

COAG review of specific Renewable Energy Target issues.

Overview

This submission template should be used to provide comments on:

COAG Review Discussion Paper 1 – Eligibility of new small-scale technologies and heat pumps

COAG Review Discussion Paper 2 – Self-generation provisions under the expanded national RET scheme.

COAG Review Discussion Paper 3 – Support for small-scale off-grid renewable generation

Stakeholders are asked to use the template provided to answer the questions posed in the discussion paper. The Department will also accept any other documents, further information, costing tables etc that are attached to the submission template.

Contact Details

Name of Organisation:	Hydro Tasmania
Name of Author:	Kane Thornton
Phone Number:	03 8628 9735
Email:	Kane.thornton@hydro.com.au
Website:	www.hydro.com.au
Date:	30 th October 2009

Confidentiality

All submissions will be treated as public documents, unless the author of the submission clearly indicates the contrary by marking all or part of the submission as 'confidential'. Public submissions may be published in full on the Department of Climate Change website, including any personal information of authors and/or other third parties contained in the submission. If any part of the submission should be treated as confidential then please provide two versions of the submission, one with the confidential information removed for publication.

A request made under the *Freedom of Information Act 1982* for access to a submission marked confidential will be determined in accordance with that Act.

Do you want this submission to be treated as confidential?

Yes No



Renewable Energy Sub Group Secretariat
Department of Climate Change
GPO Box 854, Canberra ACT 2601

RET@climatechange.gov.au

30 October 2009
Dear Sir/Madam,

Re: Submission to COAG Review of specific Renewable Energy Target (RET) issues.

Thank you for the opportunity to provide comment to the COAG Review Discussion Papers on specific RET issues. This submission addresses all three discussion papers.

Hydro Tasmania is the largest generator of renewable energy in Australia, and is internationally recognised for its expertise in renewable energy operation and development. Hydro Tasmania continues to make a major contribution to the production and growth of renewable energy and reduction of greenhouse gas emissions. This includes through wind developer Roaring 40s (a joint venture company between Hydro Tasmania and China Light and Power), a Consulting business providing expertise internationally, and as owner of energy retail business Momentum Energy.

Hydro Tasmania supports the Government's objective to ensure 20 per cent of Australia's electricity generation is sourced from renewable electricity generation by 2020. The introduction of an expanded 45,000GWh Renewable Energy Target (RET) was welcomed by the renewable energy industry as a necessary and appropriate means of increasing Australia's renewable energy contribution and commencing a transition towards a lower emissions intensity electricity generation sector.

RET is a proven and effective market driven policy measure to accelerate the deployment of least cost, commercially proven renewable energy technologies. Some key concerns with the current policy and their consequences for the current REC price are, however, emerging.

The recent accelerated deployment of solar water heaters (SWH) and solar PV is resulting in a large number of RECs from these sources entering the market and significantly reducing the REC price. Hydro Tasmania supports the development and deployment of all forms of renewable energy and regards the growth in both these sectors as important to the long term strength of the Australian renewable energy industry. However, the current low REC price means many large scale renewable energy projects will remain difficult to commercialise in the short to medium term. If the current low REC price is sustained, it risks undermining investment certainty for

large scale renewable electricity generation and putting the ultimate achievement of 20 per cent renewable energy in jeopardy.

Both SWH and solar PV deployment are being driven by the RET in combination with a range of other additional incentives and rebates. The RET is not on its own the policy 'silver bullet' for all renewable energy technologies and should be complemented by a range of other key policy approaches to stimulate the development and deployment of a low emissions energy sector. This has already been recognised with the establishment of measures such as the Government's Renewable Energy Demonstration Program (REDP), the Geothermal Drilling Program and the Australian Centre for Renewable Energy. Without these, Australia's carbon abatement challenge will be exacerbated.

While it is important that the growth of SWH, solar PV and other small scale generation is maintained, this should not undermine the integrity of the RET target and overall policy objective of delivering 20 per cent of Australia's electricity from renewable sources. Hydro Tasmania believes that in considering the treatment and inclusion of small-scale technologies with further multipliers under the RET, the review must consider whether the RET is the appropriate measure to support the deployment of all renewable technologies or if other complementary measures are more appropriate. This is particularly relevant when technologies receive additional support outside of the sale of RECs.

