



ESB (Energy Security Board)

Dear ESB

LGI Limited (LGI) is taking this opportunity to respond to the proposed NEG detailed design.

LGI is a specialist renewable energy and carbon abatement business. Primarily our business focuses on Landfill Gas abatement activities but more recently are seeing opportunity in the wider energy market.

A quick, but important outline of our industry is important due to the general lack of understanding of what we do. Landfill gas fired power generation is a unique business that provides both renewable energy and carbon abatement from our process. The act of combusting harmful methane from the landfill generates carbon abatement whilst the utilization of the gas as a fuel in a power station offsets fossil fuelled generation through renewable electricity production.

Landfill gas fired power generation has a unique opportunity to provide solutions to all aspects of the NEG:

- Base load electricity
- Dispatchability
- Emissions Abatement

1MW of landfill gas power generation equates to 5 MW of Solar output on an annual basis. In order to achieve the same output profile as 1MW of LFG a solar installation would require 3MW of panel installation and 15MW/hrs of storage capability.

The LFG industry contributes approx. **180MW** of base load renewable energy to the NEM right now with no additional investment. In order to achieve this through the addition of batteries to solar would cost approx. **\$1.3B dollars**.

We feel that the current draft of the NEG does not reflect the ability of our industry to punch above its weight. There are two key areas that we feel are lacking in the current draft.

Market Customer Load for the Emissions Reduction Requirement Technical Working Paper – Embedded Generation

- The proposed treatment of non-market embedded generation <5MW negatively impacts the contracting market customers' ability to meet their emissions reduction requirement from low emission embedded generation.
- This is due to how the generation is accounted for, and the inability of participating in the emissions registry.
- We think that generators with capacity between 100kW and 5MW should be able to voluntarily participate in the emission registry where they have the necessary metering and reporting ability to do so.
- Additionally, any non-market **renewable** embedded generator below 5MW (not wanting to voluntarily participate) should have the same treatment as proposed for Solar PV. (automatically apply a zero emissions intensity)

Emissions Register Technical Working Paper – Generator Emissions

- These generators should have an emissions intensity which reflects the environmental outcomes of generating electricity. Landfill gas projects should be considered to provide additional environmental benefit when compared to a solar or wind project due to the destruction of methane (with a GWP of 25, under current standards). We would suggest that an abatement or intensity reduction multiplier should be applied.

We feel that this should be considered under the NEG as a key focus of the NEG is the emissions intensity of the electricity sector.

Recently it has been decided that some of the LFG to power projects currently registered under the Emissions Reduction Fund should not receive Australian Carbon Credit Units (ACCU's) beyond their initial crediting period because of the financial benefit currently delivered by the electricity generating activities. This current financial benefit will soon evaporate due to the enormous influx of non-baseload, non-dispatchable renewables providing an over supply of LGC's to the market, this in turn will leave an important baseload renewable energy source at a significant disadvantage.

It is not regulatory additionality which has stopped these projects receiving ACCUs, it is that the ERAC has ruled that gas destruction as the result of electricity generation will not receive ACCUs.

Electricity generation is therefore what is causing the carbon abatement and should be included in the emissions intensity of the generator.

In conclusion, we feel that further communication with our industry is required to create an understanding of the magnitude of benefit that can be derived from this generation source that meets all the key requirements of the proposed NEG. The ability for the government to reach its goals with the NEG will be enhanced through the support of this unique generation source.

Please do not hesitate in contacting me for further discussion on either mobile 0488 123 138 or email adam.bloomer@lgi.com.au.

Kind Regards



Adam Bloomer

Managing Director