

Monday, 7 November 2016

**Re: A91520 Council Solutions & Ors - Invitation to provide public submission  
Submission by Phoenix Energy Australia Pty Ltd**

To the Australian Competition & Consumer Commission (ACCC),

Phoenix Energy Australia Pty Ltd (Phoenix Energy) welcomes the opportunity to contribute to the ACCC's consultation in relation to the application for authorisation (A91520) by Council Solutions & Ors. In response to the ACCC's questions, Phoenix Energy has provided the responses below for the public record:

**1. A brief summary of your activities in Western Australia.**

Phoenix Energy is developing the Kwinana Waste to Energy (WtE) Project, or Resource Recovery Facility, to process up to 400,000 tonnes per annum of Municipal Solid Waste (MSW) and similar wastes.

**2. To what extent does Waste to Energy technology displace or complement current technologies such as landfill, glass and plastic recycling?**

WtE competes directly with Landfill by providing a resource recovery alternative for residual waste otherwise destined for landfill disposal. WtE targets residual waste streams i.e. waste remaining after source separation by the householder. Resources are recovered as energy (typically electricity), recyclable metals and ash by-products for reuse. WtE is therefore complementary to Recycling. Internationally, those countries (e.g. Germany, Denmark, Netherlands) with the highest installed WtE Capacity typically also have the highest levels of recycling and composting (for green waste and source separated organics), and virtually no landfill capacity. Please refer to [http://www.cewep.eu/information/recycling/m\\_1486](http://www.cewep.eu/information/recycling/m_1486).

**3. In Phoenix Energy's experience, what is the minimum volume of waste that would be required to maintain a Waste to Energy facility in Adelaide?**

Minimum volumes depend on a range of commercial and economic factors, none the least being how the project will be financed. With these in mind we estimate that 150,000t/yr would be the minimum volume for Adelaide.

**4. How do the environmental credentials of Waste to Energy technology compare to other energy generation technology currently used in SA?**

In terms of carbon intensity, WtE from MSW is similar to that of a gas fired power station. However, once offsets associated with avoided fugitive landfill gas emissions and recovered recyclable metals are taken into consideration, net greenhouse gas (GHG) emissions are typically considerably below zero (i.e. a significant reduction in GHG emissions). The atmospheric emissions from WtE are fairly unique given the nature of the fuel, but are controlled to very low levels, typically based on benchmark European emission standards used to regulate the ~500+ WtE facilities operating across continental Europe and the UK (please refer to <https://waste-management-world.com/a/time-out-for-waste-to-energy-in-europe> for an overview of the Ecoprog report on Waste to Energy 2013/14). Nuisance emissions such as noise and odour are readily managed by the full enclosure of waste handling and noisy equipment items, and the extraction of combustion air from the waste storage area.

**5. How the grouping of councils under the Council Solutions arrangement could support potential interest or entry of Phoenix Energy in SA:**

(a) Does Phoenix Energy intend to participate in any Council Solutions joint tender if it proceeds?  
Any involvement by Phoenix and its project development partners will depend on the nature of any RFT,

specifically with regard to waste volumes and contract terms (such as exclusivity, and tenure).

(b) Is it important to contract with councils in order to secure sufficient waste volumes to sustain an efficient Waste to Energy operation in Adelaide?

Typically a single council will not have sufficient waste to justify a WtE (infrastructure development) project. Hence, it is common for councils to collaborate (as they have done for years in relation to procurement of value-for-money waste services). Councils are seen by financiers as a better credit risk than private waste haulers and contract for long tenures. Private haulers can generally only contract for up to a maximum of five years, which is insufficient to underpin a bankable WtE project.

(c) How does the combined waste volume available under the Council Solutions arrangement compare to volumes available from individual non-municipal sources? Note that only three of the five participating councils have indicated that they are seeking to procure waste disposal services through the Council Solutions process.

In general, councils typically control over 50% of the waste suitable for processing through a WtE plant. The remaining volumes under non-municipal control have higher risk of contaminants and other non-acceptable waste. Please also refer to our response to (b) above.

(d) Is it easier/lower risk to contract only with non-municipal sources of waste?

Municipal sources are more likely to be able to guarantee a minimum volume of waste, significantly longer tenures and more consistent waste compositions, which are more attractive to project financiers.

(e) How do non-municipal sources of waste compare to municipal waste in terms of size, reliability, quality and ease of contracting compared to councils?

Please refer to our comments above.

Yours sincerely,

Peter Dyson  
Managing Director, Phoenix Energy