



CUTTING VICTORIA'S EMISSIONS 2021–2025

Waste sector emissions reduction pledge

Minister's foreword

A circular economy – in which we maximise the value gained from our natural resources by reducing waste, reusing goods, and recycling materials – is the way of the future. In Victoria, our commitment to the principles and practices of a circular economy will not only help to protect our environment and further reduce emissions; it will provide significant opportunities for new investment and jobs.

Recycling Victoria – A New Economy is Victoria's circular economy policy and action plan. Through *Recycling Victoria*, the Victorian Government is delivering the biggest reform and transformation of the waste and recycling system in our state's history, it will create thousands of jobs in recycling and manufacturing and drive emissions reduction in this sector.

Launched in February 2020, the plan will strengthen Victoria's local waste and recycling industry, support new local infrastructure development and drive innovation and new technologies.

Recycling Victoria sets ambitious targets, including to halve the volume of organic material going to landfill between 2020 and 2030. Achieving this target will reduce methane emissions from the breakdown of organic waste.

A suite of new initiatives will support the achievement of this target, including support for new organics processing infrastructure, market development programs to expand the use of recycled organic products, and reforms to ensure every Victorian household has access to food and garden organic waste recycling services by 2030.

Victoria is ideally placed to make the transition to a circular economy with our highly skilled workforce, connected supply chains, exceptional design and engineering expertise, world-class infrastructure and leading education, research and development.



The Hon. Lily D'Ambrosio MP
Minister for Energy,
Environment and Climate Change

The waste sector accounted for 3.1% of Victoria's total emissions in 2019

Overview of waste sector

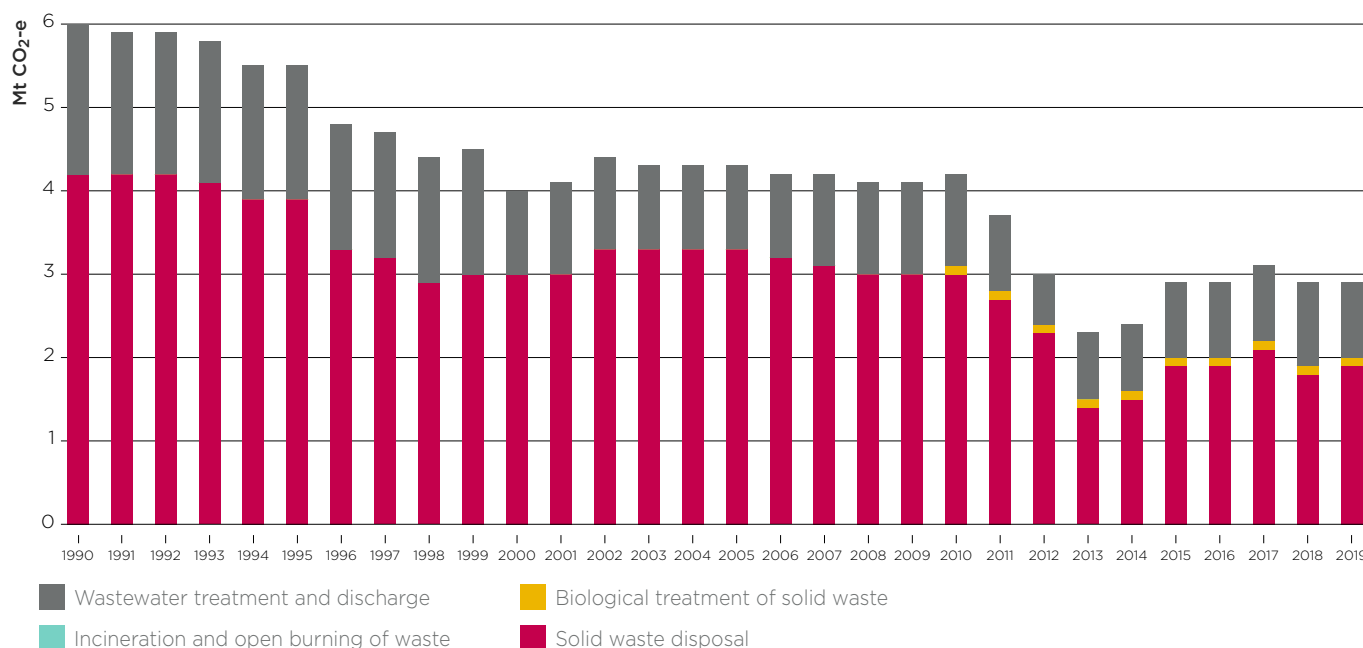
The waste sector encompasses services and activities essential to our community, including the management of household, construction and business waste and recycling, and the treatment of wastewater.

