

Submission
No 298

INQUIRY INTO 'ENERGY FROM WASTE' TECHNOLOGY

Organisation: Shoalhaven City Council

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Energy from Waste Technology

Shoalhaven City Council Submission

Introduction

The Shoalhaven may be considered to be a small player in the waste industry. However, with our mix of rural and urban areas, and a dispersed community over a large area, we believe that we are able to speak on behalf of regional communities who don't fit the dynamics of a typical Sydney Metropolitan waste service.

The Shoalhaven is a coastal Council occupying 4,660km² of land area with a population of 100,000 in 49 towns and villages. The travel distance from the North of the Shoalhaven to Sydney is 140km and from the South of the Shoalhaven to Sydney is 270km. The tyranny of this distance has a significant effect on the economic viability of many recycling options.

This submission primarily focusses on part a) *the provision of waste disposal and recycling, the impact of the waste levy and capacity to address ongoing needs.*

a) *the current provision of waste disposal and recycling, the impact of waste levies and the capacity (considering issues of location, scale, technology and environmental health) to address the ongoing disposal needs for commercial, industrial, household and hazardous waste*

Current provision of waste disposal and recycling

The Shoalhaven provides waste and recycling kerbside collection services in all the urban areas, with an optional collection service in the rural areas. In order to provide equitable opportunities to residents for recycling and waste drop offs, Council operate ten recycling and waste transfer facilities across the LGA, including one large licenced putrescible landfill, a small inert waste landfill with transfer of putrescibles, and eight other recycling and waste transfer facilities of varying sizes and operating hours and days.

The scale of the operation varies from Bendalong which is open 2 mornings per weekend and averages 27 tonnes per month through 111 transactions, to West Nowra which is open 7 days per week and averages 5,857 tonnes per month through 4,342 transactions.

Nine of the facilities operate at a financial loss and rely on West Nowra (the largest facility) to subsidise their operating costs. This is typically a problem for regional areas. The total cost of operating facilities is similar to metropolitan facilities but the throughput of waste or recycling is so small that facilities are not financially viable unless the gate price is increased three, four or even tenfold.

The recycling achieved at each of Council's 9 transfer facilities varies between 47% and 67%, and the recycling achieved at West Nowra is 14.1%.

Metro cities with a population of about 100,000 such as Rockdale (land area of 28km²) or Holroyd (land area of 40km²) would require a very different form of domestic waste and recycling service, so the blanket approach taken by EPA on recommending solutions to waste collection and disposal needs to be tempered for the different characteristics of each unique Council.

Most regional areas rely on their local Council to provide waste disposal facilities because there is simply no commercial attraction for the private sector to be involved in small scale facilities. In the Shoalhaven the only commercial waste recycling facilities are the concrete and brick recyclers and the Materials Recovery Facility that sorts our commingled bins. Otherwise, Council facilities provide the only disposal option for commercial and building waste. The alternative could be a very long haul to a disposal facility. In Metropolitan areas, Councils manage the domestic waste for their residents while commercial and building waste is managed by the private sector.

Impact of waste levies

At \$138.20/tonne the waste levy currently makes up 40% of the Shoalhaven's landfill gate fee and adding GST into the mix the tax on the landfill gate fee is 50% of the fee.

The intent of the levy "*to encourage recycling and divert waste away from landfill*" should be applauded. However, the practical application has resulted in some perverse outcomes, as outlined below:

1. Applicability and fairness –

As a regional area with low socio economic indicators (see Table 1) and high unemployment, the Shoalhaven is regulated together with the Sydney Metropolitan levy area and charged a levy of \$138.20/t. In comparison, the Blue Mountains and Wollondilly, both clearly closer in distance to Sydney (see Map 1) and more economically empowered (Table 1), are classified as being in the Regional Levy area and charged a levy of only \$79.60/tonne. Eurobodalla, the Shoalhaven's immediate southern neighbour, on the other hand, is considered to be outside of the levy regulated areas and does not get charged any waste levy.

