

APPENDIX C

Draft Metropolitan Waste and Resource Recovery Strategic Plan

Glossary

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Advanced Resource Recovery Technology	Any technology that processes solid waste to recover resources such as energy or materials for reuse and recycling. Recovered energy can be used for electricity production and other applications that substitute for energy produced from primary resources. This term is similar to Advanced Waste Treatment, but stresses that treatment is to recover resources.
Alternative Waste Technology	Any technology that is applied to mixed waste other than traditional methods such as disposal to landfill. AWT facilities typically recover some dry recyclables and treat organic waste by fermentation or other process.
Anaerobic digestion	A process of biologically degrading organic materials in the absence of oxygen, yielding methane gas (that may be combusted to produce energy) and stabilised organic residues (that may be used as a soil additive).
Best practice facilities	Facilities with high levels of environmental management consistent with EPA and Sustainability Victoria Best Practice Environmental Management guidelines. In the case of materials processing facilities, best practice also implies high levels of product quality management.
Best practice landfill management	Adoption of measures established in Best Practice Environmental Management – Siting, Design, Operation and Rehabilitation of Landfills (EPA). This document gives direction through required outcomes and suggested measures on the main aspects of landfill management.
Bio energy	The conversion of biomass to energy, e.g. electricity, gas or bio fuel.
Bio mass	A natural resource derived from photosynthesis which is not fossilised, e.g. forest and mill residues, agricultural crops and wastes, wood and wood wastes, animal wastes, livestock operation residues, aquatic plants, fast growing trees and plants, and municipal and industrial wastes.
Biosolids	Nutrient rich organic materials derived from wastewater solids (sewage sludge) that have been stabilised through processing.
Cogeneration	A highly efficient way of simultaneously converting gas into a number of useable forms of energy, e.g. electricity and useful heat.
Collection Systems	System in place for the collection of materials from kerbside, including bins type and collection frequency.
Commingled materials	Materials all mixed together, such as plastic bottles with paper, glass and metal containers. Commingled recyclable materials require sorting after collection before they can be recycled.
Commercial and industrial waste	Solid waste generated from trade, commercial and industrial activities including the government sector. It includes waste from offices, manufacturing, factories, schools, universities, State and government operations and small to medium enterprises. E.g. food waste.
Construction and demolition waste	is solid waste that is generated from residential and commercial construction and demolition activities. E.g. bricks and concrete.
Composting	A process of biologically degrading organic materials in the presence of oxygen, yielding carbon dioxide, heat and stabilised organic residues that may be used as a soil additive.
Council clusters	A grouping of more than one Council to provide a cluster.
Department of Sustainability and Environment	The Department of Sustainability and Environment (DSE) leads the Victorian Government's efforts to sustainably manage: <ul style="list-style-type: none">• water resources and catchments• climate change• bushfires• parks and other public land• forests• biodiversity and ecosystem conservation

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Eco buy	Formerly the local government Buy Recycled Alliance. A partnership of local governments committed to purchasing policies and practices which promote the use of recycled products across operations and services. It is a joint initiative of Sustainability Victoria and the Municipal Association of Victoria (MAV) with the Department of Natural Resources and Environment (now Department of Sustainability and Environment) joining the partnership in 2002, broadening the program to cover green purchasing.
Eco-design	An approach to sustainable production and consumption that addresses the link between a product and the environment, recognising the critical influence of the design of a product on its life-cycle impacts.
Ecological footprint	The impacts of human consumption on the earth's ecosystem, expressed in terms of the area of land used to supply these resources.
End of life waste eg vehicles	Products such as cars that have reached the end of their useful life and become wastes. This term is often used in the context of product stewardship responsibilities of manufacturers and brand-owners for wastes discarded by consumers.
Energy from waste	Processing technologies that use waste as a feedstock for generating energy, which can be used for heat or for generating electricity.
Environmental accounting	A discipline for measuring environmental costs that may be applied to the areas of management accounting, financial accounting and national accounting. The reference to environmental accounting in the draft Strategy relates to its application for internal organisational decisions or management accounting.
Environmental management system (EMS)	A business tool for systematically measuring and improving environmental performance.
Environment Protection Authority	Environment Protection Authority Victoria's purpose is to protect, care for and improve our environment.
Environment Protection & Heritage Council (EPHC)	A national body established in 2001 to ensure the protection of Australia's environment and heritage. Created by amalgamating the National Environment Protection Council (NEPC), the environment protection components of the Australian and New Zealand Environment and Conservation Council (ANZECC) and Heritage Ministers' Meetings.
Fill material	Soil (being clay, silt and sand), gravel and rock, all being naturally occurring materials, having chemical contamination levels below that specified in Table 2 of EPA publication 448. Materials exceeding the minima set in Table 2 must be classified as either low level contaminated soil or contaminated soil.
Food organics	Food wastes from households or industry including food processing waste, out of date or off-specification food, meat, fruit and vegetable scraps. Excludes liquid wastes.
Garden organics	Organics derived from garden sources eg grass clippings, tree prunings.
Gasification	Advanced thermal technology that converts organic material into combustible gases by partial oxidation under the application of heat, leaving an inert residue.
Greenhouse gas (emissions)	Gases such as carbon dioxide and methane that trap heat in the Earth's atmosphere, with impacts on weather and climate.
Hard waste	The term given to household garbage that is not normally accepted into mobile garbage bins by local councils, e.g. old fridges and mattresses.
In-vessel enclosed compost operation	The biological decomposition of organic material, where oxygen and temperature levels are provided in a controlled environment.
Kerbside waste	Waste collected by local Councils from residential properties including garbage, commingle recyclables and garden organics, but not including hard waste.
Landfill	A site for the disposal of waste to land.

