



Building 17
2404 Logan Road
PO Box 4046
Eight Mile Plains Qld 4113
Australia
Main Tel 61 7 3275 5555
Main Fax 61 7 3341 5150

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Climate Change Authority
GPO Box 1944
Melbourne VIC 3001

By email: submissions@climatechangeauthority.gov.au

Dear Sir / Madam

Submission to the Renewable Energy Target Review

Energy Developments Limited (EDL) thanks the Climate Change Authority for the opportunity to submit to the RET Review.

1. ABOUT EDL

EDL is an international provider of low emissions, renewable and remote energy. The Company currently owns and operates a diversified international portfolio of 79 power stations in Australia, the United States, Europe and the United Kingdom with a total capacity of over 690 MW from a range of fuel sources operating in four main areas:

- Landfill gas power generation and abatement;
- Waste coal mine gas (**WCMG**) power generation and abatement;
- Remote energy generation; and
- Liquefied natural gas and compressed natural gas energy solutions.

EDL is involved in project development, finance, design, construction, operation and maintenance of international small scale power-generating and energy delivery projects.

The Company is one of Australia's largest, clean-energy companies listed on the Australian Securities Exchange.

EDL abates over 10 million tonnes CO₂-e per annum from its worldwide projects (see www.energydevelopments.com.au)

2. RESPONSES TO RET REVIEW ISSUES PAPER

2.1 General

EDL submits that it is critical to investment certainty in clean energy in Australia that there be no changes to the existing framework of the RET.

EDL has been an investor in, and owner and operator of, clean energy projects in Australia and internationally for almost 25 years. Risk of regulatory change in this sector in Australia, and the resulting perverse outcomes that can be faced by those who invest in existing schemes in good faith, poses the single greatest obstacle to existing and future investment in clean energy.

In conducting its review the Authority is required to have regard to the principle that a measure to respond to climate change should:

- be economically efficient;
- be environmentally effective;
- be equitable;
- be in the public interest;
- take account of the impact on households, business, workers and communities;
- support the development of an effective global response to climate change;
- be consistent with Australia's foreign policy and trade objectives.

The RET can only achieve a reasonable outcome in each of the above considerations if those who have invested, and will be investing, in the objectives of the RET have the confidence to do so without the risk of ongoing regulatory changes.

Accordingly, EDL submits that in relation to the specific issues posed in the RET Review Issues Paper August 2012:

- there should be no change to existing RET targets;
- there should be no change to the RPP calculation or shortfall charge;
- there should be no change to the intent of the exemptions or self-generation provisions;

However, the application of the self-generation provisions could be improved to resolve current uncertainties. EDL provides a detailed submission on this issue below.

- there should be no change to the 'eligible renewable sources' list from this RET Review¹;

That includes there being no change to the current provisions for existing eligible waste coal mine gas (**Eligible WCMG**). Eligible WCMG is a limited transitional provision in the RET for a fixed number of existing WCMG power stations. It is critical to protecting the significant abatement of these power stations and to protect early mover clean energy investment. EDL provides a detailed submission on this issue below.

Further, EDL submits that, whilst support is warranted to promote the significant greenhouse gas abatement potential of new WCMG clean energy projects, the RET is currently not the appropriate mechanism for these new projects and there is no requirement to respond to this issue in the current RET Review.

- LRET accreditation and registration procedures are appropriate and working efficiently and should not be changed;
- there should be no changes to the SRES regulatory framework;
- there should be no further reviews of the RET scheme. Regulatory reviews should only be considered if there is a market failure that threatens the functioning of the RET.

¹ The existing process for adding new eligible sources through COAG consultation should remain

2.2 Eligible Existing WCMG

Attached to this submission is the media release of the Minister for Climate Change and the Minister Assisting the Minister for Climate Change of 17 August 2009 announcing transitional assistance for eligible existing WCMG power stations. This press release summarises the policy rationale for this limited transitional measure in the RET. This transitional measure had (and continues to have) bi-partisan support. The explanatory memoranda to the Renewable Energy (Electricity) Amendment Bill 2009 explains that the limited and capped inclusion of eligible WCMG power stations “*will provide transitional support to existing power stations that may be disadvantaged by the winding up of state-based emissions trading schemes which utilise the WCMG associated with current coal mining operations.*” Further, the explanatory memoranda described the financial impact of the amendments as a “*small impact on administered revenue*”.