The waste sector accounted for 3.1 per cent (2.8 Mt CO₂-e) of Victoria's total emissions

in 2019. Landfills accounted for 66 per cent of these emissions (1.9 Mt CO₂-e), with the remaining emissions (1.0 Mt CO₂-e) largely arising from wastewater management.

Despite strong population growth, emissions from Victoria's waste sector fell by 53 per cent between 1990 and 2019. This was due to improved landfill management practices; greater diversion of organic waste from landfill; more efficient wastewater treatment processes; and increased capture of methane from both landfill and wastewater treatment.

Waste sector emissions (1990–2019)



Source: State and Territory Greenhouse Gas Inventories 2019 (DISER 2021)

Emissions reduction opportunities

Further reductions in waste emissions will be achieved through a range of actions, including improvements in waste management, a greater focus on product stewardship schemes, reforming supply chains and the transition to a circular economy.

Many medium and large landfills in Victoria already operate with best-practice gas capture and management. But significant opportunities exist for additional emissions reductions in this sector, including through:

- / Reducing organic waste generation, and recycling more organic waste into useful products
- / Diverting organic waste from landfill to 'waste-to-energy' facilities
- / Expanding the use of landfill gas capture and flaring, and improving the efficiency of such systems.

Diverting waste from landfill for recycling does more than reduce emissions; it also reduces air, water and soil pollution associated with virgin resource use and waste management, and supports economic development across Victoria.

Emissions reduction pledge 2021–2025

The waste sector pledge focuses primarily on emissions from landfill, which are generated by the disposal and decomposition of solid waste such as paper, cardboard, timber and, most significantly, food and garden waste. The actions in this pledge will continue the trend of this sector towards zero emissions.

The Victorian Government has invested over \$515 million to deliver the biggest reform and transformation of the waste and recycling system in our state's history. This includes *Recycling Victoria: A New Economy* – our action plan to overhaul the management of waste, stabilise and strengthen the resource recovery sector, and support the state's transition to a circular economy. The plan involves sweeping reforms to waste management and recycling that will accelerate the diversion of organic waste from landfill and, as a result, reduce greenhouse gas emissions from the waste sector. Importantly, it will also create thousands of jobs in recycling and manufacturing.

\$515M
to transform waste
and recycling

Recycling Victoria includes:

- / A target to halve the volume of organic material going to landfill between 2020 and 2030, with an interim target of a 20 per cent reduction by 2025. Ensuring every Victorian household has access to food and garden organic waste recycling services or local composting by 2030 will play a critical role in achieving this target.
- / Targets to divert 80 per cent of waste from landfill, and cut per capita waste generation by 15 per cent.
- / Business innovation and market development programs to support Victorian businesses to recover – and generate value from – organic materials that would otherwise go to waste.

ACTIONS
under the waste sector
pledge will reduce emissions
in Victoria by an estimated

0.1 Mt
CO₂-e in 2025 and

0.6 Mt
CO₂-e in 2030¹

¹ These emissions estimates represent the difference between projected emissions with these actions in 2025 and in 2030 compared to projected emissions without these actions.

Emissions reduction actions

Improve ways households and communities recycle and manage their waste

Four-bin kerbside waste system and behaviour change campaign

This new waste system and campaign will allow better separation of organic waste from other forms of waste, support more effective organics recycling and help avoid emissions that occur when organic waste goes to landfill.

