Submission to discussion paper on turning waste to energy

Hobsons Bay City Council’s response to questions raised in the Victorian Government’s Turning Waste to Energy discussion paper are summarised below.

1 What is the appropriate role for waste to energy in Victoria’s waste and energy sectors?

Council acknowledges the Victorian Government’s view that there is substantial opportunity to deliver improved waste and energy sector outcomes across the state. Council supports the preliminary position proposed in the discussion paper and is keen to work closely with the Victorian Government, other councils, industry and community. Council recognises that with right policy framework we can realise opportunities to add to a clean energy future, protect the environment, support our communities and build our economy.

Council believes that there is a key role for the Victorian Government to play particularly in assisting the industry to establish viable business models. It is important for the industry to succeed and perform well against a competitive global market. Failure to do so will have huge implications for governments and community. If viability of the business model is completely left to the industry initially, it can delay investment in the sector and Victoria will be left behind. However, in the long run, the industry should be empowered to perform independently.

One avenue is to support local government and industry transition from landfill to alternatives. One example of support to local government and industry is the Metropolitan Waste and Resource Recovery Group’s (MWRRG) business case and procurement activities which are valuable. Support from the Environment Protection Authority (EPA), Sustainability Victoria and Department of Environment, Land, Water and Planning (DELWP) in the process is critical to assess to viability of proposal and offer regulatory advice.

This support could also be in the form of incentives, seed or grant funding or low interest loans from the Sustainability Fund. Also continuing Sustainability Victoria’s investment facilitation service, identifying sites or feedstock sources and facilitating procurement activities to secure this feedstock for a certain period. Failure to do so would delay investment in this sector which will have a detrimental impact on Victoria’s reputation of an environmentally responsible state and its investment friendliness.

It is encouraging to note that waste to energy technologies offer opportunities for recovery of problem wastes that cause environmental issues when disposed of in landfill, or for which recycling or recovery is difficult. While waste to energy technologies could be a solution to existing waste products where recovery is difficult (eg. tyres), the onus of managing the waste generated by such products must be on its manufacturers through product stewardship schemes.

Energy which can be generated from a non-energy intensive resource (i.e. not required to be mined) that is also a waste stream that cannot otherwise be easily and environmentally responsibly disposed of, is seen as an important input to the energy mix. If a viable and secure quantity of such waste streams can be sourced after
considering the waste hierarchy principles stated above, then energy production would be a welcome outcome.

It should also be a role of the Victorian Government to educate the community about all aspects of these facilities as the perception of the general public isn’t well aligned with the true nature of the sites especially with respect to amenity. The Victorian Government could provide case studies and communicate the regulations and standards that would be in place to ensure amenity is protected.

The Victorian Government should also encourage and support business through incentives to retrofit with localised waste to energy solutions. Waste minimisation and recovery strategies, including waste to energy options, should be part of planning requirements for future industrial facilities and large residential developments that will generate large quantities of waste.

2  Is there a limit to the scale of waste to energy projects Victoria can or should support?

The scale of waste to energy projects must be left to industry to decide provided it meets the Victorian Government’s preliminary position and considers possible changes in the quantity and composition of the feedstock over time. Health, environment, safety and amenity impacts of the facility are key factors to be considered while scaling the project and also the financial viability and marketability of outputs.

However, there would be demand from industry to establish larger facilities as the ‘economics of scale’ could reduce costs. The Victorian Government should be aware of the implication of this demand on feedstock sourcing, transport, the management and regulation of any waste left over after energy recovery and the balance with objectives to reduce, reuse or recycle waste.

Waste to energy is a lower order option in the waste hierarchy for managing resources, and should not be over-emphasised above avoidance, reuse or recycling.

With waste avoidance, reduction, reuse and recycling established and accepted as Victoria’s waste management priorities, it will be important for waste to energy facility operators to be able to respond to possible reductions in feedstock volume and also changes in feedstock composition. This will be a business risk that facility owners will need to manage.

Unfortunately the Victorian Government’s effort and funding is on the bottom tier of the waste hierarchy and therefore more funding and effort should be provided to higher hierarchy waste avoidance activities.

Experience in the waste sector shows that community opposition to a project can delay, if not destroy, a project’s progress. The larger the scale of a proposed project the more likely it may be that there will be more amenity impacts on the local community, such as increased truck traffic and even damage to an area’s reputation. Communities will likely play a key role in determining the scale of projects that succeed in Victoria.