The purpose of this transitional measure is to protect the early mover, long term investments that were made in these clean energy and abatement projects, in good faith, on the basis of the NSW Greenhouse Gas Reduction Scheme (GGAS) continuing until 31 December 2020 or being appropriately transitioned into a national emissions trading scheme. GGAS was closed on 30 June 2012 due to the introduction of the Clean Energy Future legislation. Eligible WCMG power stations transitioned into the capped addition to the RET on 1 July 2012.

This transitional measure is limited in its effect by a number of criteria, including;

- eligibility is restricted to those existing WCMG power stations that were in operation by May 2009, reflecting this transitional measure only applies to those WCMG power stations in which investments were made, in good faith, on the basis GGAS would continue until 2020;
- eligibility is restricted to the period 1 July 2012 to 31 December 2020, reflecting the transitional measure only applies for the period for which these investments expected, in good faith, to be eligible under the former GGAS;
- creation of LGCs is restricted to an 850GWh per annum capped addition to the RET. This means that eligible generation from these WCMG power stations does not displace any renewable energy and cannot exceed the limits designated by the RET. Further, each eligible power station is limited in the number of LGCs it can create by an individual power station cap.

WCMG is waste methane, extracted for mine safety (mostly to during the mining of metallurgical coal for steel production). This methane would otherwise be vented or flared into the atmosphere. The energy content and composition of waste coal mine gas can be variable – it is a true waste product of a production process. In this regard it can be distinguished from coal seam gas which is specifically extracted for its high and consistent energy content for fuel or feedstock use.

Methane is at least 21 times more potent a greenhouse gas than carbon dioxide. The destruction of this waste methane and conversion into zero net emission electricity by Eligible WCMG projects abates and avoids more than 3 million t/CO₂e- of greenhouse emissions every year.

The inclusion of these eligible power stations in a capped addition to the RET is critical to the continued achievement of this large scale abatement. A carbon price alone is insufficient in the period 1 July 2012 to 31 December 2020 to support the ongoing abatement achieved by these investments.

There is approximately 124 MW of Eligible WCMG power station capacity eligible to participate in the capped addition to the RET. The power stations are located in the high electricity demand growth areas of regional Australia, such as the Bowen Basin. They provide long term, high income, skilled employment to these regional areas. Further, they provide a zero net emission source of energy security to otherwise constrained networks. In the absence of adequate support, these power stations would close, necessitating expensive network upgrades to bring predominantly coal fired electricity to these regions from coastal power stations. This outcome would impose only higher network costs on the consumers' power bills and increased greenhouse gas emissions.

The investment decisions to build these power stations were legitimately made on the basis of they would receive a revenue stream under GGAS (called NSW Greenhouse Gas Abatement Certificates or 'NGACs') to 2020 or be appropriately transitioned into a national emissions trading scheme. In June 2005 the NSW Government announced the extension GGAS to 2020, explicitly to encourage long term investments, such as WCMG power station, to be made in the abatement of greenhouse gases. This extension was legislated in October 2006 on the basis GGAS would continue to 2020 or there would be a transition to a national emissions trading scheme (NETS) acceptable to the NSW Government. In June 2007 the Federal Government announced its intention to introduce a NETS, followed in September 2007 with confirmation in the report of the Department of Prime Minister and Cabinet that appropriate transition of early mover projects, including early action credits, should be included in a NETS. From November 2007 the Federal Government worked on the introduction of the CPRS, including bi-partisan agreement in Federal Parliament and agreement with the NSW Government to appropriately transition these WCMG power stations into the RET. This agreement was legislated in 2009 and this transition confirmed by the Federal Government during the legislative process to the Clean Energy Future Scheme.

These transitional provisions are evidence of how sound public policy can enable regulatory changes to occur whilst protecting early mover investment from otherwise perverse outcomes. EDL notes that the Clean Energy Future package includes a number of transitional measures, including the Energy Security Fund in (\$1billion in 2011-12 and subsequent free permit issues) to certain affected electricity generators, the \$300 million Steel Transformation Plan and the \$1.3 billion Coal Sector Jobs Package – all of which provide transitional support for large scale greenhouse gas emitters. It would be a perverse policy outcome to withdraw critical and legitimate transitional support for long term investments by Australian clean energy businesses in large scale greenhouse gas **abatement**, such as the transition of Eligible WCMG into the RET.