Hydro Tasmania is concerned that this COAG review of specific issues does not address the real issues facing Australian renewable electricity development since the implementation of the 45,000GWh target. Hydro Tasmania believes these issues need immediate consideration. While it is understood that the review terms of reference were agreed upon in early 2009, Hydro Tasmania is disappointed that there appears to be limited scope to have these major concerns investigated. A number of issues raised through the three COAG discussion papers in fact risk further compounding current REC market issues.

Hydro Tasmania has a large pipeline of renewable energy projects that require long term commercial incentives. With the appropriate price signals Hydro Tasmania can continue to make an important and growing contribution to Australia's emission reduction goals and has a number of renewable energy projects waiting to be deployed. These projects include wind farms, mini-hydro, and the modernisation and enhancement of existing hydro power generation. But these projects are all dependent on a well designed RET to deliver the necessary commercial incentive. This must ensure ongoing recognition of the imperative to maintain, enhance and upgrade existing renewable energy generation assets.

This submission addresses the following key issues:

1. The **objectives of RET.**
2. **Current low REC price and status of the RET measure.**
3. **Implications of Discussion Paper 1 – Eligibility of new small-scale technologies and heat pumps.**

4. **Implications of Discussion Paper 2** – Self-generation provisions under the expanded national RET scheme.
5. **Implications of Discussion Paper 3** – Support for small-scale off-grid renewable generation
6. Discussion of **possible policy solutions** for further investigation.

We welcome the opportunity to provide the COAG Working Group with further information about the contents of this submission or any other issues. Should you have any queries or require further information, please contact Kane Thornton, Senior Advisor Renewable Energy Policy on (03) 8628 9735 or email kane.thornton@hydro.com.au.

Yours faithfully

<Original signed>

Andrew Catchpole
General Manager
Communications & External Relations

HYDRO TASMANIA SUBMISSION

COAG Review

1. RET Objectives

Hydro Tasmania welcomed the Rudd Government's election commitment to achieve 20 per cent of Australia's electricity supply by 2020 from renewable electricity sources. Fundamental to delivering this commitment was the expansion of the RET from 9,500GWh by 2010 to 45,000GWh of additional renewable electricity generation by 2020.

The RET scheme was designed to promote renewable electricity generation and contribute to Australia's commitment to generate 20 per cent of its electricity (an additional 45,000GWh) from renewable sources by 2020. The objective of the Renewable Energy (Electricity) Amendment Bill 2009 is:

(a) *to encourage the additional generation of electricity from renewable sources;*

Accordingly, the target is set out in the Act (section 40) and defined in terms of 'Required GWh of renewable source electricity'. This was confirmed in recent speeches:

- Senator Carr's second reading speech during the recent passage of the amendment...
'Higher annual targets under the expanded Renewable Energy Target scheme will apply from 1 January 2010 and will reach 45,000 gigawatt/hours in 2020'
- Minister Wong on September 30th 2009...
'We have already passed laws to increase our renewable energy by four times over the next decade, so that by 2020, 20 per cent of our electricity will come from renewable sources'.

However, a number of compounding factors are detracting from delivery of the ultimate objectives of the RET, and limiting its contribution to the overall 20 per cent policy objective.

SWH reduces the level of consumption of energy, rather than directly generating electricity. Similarly, Solar Credits RECs do not equate to one MWh of additional electricity generation. While it is important that the growth of SWH and solar PV is maintained, this should not undermine the integrity of the RET target and overall policy objective of delivering 20 per cent of Australia's electricity from renewable sources.

2. Current market status

REC prices have fallen and have been trading as low as \$28 in recent weeks. This is as a result of significant oversupply in the REC market. Approximately 60% of RECs created during 2009 (year to date) come from sources that do not generate electricity. The current level of REC creation is as follows:

