their obligations under the RET. Large energy users should be able to evaluate how to best manage their aggregated liabilities to minimise the net cost to their business.

These improved market efficiencies would not be achieved if the administrative arrangements and other regulatory requirements were impractical or too onerous. It is for these reasons we recommend a thorough consultation process be carried out to determine an efficient RET opt in scheme design that avoids duplication and minimises the administrative burden on both the end user and supplier/retailer to maximise value and uptake.

Evaluation of the RET

1. Economic efficiency

MRET was designed as a relatively efficient market mechanism notwithstanding that it was not a low cost solution to greenhouse gas emission abatement. However constant Federal and State government intervention – the amended RET, rebates for installation and feed-in tariffs for SRES technologies – has removed most market efficiency benefits from the scheme.

AIGN considers that the SRES and LRET programs fail to meet the objectives of economic efficiency, are distortive and are a high cost approach towards reducing greenhouse gas emissions.

For example with regard to the SRES, the Productivity Commission's 2011 Report (*Carbon Emission Policies in Key Economies*) concluded that subsidising the installation of small scale solar PV systems significantly increases the average implicit abatement subsidy and hence the resource costs of abatement. The Commission also commented that

Because the state and territory FITs overlapped completely with the RET in 2010 they did not lead to any additional abatement and only added to the total financial costs of meeting the target."

The Commission also noted that whilst the large scale component of the RET was less costly than subsidies for solar PV the implicit abatement subsidy was still high relative to alternate effective policies. This finding was supported by other publicised estimates of the cost of the RET, such as from the Grattan Institute.⁸

More recently the NSW Independent Pricing and Regulatory Tribunal (IPART) stated that,

*"...the introduction of the carbon price and a move towards an emission trading scheme (ETS) removes the need for the RET (and ultimately electricity customers) to continue to subsidise investment in the renewables sector. The RET is not complementary to the carbon price and does not cost effectively address any other significant market failure."*⁹

Whilst there has been an increase in the proportion of renewable energy derived from the SRES, it has been at a high cost relative to other greenhouse gas emission options. Relying on the use of pricing signals via the CEF carbon price will enable a more environmentally effective solution at lower overall cost. Interference with the market in such a way as to favour particular technologies adds a further layer of cost to the scheme, distorts the efficacy of the market and undermines the principal of using the market to determine the uptake of renewable energy generation.

Whilst the objective of the RET is to encourage the additional generation of electricity from renewable sources, this is not without a cost to the consumer. Maintaining a fixed target that is not realistic will add to unnecessary costs for consumers and distort investment decisions.

2. *Environmentally effective*

The Australian Energy Market Commission (AEMC) reported modelling that showed the enhanced RET is projected to abate about 226 Mt CO_{2e} in the period 2012-2020 in comparison with a counterfactual case with no carbon price and no RET. However this abatement comes at a significant cost. AEMC found that abatement from solar

⁸ Daley, J., Edis, T. and Reichl, J. 2011, *Learning the hard way: Australian policies to reduce carbon emissions*, Grattan Institute, Melbourne.

⁹ Independent Pricing and Regulatory Tribunal (IPART), Submission to Renewable Energy Target Review, 12 September 2012.

PV ranges from \$500 - \$300 / t CO₂e, while large-scale abatement was of the order of \$80-55/ tCO₂e.

Therefore it can be seen that the RET is delivering abatement from the electricity sector in the absence of a carbon price, however, environmentally cost effective options are more likely with a carbon price and complementary measures only where there is an agreed market failure.

3. *Equitable*

As the increase in renewable energy has predominantly comprised wind and solar installations, renewable energy production is currently more expensive than alternative sources; consequently the higher cost is passed on by retailers to householders and businesses.