Reforms to enhance the performance of our waste and recycling sector

New regulations supporting more effective sorting of recyclables

For businesses not using the expanded kerbside collection system, new regulations will be developed requiring the sorting of commonly recyclable materials (which could include organic waste, paper and cardboard, metals, glass and recyclable plastics) at the point of disposal. These rules, to be developed in consultation with affected businesses, are expected to come into effect by 2025.

Landfill levy reforms

An incremental increase to Victoria's landfill levy rate will recognise the social, economic and environmental value of recycling, and support a shift to a circular economy. The levy incentivises waste avoidance and reuse and recycling of materials, and will drive innovation

in new technologies for residual waste that cannot be recycled. The measure will also be supported by programs to prevent waste mismanagement behaviour prompted by increased disposal costs.

Increasing the use of recycled materials and supporting new markets

Recycled Markets Acceleration package

\$30 million will be provided to fund collaboration between industry, universities and government to stimulate new markets for recyclable materials by developing product specifications, and improving quality standards and industry accreditation.

An early focus will be products made from recovered organic materials such as compost and biofuels, and materials subject to Australia's new waste export ban – plastics, paper, cardboard, glass and tyres.

Circular Economy Business Innovation Centre \$7 million will be provided to bring together industry, universities and councils to develop new technologies and collaborate on creative solutions to waste.

Business Support Fund

A \$10 million grants program will support Victorian businesses to improve their resource efficiency, reduce the disposal of waste to landfill, increase recycling and reduce business costs.

Infrastructure investment

As part of a package worth close to \$100 million, \$49.5 million will be spent strengthening Victoria's waste and recycling industry and infrastructure, with the goal of processing more materials locally. The funding will include \$10 million to expand waste-to-energy initiatives for materials that can't be recycled.

Further information on *Recycling Victoria*

vic.gov.au/transforming-recycling-victoria

-

Note: Emissions from wastewater are addressed as part of the Whole of Victorian Government emissions reduction pledge, which includes actions across the Victorian water industry to reduce emissions associated with the delivery of water and wastewater services to the community and businesses.

While waste-to-energy initiatives will be implemented as part of the *Recycling Victoria* package, emissions reductions achieved through this process will be in the energy sector. Actions that lead to waste avoidance, reuse and recycling will prevent the use of virgin materials and further reduce emissions in other sectors including, for example:

- / Energy – using recycled aluminium instead of making new aluminium can reduce emissions from aluminium production by 98 per cent. Waste-to-energy technologies can also contribute to renewable energy.
- / Agriculture – reducing food waste can improve agricultural productivity, while using compost and fertilisers derived from organic waste can offset synthetic fertiliser use.
- / Land use, land use change and forestry (LULUCF) – waste avoidance and recycling reduces the need for forest product extraction.

Acknowledgement

We acknowledge and respect Victorian Traditional Owners as the original custodians of Victoria's land and waters, their unique ability to care for Country and deep spiritual connection to it. We honour Elders past and present whose knowledge and wisdom has ensured the continuation of culture and traditional practices.

We are committed to genuinely partner, and meaningfully engage, with Victoria's Traditional Owners and Aboriginal communities to support the protection of Country, the maintenance of spiritual and cultural practices and their broader aspirations in the 21st century and beyond.

© The State of Victoria Department of Environment, Land, Water and Planning, May 2021.



This work is licensed under a Creative Commons Attribution 4.0 International licence. You are free to re-use the work under that licence, on the condition that you credit the State of Victoria as author. The licence does not apply to any images, photographs or branding, including the Victorian Coat of Arms, the Victorian Government logo and the Department of Environment, Land, Water and Planning (DELWP) logo. To view a copy of this licence, visit creativecommons.org/licenses/by/4.0/

ISBN 978-1-76105-531-7 (pdf/online/MS word)

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

This instrument has been made to give effect to the requirements in Division 3 of Part 5 of the *Climate Change Act 2017*.

Accessibility

If you would like to receive this publication in an alternative format, please telephone the DELWP Customer Service Centre on 136 186, or email customer.service@delwp.vic.gov.au, or via the National Relay Service on 133 677, www.relayservice.com.au. This document is also available on the internet at www.delwp.vic.gov.au