Fuel Type	2008	2009 (to 9/10)	2009 - 2008	2009 % of 2008	2009 (scaled)	2009 (scaled) - 2008	2009 (scaled) % of 2008
Solar Water Heater	2,994,001	5,842,677	2,848,676	195.1	7,790,236	4,796,235	260.2
S.G.U. - Solar	377,241	868,839	491,598	230.3	1,158,452	781,211	307.1
Wood Waste	105,391	123,781	18,390	117.4	165,041	59,650	156.6
Energy Crops	-	9,705	9,705	-	12,940	12,940	-
S.G.U. - Wind	518	668	150	129.0	891	373	171.9
S.G.U. - Hydro	132	170	38	128.8	227	95	171.7
Photovoltaic	2	-	-2	0.0	-	-2	-
Agricultural Waste	375	329	-46	87.7	439	64	117.0
Food Processing Waste	58	-	-58	0.0	-	-58	-
Solar	2,598	1,261	-1,337	48.5	1,681	-917	64.7
Food Waste	7,787	5,433	-2,354	69.8	7,244	-543	93.0
Agricultural Waste	13,469	10,151	-3,318	75.4	13,535	66	100.5
Municipal Solid Waste	71,817	66,178	-5,639	92.1	88,237	16,420	122.9
Sewage Gas	73,307	61,467	-11,840	83.8	81,956	8,649	111.8
Black Liquor	100,823	63,393	-37,430	62.9	84,524	-16,299	83.8
Bagasse	518,503	393,655	-124,848	75.9	524,873	6,370	101.2
Wind	3,126,324	2,995,505	-130,819	95.8	3,994,007	867,683	127.8
Landfill Gas	712,664	557,436	-155,228	78.2	743,248	30,584	104.3
Hydro	632,576	185,986	-446,590	29.4	247,981	-384,595	39.2
Total	8,737,586	11,186,634	2,449,048	128.0	14,915,512	6,177,926	170.7

Source: IES/CEC, 2009

The low REC price is significantly below the level required for the lowest cost renewable energy generation to be developed. Wind, is generally accepted as one of the least cost large scale renewable electricity generation technologies currently available (along with hydro upgrades and biomass projects). A return of at least \$100 per MWh is necessary to develop the best wind projects, comprising the revenue from both the sale of wholesale energy and RECs.

With the current wholesale energy price around \$40 to \$50, to commercialise a wind project developers require a REC price of \$50 plus to secure the long term project finance necessary.

The current low REC price means large scale renewable energy projects will remain difficult to commercialise in the short to medium term. One such example is the Musselroe Wind Farm being developed by Roaring40's in Tasmania:

- 168MW
- Approximately \$400m investment in North East Tasmania
- Full support of Dorset Council
- Direct jobs - construction (150) and ongoing (10)
- Several million ongoing directly into the local economy and tourism-driven employment

This project has been under development for several years now. The current REC price outlook means financial close remains difficult.

Hydro Tasmania believes it is important that this COAG review consider the current market situation and its implications against the stated aims of the RET. Furthermore, the terms of reference of discussion papers 1 and 3 include consideration of additional technologies that could be considered eligible under the RET and the broadening of multipliers to support off-grid applications. It is imperative that the review understand the potential implication of such measures and consider whether the RET is the most suitable policy framework by which to incentivise these technologies.

The renewable energy sector requires a comprehensive policy platform to provide necessary incentives for the development of a range of technologies throughout the full technology development lifecycle. Hydro Tasmania has for a number of years advocated the importance of RET as a fundamental component of a comprehensive framework.

As a result of a number of amendments made during the design of the expanded RET and also the issues raised in this COAG review, Hydro Tasmania is concerned about the ongoing consideration of RET as the primary measure to address a multitude of sometimes incompatible renewable energy policy objectives and challenges.

Hydro Tasmania expressed this concern in its February 2009 submission in response to the Draft RET legislation and stated that:

A range of additional fiscal measures are also essential to support different technologies at different phases of the technology innovation cycle. RET is essential to commercialising proven least cost renewable energy technologies and any attempt to broaden its role beyond this risks undermining the integrity of the measure.

Hydro Tasmania strongly believes future policy making in respect to RET must aim to restore its proper role as an effective policy mechanism for accelerating the least cost development of additional renewable electricity generation projects.

Where technologies are receiving multiple incentives, consideration should be given to their role within the RET and the appropriate policy setting(s) to support their ongoing development and deployment.

