

Alex Fraser Response. Infrastructure Victoria. Evidence Based Report. October 2019.

Land Use Planning

Section 6.3 of the Report touches on the roles of state and local government in land use planning but there is little detail provided about current issues and opportunities for improvement.

Long term consistency and rational land use planning are essential to provide the certainty that the community needs to ensure the local amenity in residential areas and also the certainty that business needs to support investment, employment and continuous improvement of efficient operations in the circular economy.

An example of a planning decision impacting the viability of a high performing recycling operation, compromising effective waste management in Melbourne's southeast and the circular economy is summarised as follows:

Situated in Clarinda (near Clayton), Alex Fraser Group's south-eastern facility recycles up to 1 million tonnes of waste every year, turning it into VicRoads approved, high quality, sustainable construction materials, ideal for use in major infrastructure projects. The facility has been operating since October 2009 and employs 50 people full time.

The current location of this facility is ideal as it has a large buffer zone, does not impact on residents, is extremely well screened from view, and is well serviced by an excellent road network which will be further enhanced with the construction of the recently announced Mordialloc Bypass.

In October 2015, the Minister for Planning determined to rezone the site to Green Wedge A Zone (GWAZ) at the request of Kingston City Council and against the advice of an independent planning panel.

The 2018 Statewide Waste and Resource Recovery Infrastructure Plan indicates that Victoria recovers 5.3 million tonnes of (C&D and glass) waste per annum; highlighting the critical impact of the loss of 1 million tonnes of recycling capacity if the Clarinda site was to close. Efforts to find a suitable alternative site have been unsuccessful, in spite of assistance from state government departments.

The current planning permit for the Clarinda Facility is due to expire in 2023. An application for an extension to the permit has been lodged but has been denied by the City of Kingston, meaning that in the absence of any further action, the facility will cease operations in 2023.

This situation highlights a number of issues with land use planning that need to be addressed if waste management and resource recovery is to be properly supported by government:

- Local government making planning decisions based on local considerations when waste and resource recovery considerations are of state significance.

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- The failure of waste and resource recovery infrastructure plans to identify significant risks to capacity and to address those risks.
- The absence of a holistic state government policy framework that can recognise the significance of a development to resource supply (in this case supply to the “big build”) and resource recovery or to acknowledge and follow the advice of an independent planning panel.

It is recommended that the final report give consideration to:

- How to better recognise matters of broad economic impact in the planning framework.
- Interaction between state government policy objectives and local government planning decisions.
- More risk assessment and detailed action in waste and resource recovery infrastructure plans regarding risks to capacity.

Consideration of the Location of Recycling Sites Close to Sources of Recovered Materials

In the planning context and in the development of infrastructure plans consideration needs to be given to optimising the location of recycling facilities. Given the source of recovered materials is centred within the metropolitan area, careful selection of processing sites close to the source will also put finished products close to their end-markets – also typically within the metropolitan area.

This minimises transport costs, congestion and emissions not only for the recovered materials coming to processing sites but also for deliveries to end users. This can provide a significant benefit over virgin materials that may come from sites outside Melbourne, Victoria or even Australia.

Examples:

- Construction and Demolition (C&D) waste is typically generated by brownfield developments closer to the city centre. Alex Fraser Group has a network of sites within the metropolitan area located close to waste sources. These sites process these materials into pavement materials that have been used on most of Melbourne’s major infrastructure projects. The use of these materials therefore provides significant benefits over virgin materials that come from quarries that are increasingly well away from end-use markets. This has been a key driver of Victoria’s success in using recycled content in infrastructure, when compared with major cities domestically or internationally.
- Up to 50% of glass recovered from kerbside bins cannot be recycled back into glass containers and has historically found its way to landfill or growing stockpiles. Alex Fraser recovers this material and transforms it into construction

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materials such as roadbase, sand and asphalt. Having a network of sites close to the sources of recovered materials and primary sorting facilities minimises transport (and associated costs, emissions and congestion). Also, with virgin deposits of sand now moving to outer areas like Lang Lang, well out of Melbourne, having a glass sand source close to the site of major projects provides significant benefits in minimised transport costs, congestion and emissions.