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Landfill levy	Levy applied at differential rates to municipal, commercial and industrial and prescribed wastes disposed to licensed landfills in Victoria. Landfill levies are used solely for the purposes of environment protection and fostering environmentally sustainable use of resources and best practice in waste management. They fund the activities of RWMGs, Sustainability Victoria and EPA, helping to establish waste management infrastructure, industry waste reduction programs, education programs, regulatory controls and enforcement regimes. Levies also provide an incentive to minimise the generation of waste, sending a signal to industry that the Government supports efforts to develop alternatives to disposal to landfill.
Landfill prohibition	The banning of a certain material or product type from disposal to landfills. The state environment protection waste management policy (siting, design and management of landfills receiving municipal wastes) allows for the EPA to ban a material from landfill where a higher waste management option is available.
Life cycle assessment (LCA)	An objective process to evaluate the environmental burdens associated with a product, process or activity by identifying energy and materials used and wastes released to the environment, and to evaluate and implement opportunities to affect environmental improvements.
Life cycle of a product	All stages of a product's development, from raw materials, manufacturing through to consumption and ultimate disposal.
Materials efficiency	Achieving more with less, by supplying products and services using fewer resources, and generating less waste, to maintain quality of life.
Material recovery facility (MRF)	A centre for the receipt, sorting and transfer of materials recovered from the waste stream. At a MRF, materials are also sorted by type and treated, which may include cleaning and compression (e.g. bale).
Metropolitan Waste Management Group	A statutory body established between the 30 metropolitan local councils and the state government under the provision of the Environment Protection Act on 1 October 2006. The Group works with state and local councils to: <ul style="list-style-type: none">• drive planning and investment in alternative waste technologies that have the capacity to generate renewable energy, recycle organics and other materials• facilitate and enable effective resource efficiency and community engagement and education programs• develop new waste contracts that deliver environmental and economic gains
Municipal solid waste (MSW)	Solid waste generated from municipal and residential activities, and including waste collected by or on behalf of a municipal council. As used in this document, MSW does not include waste delivered to municipal disposal sites by commercial operators or waste from municipal demolition projects.
National Packaging Covenant (NPC)	A self-regulatory agreement between industries involved in the packaging chain and all spheres of government.
Open windrow composting operation	A process where incoming organic materials are shredded, mixed and managed so as to decompose aerobically in windrows or piles that are fully exposed to the air.
Optical sorting	Higher levels of quality plastics separation are achieved by the installation of four optical sort machines that accurately sort plastics by their polymer type. The optical sensor captures this reflection and generates a two-dimensional image, which in turn enables computer software to efficiently determine the type of plastic. It then blows the defined plastic onto a conveyor while the remaining material is further sorted or disposed.
Organics	Plant or animal matter originating from domestic or industrial sources. E.g. grass clippings, tree prunings, food waste.
Part enclosed process	A waste process where part of it is undertaken in an enclosed environment and part fully exposed to the open air (e.g. Covered windrow composting with open air maturation).
Prescribed waste and prescribed industrial waste	Those wastes listed in the <i>Environment Protection (Prescribed Waste) Regulations 1998</i> and being subject to requirements under the <i>Industrial Waste Management Policy (Prescribed Industrial Waste) 2000</i> . EPA Victoria closely regulates these wastes because of their potential adverse impacts on human health and the environment. Prescribed wastes carry special handling, storage, transport and often licensing requirements and attract substantially higher disposal levies than non-prescribed solid wastes.