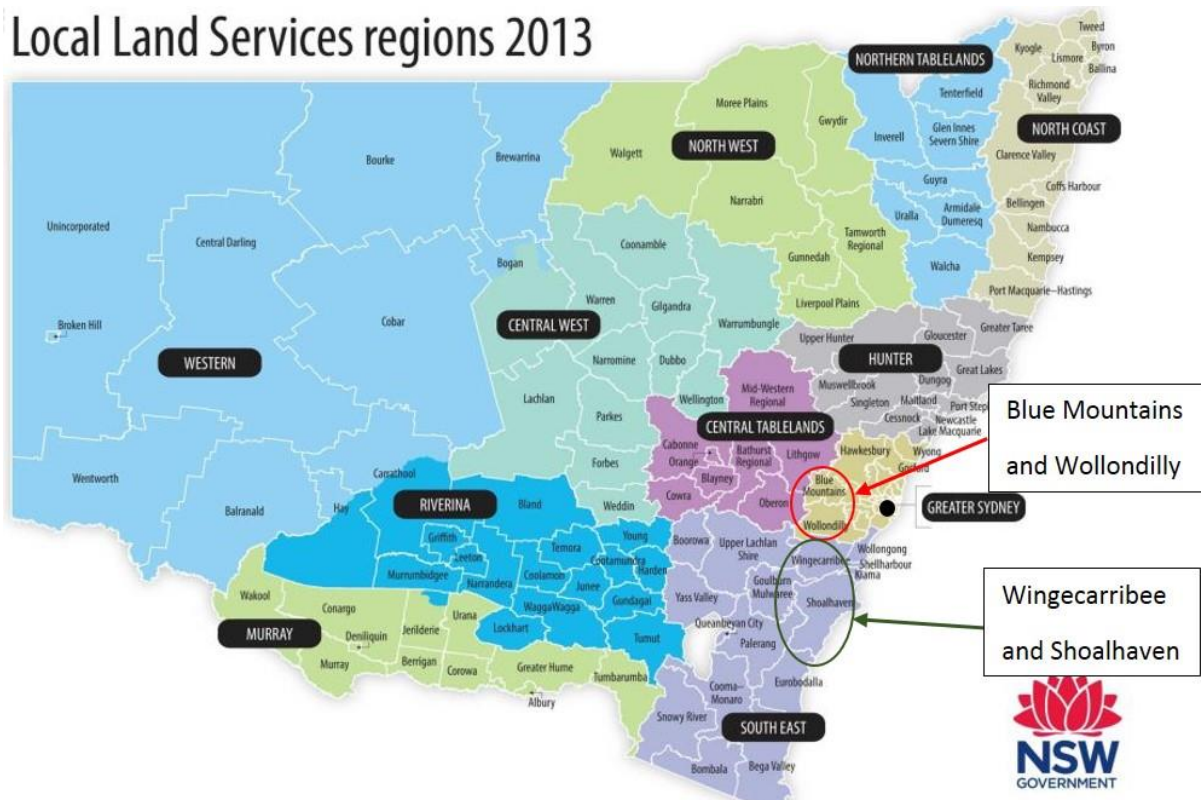
We believe that the list of Local Government Areas being charged the waste levy needs to be reassessed. The assessment needs to consider factors such as distance to recycling processors, quantum of waste produced in the LGA and affordability (level of socio economic disadvantage in the community).

Table 1 – ABS Index of Relative Socio economic disadvantage (SEIFA)

LGA	SEIFA Index of Disadvantage (Higher score is better)	Position out of 153 NSW Councils
Blue Mountains	1038.6	26
Wollondilly	1033.6	28
Sydney	1019.9	35
Shoalhaven	954.6	92

Map 1: - Location of Shoalhaven, Blue Mountains and Wollondilly with respect to Sydney

Local Land Services regions 2013



2. Location of downstream processing for recyclable materials – Regional areas are challenged further by the relatively higher cost of hauling recyclable materials to the downstream processors. Downstream processors generally require high volumes of materials for cost effective processing of recyclables. Processing factories logically select a location for their operation that is close to the largest source of material, generally within in the Sydney Metropolitan Area. So a regional area such as the Shoalhaven faces the high cost of recycling, the high cost of transport and the highest available levy on landfill.

3. Use of levy income by the State Government – Table 2 below sets out the total of levy funds paid by the Shoalhaven City Council to the EPA over the four years of their first Waste Less Recycle More (WLRM) funding program. This is contrasted with the amount of WLRM funding received by the Shoalhaven over the 4 years. Council received 5.2% of our total contribution over the 4 year program. Council has not been able to ascertain what has been done with the remaining 95% of the levy payments, except to say that the funds are considered to be consolidated revenue for the NSW government and allocated to programs or projects as needed.

Table 2 – Levy funds paid by Shoalhaven to EPA over the last 4 years

Year	Levy paid to EPA	Waste Less Recycle More (WLRM) Funding		%
		Non-contestable grant funding received	Contestable grant funding received	
2013/14	\$7,180,315	\$246,500	\$215,088	6.4%
2014/15	\$7,954,973	\$246,500	\$341,169	7.4%
2015/16	\$10,021,983	\$231,355	\$112,800	4.2%
2016/17	\$8,194,997	\$231,000	\$111,540	4.2%
Total	\$33,352,268	\$955,355	\$780,597	5.2%

The EPA will make \$337million available over the next 4 years as funding for the WLRM program. While on the surface of it this appears to be a lot, the levy payments to the EPA over these 4 years will be about \$2,520 million with only 13% of this being returned to the sector.

There are barriers to actively pursuing the funds that are available. The criteria for funding are very tight, including the requirement to complete a project within the WLRM program timeframe) and the need to provide co-contributions. This requires shovel ready projects and sufficient financial reserves. However, infrastructure projects require long term planning, design, development approvals, tendering and contracting. The DA process on its own can take a year or more of preparation and up to a year for a decision.