As the Government has noted with regard to the CEF plan, equity will only be achieved if the burden upon users and manufacturers is shared according to ability to pay. In this regard the RET is unsuccessful because-

“it promotes very expensive emissions abatement and relatively expensive renewable energy production, which has a considerable impact on retail electricity prices.”¹⁰

IPART calculated that the costs of the various green schemes applying to an “indicative regulated electricity customer’s” bill in NSW would be \$310 per annum from 1 July 2012. While over half of this amount is attributed to the carbon pricing mechanism (for which there is government support for some households) the next largest contributor to these increases is the cost of complying with the RET (costing around \$102 per annum).

The additional cost of compliance will hit hardest on the low income households as energy costs account for a greater proportion of their expenditure than those on a higher income. This does not meet the equity test.

Additionally if industry, including liable entities and smaller trade-exposed industries, has better access to clean technology programs this will facilitate co-investment in renewable energy, advanced heat capture and transfer technologies, and other lower emissions opportunities in manufacturing. Importantly making an application needs to be more user friendly, such as having a SME liaison officer.

4. *In the public interest, take account of the impact on households, business, workers and communities*

As previously discussed the SRES and LRET impose higher costs on households, business, workers and the community than necessary.

Exemption of Self-Generators

Currently self-generators that meet certain specific criteria are not liable under the RET. This exemption is partly in recognition that this technology is generally less emissions-intensive than grid electricity. Exemption is granted under tight criteria including that the self-generators must produce the electricity and deliver it on

¹⁰ IPART, *The challenges of balancing electricity retail prices*, speech by James Cox (CEO) to the Australian Energy and Utility Summit, 29.06.2012.

transmission/distribution lines which operate solely for the purpose of transferring electricity between these two points – exemption is limited to consumption within a 1 km radius. Electricity cannot be sold to a third party.

The exemption is an important component of the RET for both remote sites -for many resource projects there is little alternative but to self-generate- and manufactures/ processors that install cogeneration facilities. AIGN strongly supports the RET to be framed with respect to large grid connected electricity networks

The discussion paper makes some connection between the self-generator exemption and the EITE partial exemptions. AIGN notes that the EITE partial exemption reduces some of the RET costs at a time of rising electricity costs and additional carbon liabilities and recognises the difficulties in passing on these costs. In contrast, the self-generation exemption relates to the specific nature of these activities:

- remote resource projects where a project often has little choice but to generate its own electricity; or
- Cogeneration where the site has specific requirements for both electricity and steam to meet process requirements or options exist to use waste energy for power production.

The self-generation and PEC policies were designed for different purposes.

As noted in the discussion paper there was a review on specific RET issues by the COAG Select Committee on Climate Change, which considered self-generation provisions.

The current provisions were scoped narrowly to avoid creating perverse incentives for companies to structure their operations to avoid RET liability. However, some submissions to the COAG Review argued that the restrictions themselves have created perverse incentives. For example, APPEA commented that the self-generation provisions currently provide an incentive for power generation and transmission assets to be duplicated rather than being shared, in cases where it would normally be more cost-effective for shared assets to be developed. APPEA also argued that the provisions may provide an incentive for a self-generator to disconnect from the grid despite there being a broader economic value in retaining grid connection for security of supply.

Several submissions commented that in view of the size and complexity of larger resource projects (some of which can stretch over ten kilometres or more) the 1 km restriction between point of generation and point of use for shared distribution lines and the requirement that longer transmission must be via dedicated point-to-point lines unduly restricts the amount of legitimately self-generated electricity able to be claimed as exempt from RET liability.

For example, the WA Chamber of Commerce and Industry commented that that the 1 km and sole use restrictions

“do not align with the realities of modern isolated mineral and energy projects, where the distances and infrastructure capital costs involved mean these restrictions are impractical. In

such operations the point of generation and use can be over one kilometre apart and for transmission lines to transmit electricity to multiple points.”¹¹

The Regulator has viewed such projects as meeting the requirements for exemption where the generation points and usage points belong to the same legal entity and are not connected at any point to an external grid or a third-party user or generator.

Stakeholder feedback indicated that once generated, it makes commercial sense to use as much as possible of the electricity at the site, but that project economics generally favour centralised generation on a site and dictate that it be close to the fuel source. It was argued that on this basis, the exemption should be extended to apply to self-generated electricity supplied by the internally owned distribution network and consumed within site boundaries.

