

**Submission
No 36**

COGENERATION AND TRIGENERATION IN NEW SOUTH WALES

Organisation: City of Lake Macquarie
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Position: Councillor
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2 September 2013

Hon Jonathan O'Dea MP
Chair Public Accounts Committee
Parliament of New South Wales
Macquarie Street
SYDNEY NSW 2000

Dear Mr O'Dea

Subject: Inquiry into cogeneration and trigeneration in New South Wales

Council appreciates the opportunity to provide input on this important matter. Although the timeframes have not permitted our elected Council to discuss this matter, I provide this submission based on Council's experience in improving energy efficiency in the City of Lake Macquarie.

Council has set targets to reduce greenhouse gas emissions from its own operations, and from the city as a whole (on a per capita basis), by three per cent per annum. To achieve these targets, Council has established a program to improve the energy efficiency for its own operations, as well as to facilitate similar measures by its residents and businesses. The focus in both cases is to undertake measures that help drive down operational and utility costs, particularly in the context of rising energy prices, while reducing greenhouse gas emissions.

As co-generation and tri-generation offer energy efficiency improvements in the order of 40 per cent or more, accompanied by comparable greenhouse emission reductions, Council welcomes this review.

The two matters of immediate concern to Council, and the businesses with which it engages, are:

1. That only 30% of the City of Lake Macquarie City is connected to reticulated (piped) natural gas; and
2. That the export of electricity between property jurisdictions (i.e. to sites other than where the generation occurs) is subject to a flat transmission/network charge irrespective of the distance or component of the National Energy Market grid utilised.

As these two matters stand, without piped natural gas, and without more proportionate levying of transmission/network charges, cogeneration and trigeneration are severely constrained. Electricity and heating/cooling at individual Council sites are, in the main, insufficient to make cogeneration and trigeneration financially viable. However, were transmission/network charges to be levied based on the amount of the network used, either by distance, or by a stepped charge based on components of the network utilised, the financial viability of precinct-level projects would be greatly improved.

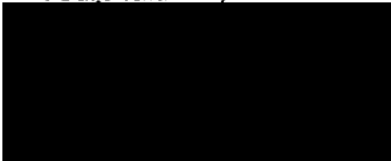
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Associated amendments to market participation and retailer regulation to support the export of excess electricity to multiple sites owned by the one entity would also improve the viability of co- and tri-generation in the City of Lake Macquarie.

For the future, Council believes that even greater benefits can be achieved from cogeneration and trigeneration where the fuel is based on renewable sources, such as municipal sewage, animal waste and solid organic waste. The technologies for converting such wastes to suitable solid feedstock, or gasification, are now well advanced in Europe, where biogas of a suitable standard is distributed through the reticulated natural gas network.

Should you require further information, please contact Senior Sustainable Living Officer, James Giblin, on [REDACTED] or [REDACTED]

Yours faithfully



Councillor Jodie Harrison
Mayor