To access funds Council needs to be convinced that the application for funding will be successful, and the application itself requires a specialist, to draft the business plans, concept designs and myriad of justifications as to why the grant is necessary. With resource poor Councils this function needs to be contracted to a Consultant, with the applicable consulting fees. Then the EPA may reject the funding application because someone else has a better application, or the funds allocated to that type of activity are exhausted.

As a result, easy to start projects such as funding consultants to do a report, or funding a litter or illegal dumping program, are popular. However, these don't address the issue of improving recycling. Projects are also confined to those that meet EPA set criteria

4. Potential recommendations for levy use – The State Government has access to more than \$630million in levy funds every year. Very little of that (13 to 14%) goes back as funding for the Waste Less Recycle More Program

Council recommendation for use of that money, is to provide research assistance to entrepreneurs who have innovative ideas about recycling certain materials. For example, a few years ago a local Shoalhaven entrepreneur tried to set up a cathode ray tube recycling facility based on his own backyard research and mortgaging his family home to fund the venture. After exceeding stockpile limits at his facility he was ordered by the EPA to cease operating. As a result he could no longer fund the operation and was declared insolvent.

There were no other processors at the time who were able to process CRT screens and this could have been a cutting edge technology and solve many concerns about lead based CRT's being landfilled. It could be argued that the EPA should have been more proactive in this instance and utilised levy funds to invest in university research to prove or disprove the process. If the process can be proved to be viable, the levy funds should be put into the start up of the business to ensure that Australia has a viable CRT recycler. This would have provided a lot of kudos for the EPA, solved a recycling problem (not only for NSW but also for the rest of Australia) and secured employment for the 20 odd staff employed by the business.

Sorting out potentially recyclable materials is a costly exercise (using manpower or machines), and the transport of the recyclate to processors (usually based in the Sydney Metro Area) incurs a high cost, especially in the regional areas where the throughput of materials is low. Council therefore recommends that the EPA change the funding criteria and allow for operational funding for additional staff, plant or vehicles required to perform the recovery, sorting and recycling function.

5. Modification of the waste regulations that would improve recycling –

Regulations to manage waste in NSW are considered to be extreme. Certain components of the regulation have been introduced on the basis that rogue operators are doing the wrong thing and the legislation is required to close the loopholes.

For example, the definition of waste in the POEO Act is so broad that it deems construction materials that arrive at a landfill site (to construct a road for example) to be waste, and therefore subject to the levy. Council pays the levy on all construction materials, submits a deduction application to the EPA, waits until an EPA officer signs off that it can be exempted, and then claims the deduction. Apart from the fact that the deduction cannot be guaranteed, this puts all the control back in the hands of the EPA, and creates a bureaucratic quagmire for Council's who are typically resource starved.

The Regulation also limits the stockpiling of recyclable materials for more than 12 months. This is designed so that those same rogue operators cannot leave "waste" in a stockpile for years without paying the levy on it. However, regional areas with low populations may take three years to build up a stockpile of recyclable material in sufficient quantity to economically transport it to a downstream processor.

The regulations appear to be informed by Sydney Metropolitan waste issues, with very little consideration given to the different circumstances in the regional areas.

Capacity to address the ongoing disposal needs

b) the role of 'energy from waste' technology in addressing waste disposal needs and the resulting impact on the future of the recycling industry

Energy from Waste Technologies require a high throughput of waste (100,000 to 200,000 tpa) in order to operate economically. The Shoalhaven, as with most regional areas, does not have the required quantities required. The NSW Policy on Energy from Waste, which requires higher levels of recycling (waste hierarchy) prior to permitting energy technologies, would have the effect of further reducing the available waste quantities.

As a result, the Shoalhaven cannot formally comment on the role of Energy from Waste.

It is understood, however, that energy from waste facilities can consume those hard to recycle components of residual waste, and if the EPA is serious about its commitment to divert waste away from landfill, then energy from waste needs to be incorporated as a State priority.

c) current regulatory standards, guidelines and policy statements overlooking 'energy from waste' technology, including reference to regulations covering:

- i. the European Union**
- ii. United States of America**
- iii. international best practice**

The Shoalhaven is not in a position to comment.

d) additional factors which need to be taken into account within regulatory and other processes for approval and operation of 'energy from waste' plants

The Shoalhaven is not in a position to comment.

e) the responsibility given to state and local government authorities in the environmental monitoring of 'energy from waste' facilities

The Shoalhaven is not in a position to comment.

f) opportunities to incorporate future advances in technology into any operating 'energy from waste' facility

The Shoalhaven is not in a position to comment.

g) the risks of future monopolisation in markets for waste disposal and the potential to enable a 'circular economy' model for the waste disposal industry, and

The Shoalhaven is not in a position to comment.

h) any other related matter.