



23<sup>rd</sup> September, 2019.

The Hon. Matt Kean MP  
Minister for Energy and Environment  
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SYDNEY NSW 2001  
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Dear Minister Kean,

Having been at the vanguard of “disruptive” thinking and acting since 1988, to achieve Circular Economy (CE) outcomes out of the entrenched “waste” sector, EcoWaste P/L is greatly encouraged by this current initiative to develop a 20 year Waste & Resource Recovery Strategy (20YWS) for NSW. The very title of this project acknowledges that the task must avoid short term and apparent “quick fixes” and that the greatest benefit to the NSW community and economy can only be achieved in the medium to long term, which in turn will inform rigorous and principled planning for the immediate short term.

EcoWaste has been a founding member of such organisations as WMRR, BioEnergy Australia and more recently AIEN. All such associations will be making their respective but consensus submissions to this 20YWS initiative, but EcoWaste makes this individual submission to introduce some much more directly focused ideas and strategic suggestions with the ambition to be subsequently considered and invited to participate in the “... further targeted engagement such as roundtables and workshops to discuss the priority problems and solutions...” .

In support of this initial objective and ambition, we address a wide range of waste/resource recovery concepts and solutions that since 1988 EcoWaste has extensively researched and developed and subsequently proven up in the actual projects as listed (attached A). EcoWaste also has a very clearly and articulated plan for all the new era systems and infrastructure necessary to optimise future resource recovery as privately funded projects wherever complementary public policy is adopted.

Before, providing detailed responses to the six target questions posed in this request for initial ideas and submissions, we feel that there is one fundamental consideration that must be understood and accommodated in the process of overseeing this intergenerational and “disruptive” transition from waste management to systematic resource recovery, and that is to fully understand the exact nature of the existing “incumbent”<sup>1</sup> waste sector. From such an understanding, many of the essential barriers to logical progress can be readily identified and the next generation of “market pulled” CE actions developed and implemented.

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<sup>1</sup> “Incumbent” – those parties, actors and contractors who currently represent policy development, strategy development and the entire value chain from post-consumer collections to final end use disposal

## The Incumbents

The existing/current post consumer, urban waste collection, processing and disposal/sale sector has emerged over the last 50 years in response to the community's statutory need for waste removal required in the observance of Public Health Protection legislation/regulation. Originally, this service was provided as an "internal", "rubbish" task, undertaken by individual councils on behalf of their ratepayers and usually with the access to their own (or shared with neighbours) landfills. During this period the nature of urban wastes presented with ever increasing amounts of packaging and durable product content and actual disposal facilities became increasingly regional and private contractors presented a compelling value proposition to undertake all such services for councils under contract.

The sector as we experience it today generates its sustaining income from collection/ uplift/gate fees and then incurs costs to dispose of the collected materials. In this model full cost recovery is achieved in the finally contracted uplift or collection fee structure, including the capital servicing costs of any subsequent waste processing, sorting or disposal facilities. This model is almost risk free for contractors who can rely on councils, as rating authorities, to always pay their bills. This model places little or no incentive for contractors to fully optimise the much more challenging task of assuming the role of specialist, high quality recycle manufacturers, deriving the majority of their income from sale of products rather than simply relying on uplift and gate fees.

This submission focuses on creating "market pull" to drive the future activities in this traditionally "waste" focused sector, which may at first present as "courageous" until one considers existing and fully function examples of such an industry model, that can be examined as a guide to future policy development.

### From "Supply Push" to "Market Pull"

Before summarising some of the key functions and drivers for the logical operation of a CE, it is perhaps useful to consider the global scrap metal industry as a closely related industrial sector. In summary, this sector functions as smoothly as it does due in large part to the following:

- i. The sector is driven by "market pull". The QC'd/QA'd provision of scrap/secondary resources to fully informed customers based on the clearly definable benefits that are not as cost effectively available from any other source.
- ii. Well defined product specifications exist to support and enable "sight unseen" global trading and as marketed via well-established exchanges (LME, CBoT, etc.).
- iii. Such "recyclate" materials are made and delivered to the defined specifications referred to in the customers' orders and delivered fit for the identified purpose.

EcoWaste is of the view that whilst the scrap metal sector is not perfect, the fact that such a system can work so effectively for one particular sector provides some comfort and guidance for the achievement of related "market pull" systems and outcomes for all the main material categories in urban waste streams, including at least:-

- All the types and colours of product and packaging applied plastics;
- All types and colours of glass;
- All forms of residual biomass;
- All forms of paper and cardboard;

- All the products and materials requiring and/or benefiting from direct management as product stewardship defined materials; and
- Miscellaneous synthetic materials.

