



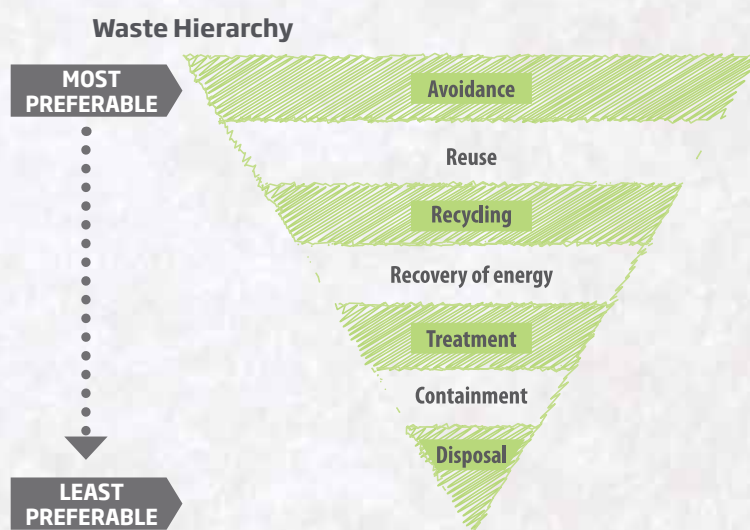
# Energy from Waste - Gate fees and the landfill levy

Update: 05/2019



## Why Energy from Waste?

- EfW would significantly reduce the amount of residual MSW and C&I waste going to landfill at a time when Victoria faces significant landfill shortages.
- An EfW facility at Maryvale Mill would reduce landfill in Gippsland and metropolitan Melbourne by approximately 650,000 tonnes each year, easing pressure on existing landfill sites.
- Access to landfill is a finite resource. Around 750,000 tonnes of annual landfill capacity in South East Melbourne is expected to close over the next five years.
- EfW is recognised as a proven and reliable technology which has been used in Europe, North America and Japan for decades.
- The recovery of energy and metals from this waste promotes a better environmental outcome than putting it to landfill as per the waste hierarchy.



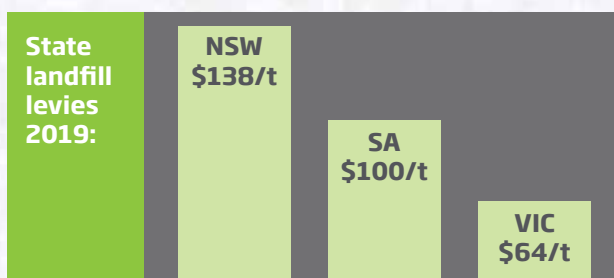
## Energy from Waste at Maryvale

- The proposed EfW plant will provide essential waste management and resource recovery infrastructure for Victoria. It will allow Australian Paper (AP) to attain a sustainable, long-term and stable alternative base load energy source to provide steam and electricity for the existing Maryvale Mill.
- The EfW facility will require approximately 650,000 tonnes each year of non-hazardous residual waste which would otherwise be sent to landfill.
- AP is targeting 80% of Municipal Solid Waste (MSW) or 'household waste' (non-recyclable) and 20% of Commercial and Industrial waste (C&I) for the plant.
- The development of an EfW facility at Maryvale Mill would support more than 1,046 Victorian jobs over 3 years during the construction phase, and more than 911 direct and indirect jobs ongoing. Further, it promotes "new energy" development and skills in the Latrobe Valley. (reference: Western Research Institute, *Economic Impact of Proposed Energy from Waste Plant*)



## Hurdles

- Currently, in Victoria, there is a pricing disconnect between the cost of sending waste to landfill and sending it to higher order waste management solutions.
- In Europe this price disconnect has been overcome with government policy instruments that have used landfill diversion and/or landfill levy pricing to fully account for externalities and achieve price competitiveness.
- The Victorian landfill levy is substantially lower than other states in Australia, meaning there is little incentive for councils and waste management companies to divert waste from landfill.
- For AP's EfW project to secure project financing it will require committed and consistent MSW waste supply under long-term secure contracts (25 years).
- Access to guaranteed waste volume has a significant impact on the competitiveness of market gate, as evidenced in Hitachi Zosen Inova's submission to the NSW parliamentary enquiry into 'Energy from Waste' Technology:
  - **\$130/t** for lower range in **large plants** at 400,000 t/yr to 600,000 t/yr
  - **\$198/t** for medium range in **medium plants** 200,000 t/yr to 300,000 t/yr
  - **\$264/t** for higher range in **small plants** 50,000 t/yr to 100,000 t/yr
- The higher cost of putting waste to landfill in states like NSW, means the financial viability of EfW is improving.
- An increase in the landfill levy will create greater incentives for councils to aggregate waste. A large scale EfW plant with capacity for 450,000+ tonnes will further support this, as the guaranteed demand will result in a more competitive EfW gate fee being offered.



## Solution

- The Victorian landfill levy needs to increase to incentivise higher order waste management practices.
- To be commercially viable smaller scale facilities will require a relatively higher landfill levy than large scale facilities due to economies of scale.
- For large scale EfW facilities to secure finance requires aggregation of sufficient MSW volumes. This is aligned with the Metropolitan and Regional Waste and Resource Recovery Group's broad intent to aggregate and drive higher efficiency waste management solutions.
- The Government has an opportunity to leverage the MWRRG and councils to provide > 450,000+ tonnes of committed MSW supply to the market.
- A levy harmonising with NSW and SA will increase resource recovery and create up to 2,200 additional jobs in Victoria (*reference: Deloitte Access Economics, Economic Impact of increasing the Victorian Landfill Levy*).
- Councils need to negotiate long-term contracts to aggregate MSW and C&I for delivery and secure volume for lower EfW gate fees.
- Ultimately this means that rate payers will pay less for the sustainable disposal of their waste at large scale and commercial EfW facilities such as AP's proposed EfW plant at Maryvale.
- Victoria should adopt a staged levy increase over four years to align with other states and support the development of new infrastructure for energy recovery, recycling and re-use.



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