It is recommended that the final report give consideration to making infrastructure plans more focused on infrastructure locations that minimise transport costs, congestion and emissions.

Gap Analysis of Existing Facilities

The Government will have a number of high priority waste streams that have been impacted by the recent changes in Chinese import policies and the “waste crisis”.

Alex Fraser encourages government to ensure, however, that existing and developing resource recovery sectors are not ignored. It is critical that a gap analysis of these sectors is carried out to ensure that high priority support activities are initiated, where critical gaps are identified, and existing support activities are sustained for these industries – in parallel with actions for “crisis” materials.

An example of an issue where there is a critical need for support intervention is the Alex Fraser recycling facility at Clarinda, as mentioned earlier.

Another associated example where there is a critical need for support intervention, and is an example of the interdependency of these issues, is the recycling of glass waste at Alex Fraser Recycling facility at Laverton:

For some years Alex Fraser has recycled glass waste into glass sand at its Laverton facility. Glass waste is designated “statewide priority materials” under the SV Market Development Strategy as up to 50% of kerbside glass waste cannot be recycled back into glass containers.

The growing waste crisis in Victoria and increasing statutory scrutiny of primary waste sorting facilities (and legacy glass waste stockpiles) has resulted in a significant increase in the flow of raw glass waste into our Laverton Facility. We have recently invested in a state of the art processing facility at Laverton to boost productivity and to enable the acceptance and of a broader range of waste streams, including waste with significant metallic or plastic contamination. This, in turn, means we need to build additional end markets for the glass sand produced.

It had been our intention to use the Alex Fraser Clarinda facility for a growing outlet for this material where there is scope to blend an additional 38,500 tonnes of this material

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into construction material end products. The potential closure of that facility would put this at risk.

The success of the circular economy depends on the development of consistent and sustainable end markets. In this case urgent support is required to avoid the loss of this pre-existing and growing conduit to the end market for glass waste.

It is recommended that any critical gaps or risks identified in any such gap analysis, or indeed at any time, be managed **in a similar way to the “hot list” approach applied to quarry planning matters in the Joint Ministerial Statement on Extractive resources.**

Container Deposit Scheme

In considering the implementation of the CDS it is important to consider all the associated waste streams.

A significant percentage of the glass placed in kerbside recycle bins can't be recycled back into glass containers. This 'problem glass' is rejected in the optical sorting process because the material is too fine to be sorted or because the material is opaque. Ceramic, stone, porcelain or glass with attached paper/labels that prevents the sorter "seeing the glass" properly, are all examples of this.

This "problem glass", as it leaves the primary glass sorting process, is typically contaminated with up to 5% by weight by plastics (eg plastic bottle caps and general contamination) and metals (bottle tops and general contamination). These materials need to be separated to enable the glass to be recycled.

The continued uptake of the container deposit schemes interstate has shown higher overall glass volumes being recovered and there may be some reduction in the percentage of "problem glass" (due to less breakdown and lower contamination), but the net effect is unlikely to be a material decrease in volumes of the "problem glass". There will, however, be an increasing differential between the high value ascribed to CDS glass being colour sorted into cullet for containers, and the low value "problem glass". It is anticipated that this will increase the difficulty in finding end-use markets and may lead to growing stockpiles of this material.

Alex Fraser has recently invested in a state of the art processing facility at Laverton in Victoria to boost productivity and to enable the acceptance and of a broader range of waste streams, including "problem glass". The material produced through this plant can be used as a sand replacement in asphalt or pipe bedding or blended into other road-making materials to ensure guaranteed high volume end markets through Alex Fraser's existing construction material markets.

