

Advice from Infrastructure Victoria on recycling and resource recovery infrastructure

Background

Melbourne and Victoria's population is growing. Addressing the health and environmental impacts of waste, while preserving our limited resources, remains a challenge for communities around the world.

The established Australian model of exporting sorted waste has been impacted by changes in international practice. While these changes have been disruptive, they also provide an opportunity to re-evaluate the focus of domestic recycling and resource recovery policies, and the infrastructure required to achieve those objectives.

Changes to Victoria's materials reprocessing infrastructure could deliver greater resilience to Victorian recycling and waste systems, while also producing economic opportunities for the state. Policy and investment decisions required to achieve these outcomes will need to be informed by advice on industry demand and markets for recovered material.

Victoria's waste and recycling system is currently reliant on a small number of large, best practice landfills, with comparatively few options for extracting recyclable material and/or recovering energy from residual waste.

The waste to energy sector is under-developed compared to other leading nations. There is a degree of uncertainty about return on investments, security of feedstock, social license and the potential to adversely divert waste from uses higher up the waste hierarchy.

Organic waste, particularly food waste, creates significant environmental and amenity problems in landfill, creating greenhouse gases, toxins and odours when decomposing anaerobically. There are opportunities to divert organic waste to create new products and/or energy, yet recovery and processing of food waste has not been adopted as an industrial scale in Victoria.

Infrastructure in the resource recovery sector is primarily delivered through private investment. However, Government has an important role in supporting investment. Advice from Infrastructure Victoria (IV) on future infrastructure requirements and opportunities will enable Government to develop policy to unlock private investment and deliver a robust sector for Victoria.

Scope of advice

The Government is seeking advice from Infrastructure Victoria on the infrastructure that would be required and the role for government in providing support to:

- Develop Victoria's re-processing sector for recycled material, particularly those that currently rely heavily on overseas markets such as plastics.
- Better enable the use of products containing recycled materials in a variety of Victorian industries, such as manufacturing, construction and agriculture.
- Support a waste to energy sector that prioritises the extraction of recyclable material and recovers energy only from the residual waste (i.e. without diverting waste from reuse or recycling)
- Support high levels of resource recovery for organics, particularly food organics

The government is also seeking advice on the potential timing of infrastructure delivery. IV's advice should also consider end to end infrastructure requirements and delivery chains, including transportation.

IVs advice should be based on projections of future waste streams based on projected trends in population growth, waste rates and resource recovery, and should also include sensitivity analysis and potential for divergence from projections.

In framing its advice, IV should have regard for the specific implications for regional Victoria, both opportunities and challenges, from the development of the State's waste recovery and re-processing sector.

IV's advice on secondary processing should consider:

- The opportunities, barriers and risks for developing secondary processing in different product sectors and for different reclaimed material types
- The role of a robust and functioning resource recovery system in supporting a transition toward a circular economy
- Market development opportunities
- Global and market trends
- Opportunities to develop E-Waste secondary processing facilities
- The sustainability of a Victorian secondary processing market
- Barriers to the establishment of processing infrastructure, particularly for food organics processing, including availability of land with adequate buffers and planning controls
- Occupational health and safety matters relating to secondary processing and products

IV's advice about residual waste processing should consider:

- Front end infrastructure requirements including sorting and collection to ensure that recyclable materials are recovered for use in a circular economy model
- The role of waste to energy compared to other infrastructure solutions
- Maximising the reduction, reuse, recycling and recovery of residual waste as higher priorities
- Potential availability of feedstock for waste to energy, and potential for changes over time
- Ensuring a social license on waste to energy infrastructure delivery

IV's advice on organics should consider:

- Front end infrastructure requirements including sorting and collection to reduce contamination and enable high quality outputs
- Opportunities and potential trade-offs for organics use in waste to energy against recycled products

Process

The Government expects that IV will undertake comprehensive engagement with industry, the community, government, local government, and other key stakeholders in developing this advice. IV should draw on inter-state and international comparators and research, as well as developing its own modelling and analysis. In developing the advice, IV should also consider existing state planning and policy documents, using the Statewide Resource Recovery and Infrastructure Plan (SWRRIP) as a

base for developing the advice, undertaking a gap analysis and focusing work accordingly to strengthen the available evidence base.

The advice is to be provided to me, as Special Minister of State, within 12 months of this request. The Government will also require an interim report, within six months of the request, that sets out key early findings, including any significant risks or opportunities, and the proposed strategic direction of the final advice.