Where a site is connected to any liable grid, (one with a total capacity of greater than 100 megawatts generating capacity), and where the generator provides any electricity for use by a third party, the sole-use test is not met. As such, the exemption is not available for any of the electricity supplied on that grid, beyond a radius of 1km from the generation point, even though almost all of the electricity is generated by the end-user. This exemption reflects the policy focus on tightly targeting exemptions to ensure only genuine self-generators are exempt. Some submissions called for an approach whereby the sole-use test is effectively removed, allowing all self-generated electricity actually used by the end-user to be exempt, with only the proportion of electricity supplied by the self-generator to a third party being RET-liable.

The WA Sustainable Energy Association commented that

“the creation of a remote power system is capital intensive and in many cases need to take into account the need for multiple partners/joint venturers on a single project... As such, the factors involved in self-generation eligibility become more complex than envisaged in the legislation.”¹²

Other stakeholders suggested broadening the definition of self-generation to include assets involved in power generation, distribution and use that are owned or leased by an entity related to the electricity consumer or an entity providing a service exclusively to a related entity embedded within the independent distribution network. ‘End user’ would be defined here to include related bodies corporate, to ensure that the exemption flows through to all entities within the same corporate group.

The adverse consequences of this limitation could be overcome by exempting all self-generated electricity if the supply is incidental (exempting all self-generated electricity used by the end user) with only the proportion of electricity supplied to external parties constituting a relevant acquisition. “Self-generation” should be where the corporation that owns the electricity generated from a power station is a member of the same group as the corporation that owns the assets that make use of the electricity. The flexibility provided by this provision will be particularly important for future developments with a potentially larger onshore footprint such as Coal Seam Gas.

¹¹ <http://www.climatechange.gov.au/en/submissions/renewable-energy-target/~media/submissions/renewabletarget/coag-ret/035chamberofcommerceandindustrywa.ashx>

¹² <http://www.seaus.com.au/files/submissions/2009/wasea-coagsubmission2.pdf>

This would extend the self-generation exemption to a limited quantity of electricity generation where the business involved is incurring the costs of construction and in many cases achieving reduced emissions and increased energy supply. This provision should also be extended to existing and planned Cogeneration Projects noting the consistency with the COAG discussion paper of 9 October – “(the exemption) could be considered as supporting the development of self-generation, for which a substantial proportion uses more efficient cogeneration technologies and less greenhouse-intensive natural gas or renewables.”

AIGN would be willing to work with the Authority to review options to open up the exemptions for self-generation – for remote sites and cogeneration facilities to draft guidelines that reflect current resource development requirements and encourage the investment in cogeneration facilities that generate energy at lower greenhouse gas intensity than grid power.

Aligning Support for Emission-Intensive Trade-Exposed (EITE) Industries

The demand for energy from the EITE industry sector is estimated at present to be approximately 45-50TWh. This represents approximately 20% of total electricity demand, although as a share of total energy demand it is falling - reflecting the difficult trading conditions for many companies in this sector with the high dollar, lower demand and the contraction of the manufacturing sector. This is highlighted by the closure of such facilities as Hydro’s aluminium smelting operations in NSW.

EITEs are eligible for a Partial Exemption Certificate (PEC) in recognition of the extent of the added costs and the inability to pass on those costs to customers. Dependent on the emissions intensity of the EITE’s activity the companies are entitled to exemptions of either 60% or 90%. However this exemption only applies to the increase in the target above the original target of 9.5 TWh and a REC price above \$40. Therefore the effective exemption is considerably smaller than the “suggested” figure of 90% - for example for the aluminium smelting and steel making sectors this would translate into an effective exemption of about 70% by the time the large scale target reaches 41TWh.

Significantly, the RET costs will therefore give cause to a rise in the costs of EITEs. For example the Australian Aluminium Council has indicated an annual cost from the RET for the aluminium smelting industry of \$80 million.