The ability to process high volumes of problem glass will remain important with the introduction of a CDS.

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Waste to Energy

The report recommends the development of a waste to energy policy. Consideration needs to be given to the generation of fly ash and bottom ash as resultant waste streams from waste to energy. Alex Fraser has investigated international best practice in the management of these materials and stands ready to recycle these high volume waste materials into construction materials through an established network of sites, with appropriate capacity and laboratory facilities. Discussions have commenced with proponents of waste to energy facilities and Alex Frasers established relationships with end users, and network of metropolitan sites provides access to markets for finished products.

Waste and Resource Recovery Facility Standards

The report only touches on the role of the various levels of government on industry standards.

Standards vary greatly across the many industry players and infrastructure sites. Where low standards exist, this can present significant safety and environmental risks. Such low standards are evidenced by the high profile unlicensed chemical storages noted recently and fires at resource recovery facilities. Less high profile cases of varying industry standards can also lead to significant environmental effects to the local environment.

There appears to be some government action being taken over statutory compliance checks through greater scrutiny of processing and storage sites but in a land use planning context, different local governments and agencies continue to apply differing standards over required environmental controls detailed in planning permits. Unlicensed or substandard facilities have operated for far too long, despite regulators being aware of the operations. This inconsistency has lead to environmental harm and enormous liabilities to be met by Victorian taxpayers. It also presents substantial economic impediments to industry players that operate at the highest standards of environmental performance.

Alex Fraser is focused on the highest levels of environmental performance and has proven environmental outcomes. This comes from investment in such things as:

- Bunding and landscape screening of its sites.
- The positioning of key infrastructure at low elevation – in excavated areas for example.
- Water storage on site to support high levels of dust control.
- Dousing bars for dust suppression of incoming vehicles.
- Continuous dust monitoring used as a real time dust management tool as well as providing an historical record of performance.

It is recommended that the final report give consideration to methods of achieving greater consistency around high standards in the industry.

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End Product Market Development

Government procurement practices are very influential in the development of markets for recycled materials.

An example of how this works well is the development of roadworks specifications by Vicroads:

In the C&D waste area, Vicroads has set the way with specification development for roadmaking products that include C&D waste and municipal glass waste. It is not widely understood that up to 50% of kerbside glass waste can be currently recycled back into glass containers. This necessitates a recycling outlet for the remaining 50%. Vicroads specifications are supportive of the use of processed glass into sand, roadbase and asphalt applications. This is an example of best practice in market generation.

Another example is the conversion of C&D waste to roadmaking materials. Vicroads have worked together with key recycling companies such as Alex Fraser Group over several years to develop construction material specifications that open up outlets for recycled materials. The result is broad use of these materials in Victoria across infrastructure developments from major projects to subdivisional developments.

Another example of government procurement practices that positively influence the development of end-use markets is the recognition of the sustainability characteristics of the materials in their procurement processes. Some detail on this and possible improvements follow:

In the infrastructure area, current sustainable procurement approaches such as the Infrastructure Sustainability Council of Australia IS rating tool have commenced to address this issue, but the following limitations apply:

- This tool currently typically applies to large infrastructure projects valued over \$100m. There is little support for sustainable products in projects below this value.*
- This rating tool gives consideration to, and recognises, a broad range of sustainability aspects but does not set specific targets. Good sustainability practice can be ignored in some areas of the project once the requisite target score has been obtained through focus in other areas. It is very much an improvement tool.*
- It is relatively complex and this is an impediment to its application to smaller projects. Local government, in particular, has failed to take up this tool for its projects.*

As can be seen, this leaves substantial gaps in sustainable government procurement. It is recommended that the final report provide strategies to ensure that sustainable procurement is established for all government sectors and all project sizes.

It is Alex Fraser's view that in our industry, initially, the urgent priority target is to ensure that sustainable products are not disadvantaged over equivalent non-sustainable products – again, at all levels of Government (including Local Government).