A closed-loop industrial site or precinct solutions as mentioned in the discussion paper are good concepts that decentralises managing waste, minimises waste transport and produces local energy supply solutions. It can reduce operational costs of a business as the waste to energy projects can generate energy on-site for the business needs. Since the facility generates homogenous waste, the technology applied would be fit for purpose and potentially generate minimal residue.
3 How can we ensure our reuse and recovery objectives are balanced against the need for business certainty to invest in waste to energy facilities over time?

The waste hierarchy is one of eleven principles of environment protection contained in the Environment Protection Act 1970. Council supports the Victorian Government’s position on waste hierarchy as the guiding principle for setting priorities for efficient use of resources.

Waste to energy is a lower order option for managing resources under waste hierarchy and shouldn’t be over-emphasised above reuse or recycling.

Balancing the desire to divert waste from landfill, reduce waste and increase reuse and recycling will be a challenge. Project proponents will need to take into consideration the broader policy objectives of the Victorian Government and councils.

Unfortunately effort and focus is on the bottom tier of the waste hierarchy and therefore more funding and effort should be provided by the Victorian Government to waste avoidance activities.

4 Do the current regulatory arrangements provide adequate protection for Victoria’s environment and communities?

The discussion paper lists the approvals and licences required for a waste to energy facility to comply with. These requirements must be reviewed against existing regulations in Europe and other parts of the world where waste to energy facilities have been operating for a significant time.

Siting requirements with particular attention to buffers are an important consideration. Buffers should be ideally contained on site or within waste management precincts and tailored to the risk profile of a facility type and these buffers need to be protected from encroachment. Facilities that are located close to the source of waste generation will also reduce emissions and transport impacts.

It is important to ensure that planning permit applications for waste to energy facilities are provided with clear instructions on the requirements and the regulations to comply with. Guidance for planning authorities will also need to be developed to help achieve consistent decision making across the state.

It is also important for the Victorian Government to ensure that project proponents engage early with the local community in order to address residents’ concerns and gain their support of the project.

Early planning by project proponents is also required to ensure that any residue produced is reprocessed into new products (e.g., bricks for construction) or managed appropriately to mitigate environmental harm and health impacts.

In addition to establishing a successful project it is equally important that the monitoring of ongoing operations mitigates environmental and social implications. Therefore oversight of the EPA is essential and it is equally important that they are resourced effectively and have the expertise to perform this function.
5 Are the existing programs to support waste to energy projects adequate?

The Victorian Government has adopted a suite of strategies to achieve the goals set out in the Statewide Waste and Resource Recovery Infrastructure Plan. These strategies guide investment, address market issues and provide funding.

The MWRRG’s business case and procurement activities in the alternative waste and resource recovery technology space including their local government and industry engagement activities are valuable. These activities are increasing the knowledge of officers and seek a collaborative approach to alternatives to landfill.

Sustainability Victoria’s investment facilitation service appears to be of value but feedback from the industry on access to this service would be useful.

Funding opportunities for waste to energy facilities seems fragmented and limiting. The Waste to Energy Infrastructure Fund is a small investment of two million dollars when compared to the scale of projects. The discussion paper highlights other funding opportunities outside the waste sector which the local government waste sector may have a limited awareness of. Improved communication of these opportunities would be welcomed.

The discussion paper states that under the renewable energy target, facilities that generate energy from landfill gas or other waste to energy technologies using organic materials can create and sell renewable energy certificates to energy retailers and that it would provide incentives to invest in waste to energy technologies. Compared to other renewable energy sources, waste to energy technologies are more cost intensive and therefore it is unclear how this would drive investment in the waste to energy sector.

6 What landfill levy settings are likely to provide the greatest economic, environmental and social benefits for Victoria?

The landfill levy is considered as a key market based regulatory tool that creates and provides incentive to divert waste from landfill. Council understands that in order for waste to energy to be competitive, the landfill gate fee must be higher than the gate fee for a waste to energy facility. However it is expected that waste to energy facilities will cost more operationally to run than landfills which will be passed onto local government.

Unless landfill levy income is used to help fund initiatives that can achieve a genuine step change in resource recovery, Council will not support an increase to landfill levy rates. This is increasingly so in a rate capped environment. Council has repeatedly called on the Victorian Government for greater investment of the Sustainability Fund into waste management and resource recovery initiatives.