Consistent with its mission of encouraging the development of Australia’s industrial resources, AIGN recommends that the Government give consideration to making the exemption rates consistent with those used for the JCP program and that the figure is based on the exemption from all RET costs (not just the expansion).

Administratively the requirement to have a reasonable assurance audit on the PEC data (for March the following year) and the equivalent data for Jobs and Competitiveness requirements (by October of the same year) and its accompanying audit costs and business disruption is an area where harmonization would be worthwhile.

Diversity of Renewable Energy Access

The REE ACT requires the CCA to review the diversity of renewable energy access to the scheme. Whilst the current RET is restricted to electricity this is considered unnecessarily restrictive. Rather, in the context of the Government's overall aim of reducing greenhouse gas emissions there should be scope for encouraging a wider spread of "eligible energy sources" consistent with a "technology neutral approach, so that the most cost-effective technologies are deployed to meet the target".

There is scope to include the deployment of renewable energy forms such as those that produce heat (including steam) and biofuels directly for both industrial and domestic purposes. This would be consistent with the approach currently followed in a number of other countries and would provide more of a level playing field for industry rather than the current imbalance in the renewable energy market.

For example residues from Australia's forest, wood and paper products industry has the potential to generate up to 3,000 GWh by 2020 (nearly 7% of the 2020 RET target). AIGN recommends amending the RET to recognise these legitimate sources of renewable energy including the recognition of biomass sourced from sustainably managed forests. There should also be the scope for pre-certification of forest biomass projects to provide security to investors and assurance that they are eligible for RECs prior to the commissioning of a plant, given the complex eligibility requirements that exist for this feedstock.

AIGN is aware that a number of member companies have argued in the past for the inclusion within the RET as an eligible source the use of industrial by-product gases and waste heat streams to generate electricity. This would provide an incentive to utilise industrial waste gases to generate nil, or low greenhouse gas emission electricity. AIGN supports this proposal; not only would it provide an incentive for the generation of electricity with low or minimal additional greenhouse gas emissions, it is also consistent with the inclusion of other sources of waste gases (such as waste coal mine gas) as eligible sources under the RET.

Such projects are highly complex and require enormous capital investments; abatement projects of this nature should be able to generate RECs. However, failure to exclude low carbon self-generation projects from REC obligations is likely to have a significant and adverse effect on project viability. These projects can often generate electricity at much lower specific carbon intensity than grid-based generation (sometimes zero intensity).

These projects, in many cases, recover an otherwise wasted energy stream to produce electricity that is embedded in networks where demand is present, therefore reducing the need for network augmentation often required for remotely located "renewable" projects which are not close to natural load centres.

The encouragement of such self-generation projects would supplement "renewables" and relieve pressure for new baseload generation assets. While not classified as "renewable" under the RET, any electricity generated by a Cogeneration Project from process gases would be at negligible emissions intensity and would therefore contribute to a net reduction in greenhouse gases. This particular exemption should



be independent of point to point distance of consumption from production or size of the independent network of public grid capacity.

Review Frequency

AIGN notes the uncertainty that is likely to be caused by undue frequent reviews of the RET, despite the REE Act mandate for reviews by the Authority every two years. Also such reviews are not in isolation. From an industry perspective, it seems that there are almost constant reviews of aspects of CEF and energy policy which are not only time consuming to respond to but seemingly of limited value to substantially change policy settings.

Rather AIGN supports a major review at an appropriate time, which would also make decisions regarding the future of the RET (presuming it continues post this review), CEF and broader energy policy.

Conclusion

It is the view of AIGN that the RET target and arrangements are costly and environmentally ineffective, and that by establishing a carbon price the Federal Government is addressing the market failure that supports the RET. With the existence of a carbon price, the Government should allow market forces to determine the lowest cost abatement options. If the RET continue, AIGN has proposed a number of solutions to reduce the impact of the RET upon industry consistent with the intent of the Government's Clean Energy Future package.

Yours sincerely

Alex Gosman

Chief Executive Officer