3. Implications of Discussion Paper 1 – Eligibility of new small-scale technologies and heat pumps.

Hydro Tasmania supports the development and deployment of all forms of renewable energy. Nonetheless, Hydro Tasmania would be concerned about the inclusion of any further technologies in the RET that do not generate additional renewable electricity, and contribute directly to the stated RET objectives of 20% renewable electricity generation by 2020. Any additional technologies that do not support the achievement of RET objectives should be considered under alternative policy support mechanisms. This COAG review should explicitly consider the policy mechanisms necessary for those technologies.

If any additional technologies, particularly non generation technologies, it is essential that the target be adjusted accordingly to ensure the current market conditions are not exacerbated.

Further, if such small scale technologies are included in RET, there needs to be a much greater level of scrutiny to ensure the technology delivers the level of electricity or abatement commensurate with the level of REC generation. This has arguably not been the case to date with some applications of solar heat pumps. Hydro Tasmania welcomes the recent tightening of regulations concerning solar hot water heat pump installations and believes Government must continue to ensure proper standards and verification apply to eligible small scale technologies.

4. Implications of Discussion Paper 2 – Self-generation provisions under the expanded national RET scheme.

Any changes to the self generation provisions are unlikely to have a significant impact on the RET. It is essential, however, that any exemption of RET liability does not diminish the overall expanded RET target of 45,000GWh. The RET target creates the investment certainty necessary for renewable electricity project development and should only be adjusted upwards.

Hydro Tasmania supports any additional incentive for business to purchase and consume electricity with low or zero emissions footprint. In the case of onsite generation, it may therefore be appropriate to amend the conditions on which such exemption is provided, including supporting more flexible ownership and commercial structures of the generation assets. Ascertaining a strict legal interpretation of 'self-generation' can be complex. While Hydro Tasmania encourages certainty under the

Act, an important principle is to ensure that Regulator/Ministerial discretion can be sought in order to avoid unanticipated or perverse outcomes in regards to this matter.

5. Implications of Discussion Paper 3 – Support for small-scale off-grid renewable generation

Hydro Tasmania acknowledges the need for strong policy support for all off-grid renewable generation, in particular to reduce dependence on high cost diesel generation. Off-grid generation faces a range of impediments that warrant targeted policy intervention, which must include both small scale and large scale off grid generation.

The previous Renewable Remote Power Generation Program (RRPGP) was an effective policy mechanism that provided such incentive. This program recognised the significant variation in off-grid projects and the particular financial incentives that were required to deliver these projects. This objective would be very difficult to mirror through the RET.

Hydro Tasmania has significant concerns with the proposition of applying a multiplier for off-grid generation in the same manner as the current Solar Credits Scheme, to achieve the same outcomes RRP GP was delivering. This policy intervention would further exacerbate the current distortion created by the Solar Credits Scheme. The current REC market problems would be compounded, placing further downward pressure on REC prices, and ultimately detract even further from the objectives of the measure.

If a multiplier was to be considered, this concern could be addressed in part by adjusting the RET target upward accordingly to mitigate the impact of the additional RECs created for these applications. The treatment of waste coal mine gas generation in the RET provides an effective for precedent for a target increase to reduce any market impact.

Hydro Tasmania supported the RRP GP scheme and would encourage the reintroduction of RRP GP as a complementary policy to the RET. RRP GP effectively delivered its policy objectives, which are distinctly different to that of RET.

6. Possible Policy Solutions

To ensure the integrity of RET is retained and that 20 per cent of Australia's electricity is sourced from renewable sources by 2020, the impact of SWH and the Solar Credits Scheme must be isolated such that they do not directly impact the delivery of the very objectives of the RET and defer investment in the least cost additional renewable electricity generation.

There are a range of policy solutions that can address this issue and Hydro Tasmania believes this should be a primary focus of the COAG review.

One such solution would be to ensure RECs from SWH and the Solar Credits Scheme equate to an equivalent increase in the annual milestone target as well as the 2020 target. The treatment of waste coal mine gas generation within the RET (where the target is adjusted equivalent to the level of REC creation from this source) demonstrates a sensible policy approach and provides an appropriate precedent. This increased overall GWh target by 2020 with a corresponding increase in yearly milestone GWh targets would accommodate genuine renewable electricity development while at the same time continue to accommodate the deployment of SWH and solar PV.

Securing the target integrity would ensure a stronger REC price, retain growth in SWH and solar PV and achieve a genuine 20 per cent renewable electricity generation target.