Examples of financial support include procurement support, research and development, land for projects or grant or seed funding to build a facility. Also a contribution to operating costs to local government over a number of years to ease the transition to higher service delivery costs.

The discussion paper also points out that some technology types are well proven and already competitive in the current market conditions and others that require further development may become competitive as technology matures and cost declines. On one hand it make sense to initiate and establish technologies that already proven competitive rather than increasing the landfill levy for improving the competition of less
7 What are the key barriers to private investment in waste to energy projects? How do these vary across waste types and waste to energy technologies?

Community apprehension on anything to do with waste is a key barrier in identifying and locating waste to energy facilities. Early communication with the community, sound strategic landuse planning, facilities with proper buffer distances and regular monitoring and auditing of sites are key factors in mitigating community apprehension.

There are a number of stakeholders in the Victorian waste management sector. Therefore it is important to provide a coordinated and consistent approach for potential investors. Businesses and investors require clear guidelines and procedures for initiating and establishing facilities. The MWRRG business case and procurement process may provide this clarity. Again it is important that the EPA, Sustainability Victoria and DEWLP support this process and offer advice when needed.

For projects to be financed long term secure contracts may be required which will rely on a secure feedstock. The discussion paper notes that contracts for municipal solid waste are typically shorter than the 15 to 20 year desirable term of the industry. However there are examples of councils entering into long term contracts such as the North West organics processing contract with Veolia.

The time lag in submitting and approving planning permits could be another barrier.

8 What would best practice contracts for waste to energy feedstock supply look like? How do these vary across the various technologies?

Cluster of neighbouring councils providing feedstock to one facility is a practical approach to initiate and establish waste to energy options. Since the facilities require significant capital investment it is logical to extend the contracts to 15 to 20 years. A key challenge in this approach would be the change in the feedstock over time due to waste avoidance, reuse and recycling activities and the likely change in the composition of the feedstock.

For example the Victorian Government and the MWRRG policy direction is to support the diversion of organics from landfill. Many councils are considering the collection of organics in green waste bins and sending it to existing organics processing facilities which produce mulch or compost. The timing of the decision to divert organics or progress along the pathway to a waste to energy project is critical. If councils decide to divert to organics it may or may not limit their pathways to waste to energy projects. It is hoped that the MWRRG business case and procurement activities in the coming months will shed more light on the right approach for councils.

9 To what extent could services that assist businesses to navigate government approvals and support programs facilitate greater investment in waste to energy in Victoria?

Services that assist businesses to navigate government approvals and support programs could significantly facilitate greater investment in waste to energy in Victoria. As stated earlier, navigating the complex approval process is a key barrier to investment. Therefore it would be important to maintain or increase support of more specialised facilitation services to potential investors.
The Victorian Government should also play a key role in assisting these businesses in
developing comprehensive business cases and proposals to present to key
stakeholders. This could be achieved through the development and provision of
resources and guidance materials and also referring businesses to any relevant
courses, seminars or funding opportunities.

10 What role should communities play in the development of waste to
energy projects?

Communities play a key role in the establishment and operation of a waste
management facility. As noted in the discussion paper, community attitude towards
waste to energy facilities are untested in Victoria. Therefore it is important to be
transparent and informative on project parameters to the community early in the
planning stage. The community should feel confident of the ongoing monitoring and
auditing of the site. It is also vital to involve key community stakeholders in the project
steering committee from the early stage of project planning and implementation.

11 Is there a need for more action to inform businesses and communities
about waste to energy?

It is vital to inform businesses and the community about waste to energy technologies
particularly about its benefits, challenges and opportunities and to remove the stigma
associated with waste processing facilities. The discussion paper is a significant step in
the right direction to inform stakeholders and the community about waste to energy as
an alternative to landfill. It’s important that they feel confident that there is government
oversight of these facilities and also a strong commitment from facility operators to run
safe, clean, environmentally friendly operations. Innovative and consistent community
engagement techniques therefore should be explored that also don’t solely rely on local
government to implement.

12 Are there other barriers to operating waste to energy businesses in
Victoria?

Barriers to operating waste to energy business in Victoria has already been highlighted
in the Victorian Government’s discussion paper or earlier in this submission.