The starting point to transition to CE/"market pull" outcomes must be to initially focus on the needs, ambitions and responsibilities of the brands (the full suite of consumer product and service manufacturers and their respective raw material convertor supply channels).

Supply of quality recyclates to this sector is almost entirely dependent on the brands seeing that a sufficiently mature recyclate manufacturing sector exists and is capable of providing:

- Recyclate materials of the agreed quality;
- Recyclate materials in the quantity and long-term reliability of supply necessary to meet the defined "virgin replacement" or "virgin supplementation" requirements over the logical production cycle of a finished product or service; and
- Recyclate materials available at an agreed price, benchmarked to reflect –
  - The price of virgin alternatives; and
  - The CE/sustainability properties so valuable to the brands when marketing to their customers and/or observing their responsibilities/commitments to Governments.

At this point in any transformative transition to a market pulled CE a crucial "chicken or egg" situation will arise.

The brands may be reluctant to commit to systematically procure high quality recyclates when no corresponding or adequate recyclate manufacturing sector exists, and the existing urban waste processing sector may be unwilling to tool up to supply a potential market that cannot be readily identified and secured. This situation might be defined as a basic market failure.

Based on extensive experience with the brands in the past and understanding the needs of the emerging specialised recyclate manufacturing sector, EcoWaste has developed a tailor-made strategic and fully commercial initiative to address this "chicken or egg" issue that can be discussed in detail, on request and in context.

We see that establishing secure and commercially relevant recyclate markets comes in 3 main stages:

- Government procurement of certain sector specific recyclates, to secure the interest and attention of early adopter recyclate manufacturers.
- Having supported the establishment of a basic retooling or initiation of a base level of quality recyclate provision, certain early adopter brands can start to place commercially significant off-take orders in the market and the sector should then develop its full potential iteratively, all based on policy encouragement and support and at the pursuit of fully informed self-interest by all parties.
- As the local use and manufacture of quality assured recyclates matures as a result of (i) and (ii) above, the established capabilities and the globally harmonised recyclate product specifications and standards will support global, sight unseen trading of all/any recyclate surpluses not required by the

relatively small national product manufacturing base. Proactive international brands could also start exporting excess recyclates to their other manufacturing centres around the world.

Before now responding to the six specific questions requested, we propose to refer to “the incumbents” or the “incumbent sector” to describe the majority of the mainstream “waste” sector:-

- The sector on whose watch this unacceptable current crisis in sustainable resource recovery was allowed to emerge;
- The sector that relies almost entirely on service fees, uplift fees, gate fees to support their activities (supply push) but who place only the slightest importance on sale income from recovered resources;
- The sector that anchors its and business risks on charging the community ever higher service fees, but mostly fails to respond to community demand for optimised levels of resource recovery, or to pass back the value the community generates as the primary sorters of recyclable materials into the different discard streams/containers provided;
- These same “incumbents” refer to future infrastructure needs still in terms of disposal capacity, transfer stations and their concept of MRFs etc. As will be addressed below, the new generation of systems and infrastructure needed to optimise systematic resource recovery and quality assured recyclate manufacture is quite different to the “incumbents” current and traditional concepts rooted in waste management rather than inherent material value recovery; and
- Finally, the incumbents tend to see the current demand for a viable resource recovery outcome as just another service they can charge for, rather than the outcome they are already being paid for, but not delivering. To the “incumbent” sector it is always someone else’s fault; more money, new legislation etc. etc. For comparison, imagine if Westfield’s required every household in the prospective catchment of a new shopping centre complex to sign up to shop at the Centre when built and to spend at least a minimum amount. This highlights the need to encourage much more entrepreneurship into the existing “incumbents” business models as a key to smoothly transitioning from “supply push” to “market pull”.

There is much the NSW Government can do to assist and foster the emergence of a circular economy in NSW.

As mentioned in the introduction, EcoWaste looks forward to the opportunity of working with the NSW Government in assisting to establish a world class resource management system.

Yours faithfully,

ECOWASTE PTY LTD



Mark Glover

**Director.**

**ATTACHED:**

- Responses to the 6 questions
- EcoWaste Capability Summary
- Introductory “flyer” on the essential R-Hub initiative
- WSROC Study