This transitional provision is consistent with the principles which the Authority is required to apply in its review, including:

- the transition of early mover, good faith investments in clean energy that would otherwise be impacted by regulatory change is economically efficient, environmentally effective, equitable and in the public interest;
- the impact on households, business, workers and communities was taken into account and deemed acceptable in 2009 when these amendments were made;
- the grandfathering of these large scale clean energy and abatement projects through regulatory change supports the development of an effective global response to climate change;
- Australia is a founding member of the Global Methane Initiative (**GBM**) and entered into an international commitment under the GBM to reduce global methane emissions. Australia has been one of the earliest developers of waste methane to energy technologies and exported this technology across the world. It is therefore consistent with Australia's foreign policy and trade objectives that these transitional provisions for eligible existing WCMG power stations be maintained.

Finally, the transitional provisions for Eligible WCMG, by supporting the large scale greenhouse gas abatement of these projects, are consistent with the objective of the Renewable Energy (Electricity) Act to reduce greenhouse gas emissions in the electricity sector.

2.3 Self-Generation provisions

The 22 June 2000 explanatory memoranda to the self-generation provisions of the RET concluded that exclusion of self-generators represented only a small reduction in the size of the target and would promote more efficient cogeneration and less greenhouse gas intensive fuels. Relevant arguments from the explanatory memoranda are copied below:

"The exclusion of self-generators represents a small reduction in the size of the target (100 GWh) and the amount of emissions reduction achieved (0.06Mt), a relatively small (\$8 million) decrease in the

costs of the measure but increases the potential for discrimination between business in a number of industry sectors.

There are strong arguments for both the inclusion and exclusion of self-generators under this measure. It could be argued that the measure would operate more effectively, and achieve greater greenhouse gas reductions, if it was targeted at the consumption of electricity and not the purchase of electricity. However, the exclusion of self-generators could be considered as supporting the development of self-generation, of which a substantial proportion uses more efficient cogeneration technologies and the less greenhouse intense fuels of natural gas or renewables.”

It should be noted that cogeneration, trigeneration, waste to energy and similar technologies for self-generation were relatively new at the time the self-generation provisions were considered. The intent of the self-generation provisions, as described in the above explanatory memoranda, is to exclude efficient forms of self-generation from RET liability. At the same time, the provisions have sought to prevent a locational signal being sent to RET liable entities to locate generation to avoid a RET liability. With that intent in mind, the drafters of the original provisions have sought to achieve these aims by restricting the self-generation exemption to generators:

- connected directly or indirectly to a grid of less than 100 MW;
- whose electricity is owned by the end user;
- producing electricity used within 1km of the generation or distributed on a line dedicated for that use.

Unfortunately, these arbitrary limits restrict the intent of the self-generation provisions by restricting the ways in which efficient and low greenhouse gas self-generation can be configured under this RET exemption. Practically, these arbitrary rules send an inefficient economic signal contrary to efficient configuration of potential self-generators.

For example:

- It can be most efficient for cogeneration or waste to energy self-generation to generate in parallel with a grid connection to the National Electricity Market (**NEM**). This can be an efficient means for an end user to efficiently balance the peaks and troughs of their energy demand. It can increase the efficiency of the self-generation plant which in turn reduces greenhouse gas emissions from the predominantly fossil fuelled grid, may utilise on site waste to produce energy (energy efficiency), reduces transmission line losses and reduces costs to consumers of network infrastructure. However, as the NEM is greater than 100 MW, any direct or indirect connection of a self-generator to the NEM results in these self-generators being unable to avail themselves of the RET exemption. This acts as a disincentive to the efficient configuration of self-generation.

- Similarly, the limit to self-generation operating on a dedicated transmission line precludes efficient parallel generation with the NEM, as raised above.

- It can be most efficient for a third party to own and operate self-generation plant, for example, where the end user relies on the experience of the third party, or the end user relies on the generator to fund the capital investment. However, the current application of the self-generation provisions requires the end user to supply the electricity and therefore excludes alternative, more efficient commercial arrangements.

- the 1km limit between self-generators and end use is an arbitrary line and does not account for the distances over which an end user can operate. For example, a mine that wishes to use waste to self-generate may need to transmit electricity over greater than one kilometre to reach its end use.

In summary, there needs to be flexibility in the application of the self-generation exemption in the RET to allow for the most efficient application of self-generation technologies.

