Why do we need the Melbourne Energy & Resource Centre?

The challenge of waste

A growing waste problem in Victoria

By 2053 Victoria is forecast to send an estimated 8.9 million tonnes of waste to landfill each year. That's enough to fill almost 5,000 Olympic size swimming pools or 9.5 MCGs, every year.

With multiple landfills reaching capacity on the horizon, new facilities are required to meet this growing need. We face a critical choice: keep sending most residual waste to landfill, or reserve valuable landfill space for materials with no other treatment options. Cleanaway's proposed Melbourne Energy & Resource Centre (MERC) in Wollert is about increasing waste treatment options and reducing waste disposed to landfill.

MERC will help Victoria move towards a more sustainable, circular economy by recovering value from waste that cannot be recycled. Instead of going to landfill, this residual waste will recover energy and other useful resources, reducing the environmental footprint of waste management while supporting the state's growing needs.

Landfilling waste buries valuable resources

When we dispose of waste in landfills, we bury materials and metals that could otherwise be repurposed. Finding sustainable alternatives like resource recovery is essential to reclaiming valuable resources and reducing costs to local councils.

Supporting Victoria's waste reduction targets

The Victorian Government's Recycling Victoria: A new economy policy (2020) aims to reduce the amount of waste going to landfill by 80% by 2030.

disposal in landfills. Without alternatives like MERC, ratepayers may face higher fees due to increased waste-related costs.



Addressing the waste challenge with waste-to-energy

The waste hierarchy

The waste hierarchy prioritises waste management approaches, from most to least desirable. The hierarchy shows the preferred approaches for waste management, from avoiding the generation of waste, to disposal.

The Victorian government is taking steps to decrease the materials currently being sent to landfill, such as Food Organics and Garden Organics (FOGO), as part of the Victorian Government's circular economy policy and plan. However, there will always be waste that cannot be avoided, reused or recycled.

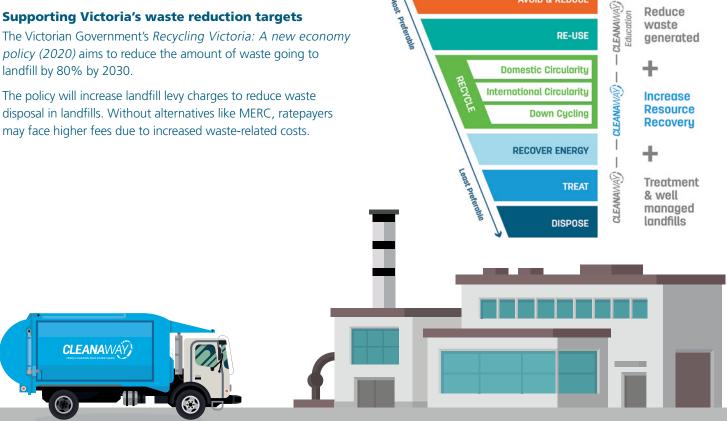
The MERC will accept the waste types that cannot be recycled in other ways, such as general household waste from weekly kerbside collections. It is only one part of the waste system, and Cleanaway operates a range of other recycling programs and facilities to divert waste from landfill.

> "Waste-to-energy is only one part of the solution to a sustainable waste system."

> > **AVOID & REDUCE**

Reduce

Waste hierarchy

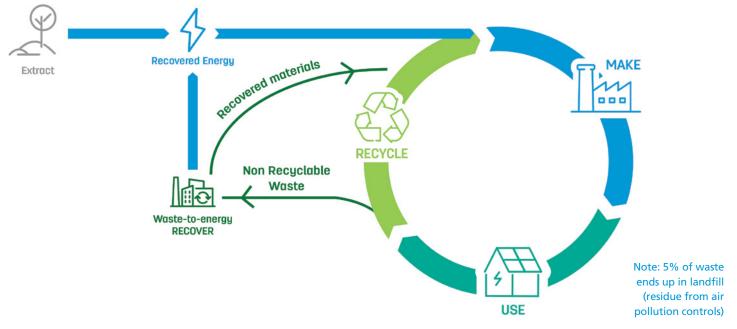


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Energy and materials recovery for circular precincts

Waste-to-energy supports the transition to a more sustainable and productive waste management system through the recovery of energy and materials. Waste-to-energy can act as a catalyst for the development of circular precincts and a more efficient use of land.



Safe and sustainable alternative to landfill

Alternatives to landfill include efforts to reduce, reuse and recycle more of the waste Victorians generate. For the waste that cannot be recycled, waste-to-energy technologies offer a way to recover value by converting waste into energy and other resources.

Waste-to-energy ranks above disposal through landfills because it enables energy and material to be recovered from waste, supporting a more sustainable approach to waste management. It safely processes waste that cannot be recycled, reducing the amount sent to landfills. Waste-to-energy is widely used internationally, particularly across Europe and other developed countries. Countries with waste-to-energy facilities often also have high recycling rates.

Energy and materials recovery

Waste-to-energy works alongside recycling efforts, potentially diverting over 95% of general waste from landfills. It enables safe recovery of metals and inert materials like stone and concrete fragments for recycling.

Waste-to-energy facilities also generate reliable power, reducing dependence on fossil fuels and supplying electricity to the local grid, benefiting both the community and the environment.

Caps on waste-to-energy

The Victorian Government has specified limits (or caps) to the amount of waste that can be processed through waste-to-energy facilities. The purpose of the caps is to ensure current and future investment in Victoria's efforts to avoid, reuse and recycle more waste. The cap limit is set at 2.5 million tonnes per year for all waste-to-energy facilities in Victoria. MERC on its own has a cap limit of 760,000 tonnes per year, meaning this is the total amount of waste that can be processed at the facility in any one year.