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Processing (of waste materials)	Best practice activities that recover resource value from wastes and prevent harmful emissions from residual materials. Processing may include sorting of mixed waste streams for recycling, aerobic or anaerobic treatment to produce organic soil enhancement materials, anaerobic or thermal treatment to recover energy, or on-site separation of materials for recycling to a standard such that residual materials contain no significant resource value.
Product stewardship	A concept of shared responsibility by all sectors involved in the manufacture, distribution, use and disposal of products, goods and services.
Putrescible waste	Waste that readily decomposes. Includes food waste and organic waste from gardens.
Pyrolysis	Advanced thermal technology involving the thermal decomposition of organic compounds in the complete absence of oxygen and under pressure and at elevated temperature.
Recovery facilities	Facilities established to receive and recover reusable and recyclable materials that would otherwise be destined for disposal.
Recyclables	While this term strictly applies to all materials that may be recycled, the term is generally used in the strategy and supporting documents in reference to the recyclable containers and paper/cardboard component of kerbside waste, i.e. not including garden organics.
Recycling	A term that may be used to cover a wide range of activities, including collection, sorting, reprocessing and manufacture into new products.
Regional Waste Management Group (RWMG)	Statutory authority established under the <i>Environment Protection Act 1970</i> responsible for planning for municipal solid waste. There are 13 RWMGs across Victoria.
Reprocessing	Changing the physical structure and properties of a waste material that would otherwise have been sent to landfill, in order to add financial value to the processed material. Without reprocessing, the beneficial use of waste materials would be lost.
Resale Centre	A Centre that enables the sale and subsequent reuse of good quality, saleable products and materials that were disposed of by their previous owner.
Residual waste	Waste that remains after any source separation of recyclable materials, including green waste.
Resource recovery	The process of obtaining matter or energy from discarded materials.
Re-use	The second highest option in the waste hierarchy – recovering value from a discarded resource without processing or remanufacture, e.g. garments sold through opportunity shops, strictly represent a form of re-use, rather than recycling.
Sectors, industry sectors	Groupings of industry used to generalise patterns in waste generation and disposal. Eg. construction and demolition, food services, food retail and food manufacturing, small and medium enterprises.
Solid industrial waste (SIW)	Solid waste generated from commercial, industrial or trade activities, including waste from factories, offices, schools, universities, State and Federal government operations and commercial construction and demolition work. Excludes MSW, wastes that are prescribed under the <i>Environment Protection Act 1970</i> and quarantine wastes.
Solid waste	Non-hazardous, non-prescribed, solid waste materials ranging from municipal garbage to industrial waste.
Source separation	The practice of segregating materials into discrete materials streams prior to collection by or delivery to processing facilities.
State environment protection policies (SEPPs)	Statutory instruments under the <i>Environment Protection Act 1970</i> that identify beneficial uses of the environment that are to be protected, establish environmental indicators and objectives and define attainment programs to implement the policies.

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Sustainability Covenant	Under Section 49 of the <i>Environment Protection Act 1970</i> a Sustainability Covenant is an agreement which a person or body undertakes to increase the resource use efficiency and/or reduce ecological impacts of activities products services and production processes Parties can voluntarily enter into such agreements with EPA or could be required to if they are declared by Governor in Council on the recommendation of EPA to have potential for significant impact on the environment
Sustainability Victoria	Statutory authority established in October 2005 with the key objective of <i>facilitating and promoting environmental sustainability in the use of resources</i> Sustainability Victoria works across the areas of energy waste and water with communities industries and government applying the best ideas and encouraging action to enable people to change their everyday practices
Sustainable consumption sustainable resource use	Sustainable resource use a change to society's historical patterns of consumption and behaviour that enables consumers to satisfy their needs with better performing products or services that use fewer resources cause less pollution and contribute to social progress worldwide
Transfer station	A facility allowing drop-off and consolidation of garbage and a wide range of recyclable materials Transfer stations have become an integral part of municipal waste management playing an important role in materials recovery and improving transportation economics associated with municipal waste disposal
Triple bottom line (TBL)	Referring to the notion ideal that organisations are responsible for social and environmental as well as financial outcomes
Victorian Litter Action Alliance (VLAA)	Victoria's peak body for litter management Formed in April 2000 the alliance was created to coordinate efforts made on behalf of State and local government agencies and the voluntary and private sectors to reduce litter in the Victorian environment to acceptable levels
Walking floor	A waste transport vehicle or trailer which is unloaded at the receipt or disposal site through movement of the floor rather than through use of a hydraulic ram or tipping of the body
Waste	Anything that is no longer privately valued by its owner for use or sale and which is or will be discarded
Waste avoidance	At the top of the waste hierarchy avoidance works on the principle that the greatest gains result from efficiency-centred actions that remove or reduce the need to consume materials in the first place but deliver the same outcome
Waste generation	Generation of unwanted materials including recyclables as well as garbage i.e. waste generation = materials recycled + waste to landfill
Waste hierarchy waste management hierarchy	A concept promoting waste avoidance ahead of recycling and disposal often referred to in community education campaigns as reduce reuse recycle The waste hierarchy is recognised in the <i>Environment Protection Act 1970</i> , promoting management of wastes in the order of preference avoidance reuse recycling recovery of energy treatment containment and disposal
Waste management industry	A term variously applied to collectors sorters and processors of waste/resources The term may also be used to include landfill operators
Waste minimisation	The concept of and strategies for waste generation to be kept to a minimum level in order to divert materials from landfill and thereby reduce the requirement for waste collection handling and disposal to landfill
Waste Management Policy (WMP)	A statutory instrument under the <i>Environment Protection Act 1970</i> that provides the basis for the management of waste and can cover generation use transport storage treatment handling recovery recycling reuse and disposal of waste
Waste stream	a classification used to describe waste materials that are either of a particular type (e.g. timber waste stream) or produced a particular source (e.g. C&I waste stream)