The intent of the self-generation provisions would be better achieved if those provisions enabled the Regulator to exercise its discretion in the application of the above limits on exemption where a self-generator can demonstrate it meets the relevant criteria, including:

- generation for on-site use (whether grid connected or not, or third party owned or not);

- efficient self-generation eg co-generation / waste to energy;

The 100 MW self-generation capacity cap should also be reviewed in the context of larger scale self-generation projects.²

Regulator discretion on the application of the self-generation exemption criteria will avoid inefficient and perverse outcomes whilst ensuring that the intent of the self-generation provisions is put into effect.

Please do not hesitate to contact the writer should you have any queries regarding this submission.

Yours sincerely

[original signed]

Tim Sprey

Manager – Corporate & Commercial Affairs
Energy Developments Limited

² By way of example, the Olympic Dam expansion project was expected to require ~400 MW and Leigh Creek Mine ~500 MW suggesting self generation loads may reasonably exceed 100 MW



Australian Government

JOINT MEDIA RELEASE

Senator the Hon Penny Wong
Minister for Climate Change

The Hon Greg Combet MP
Minister Assisting the Minister for Climate Change

PW 242/09

17 August 2009

**TRANSITIONAL ASSISTANCE FOR WASTE COAL MINE GAS UNDER THE
RENEWABLE ENERGY TARGET**

Minister for Climate Change and Water, Senator Penny Wong, today announced an amendment that will see the Renewable Energy Target (RET) 'topped up' to allow existing waste coal mine gas projects to generate Renewable Energy Certificates.

The Government is conscious that cessation of the New South Wales Greenhouse Gas Reduction Scheme and the transition to the Carbon Pollution Reduction Scheme may impose a significant cost on existing electricity generators using waste coal mine gas. Affected companies have indicated that currently profitable projects could be forced to close.

Senator Wong said the decision to increase the target to include waste coal mine gas had not been taken lightly. She said the amendment guaranteed there would not be a single megawatt-hour of renewable energy replaced by waste coal mine gas generation.

"Waste coal mine gas is not a renewable energy source and is not intended to contribute to the 20 per cent target for renewables in 2020," Senator Wong said.

The amendment will increase the annual targets under the RET for the years 2011 to 2020 inclusive to ensure the inclusion of waste coal mine gas under the RET does not displace renewable energy generation.

Minister Combet said the amendment will ensure the Government is able to deliver on its commitment to achieving 20 per cent of renewable energy in Australia's electricity mix by 2020, while meeting the need for transitional assistance for the waste coal mine gas generation sector.

"Inclusion of waste coal mine gas in the RET helps to ensure these entities continue to remain viable and are able to make a valuable economic and environmental contribution," Mr Combet said.

Senator Wong and Mr Combet thanked Labor Members of Parliament – in particular Kirsten Livermore, Shayne Neumann, James Bidgood and Chris Trevor – who have worked to address the concerns of waste coal mine gas generators in their electorates.

This amendment addresses another one of the concerns raised by the Opposition. The amendment will be moved in the House of Representatives today.

Media contact: Laura Anderson (Wong) 0411 143 111
 Rod Hilton (Combet) 0458 276 619

Supporting Information

The Government will introduce an amendment to the RET legislation allowing existing waste coal mine gas generation projects to be included in the RET, as a transitional assistance measure. This will apply from 1 July 2011 until 31 December 2020.

To clearly differentiate waste coal mine gas from renewable energy sources, the amendment creates a new concept of an 'eligible energy source' that comprises the current list of eligible renewable energy sources, and separately, eligible waste coal mine gas.

Eligibility will be limited to waste coal mine gas-fuelled power stations currently in operation. Annual limits will be placed on these power stations' ability to create Renewable Energy Certificates (RECs) based on their 2008 output levels.

To ensure the inclusion of waste coal mine gas under the RET does not crowd out renewable energy generation, the amendment will increase annual targets under the expanded RET scheme for the years 2011 to 2020. The target for 2011 will be increased by 425 gigawatt-hours to account for the half-year of eligible generation, and the annual targets for 2012 to 2020 will be increased by 850 gigawatt-hours.

Total eligible waste coal mine gas generation will be capped at 425 gigawatt-hours in 2011 and 850 gigawatt-hours for the years 2012 to 2020; equal to the amount by which the annual targets are increased under the RET.