

Reducing Waste Sent to Landfill



Despite an increase in recycling rates over recent years, large quantities of waste are still generated, ending up in landfill. Poorly managed waste can pose a threat to health, the quality of our environment and places a burden on businesses and national economics. As development and the global population increases, it is inevitable that the problem of waste and its disposal will have a significant effect.

Most of the manufactured items that are thrown away involve the use of natural resources (materials, energy and water) and pollution during their production. Cutting consumption reduces these impacts, as well as the time spent handling it. Often it is more resource efficient to manufacture new products through recycling.

Although landfills are often the most cost-efficient way to dispose of waste, they have the potential to cause negative issues including social and environmental impacts.

This factsheet covers:

- The True Cost of Waste
- What Can We Do?
- Eliminate and Avoid
- Reduce, Reuse, Recycle, Treat and Dispose

THE TRUE COST OF WASTE

Waste disposal accounts for about 10% of the true cost of waste. Waste itself represents a loss of valuable resources that cost your operation money. There are also many other hidden costs such as lost revenue from not recycling, a loss of floor space or property area, valuable staff time spent on unproductive waste storage and management, degraded guest amenities and a poor public image as well as costs to the environment and community including:

- Greater landfill requirements
- Greater resource consumption
- More energy consumption
- More greenhouse gas emissions.

Preventing waste from being generated in the first place will eliminate these costs for waste disposal. However, this is not always viable. Alternatively, reuse or recycle waste as there is potential to reduce disposal costs and possibly even generate some revenue or contribute to charitable causes.



WHAT CAN WE DO

There are many options available to reduce waste, but first it is necessary to undertake a waste audit to understand the typical types and quantities of waste being generated. The waste minimisation hierarchy shown to the right can help prioritise waste efficiency opportunities.

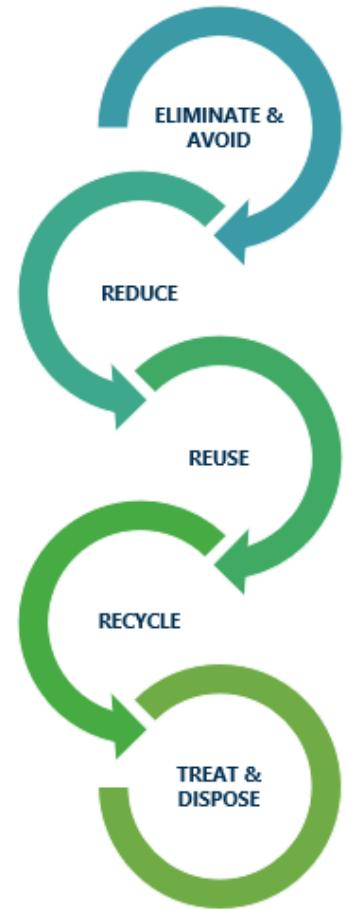
When reviewing waste management procedures and identifying waste reduction opportunities, the following should be considered across all areas and at each stage of the waste management hierarchy:

Supply Chain Management - How can we work with suppliers and waste contractors to minimise waste quantities received and maximise waste reuse and recycling opportunities?

Standard Operating Procedures - Do we have clear standard operating procedures which address waste issues and specify appropriate procedures for waste management?

Training and Education - Do we train and educate staff and guests on standard operating and waste management practices?

Monitoring and Review - Do we continually monitor and review procedures to ensure waste management processes are being followed and are working properly?



ELIMINATE AND AVOID

The best way to reduce waste to landfill is to try and eliminate as much waste as possible. Ways to eliminate or avoid waste require innovative thinking about the business procedures and product purchasing.

One suggestion is substituting one product for another. If there is waste of a particular concern (such as hazardous or non-recyclable waste) are there products which could be substituted to eliminate this waste altogether? Could a new piece of equipment help to eliminate this waste? Another tip is to review your standard operating procedures to ensure waste reduction is included and appropriate training has been conducted with staff.

REDUCE

Some waste may be unavoidable. If there is no feasible way to substitute, avoid or eliminate the production of this waste, reducing the quantity of waste is the next step in the hierarchy. Some opportunities to reduce waste include:

- Implement an inventory management system to monitor product purchasing, storage and waste.
- Discuss opportunities to reduce packaging with suppliers such as returning containers or bulk purchasing.
- Maximise visibility by reducing clutter and reduce the distance products travel to decrease the likelihood of product damage and accidents such as spills.
- Keep equipment well maintained and operating efficiently.
- Design areas to reduce waste and cleaning requirements.

REUSE

If waste cannot be eliminated and all efforts have been made to reduce the quantity of waste generated, there may be opportunities for its reuse either onsite or with external businesses, customers or community groups. Reuse is not just about reusing packaging, it also includes purchasing items that can be reused.

Reuse is different from recycling in that it involves reusing waste without significantly altering its physical form. This can be achieved onsite through items being reused for the same procedure or different procedures/departments, or offsite through sale or donations of items to other businesses, staff and community groups.

RECYCLE

Recycling incorporates the reuse of product materials in different forms or within new products. Recycling can be conducted onsite (such as organic waste composting) or offsite using waste service providers. Successful recycling relies on careful segregation and sorting of different waste types. Establishing standard procedures for waste separation and recycling and regularly monitoring the implementation of these procedures can help to reduce contamination issues.

The following are additional suggestions for implementing successful recycling initiatives:

- Provide clear visual signs and labels for different waste bins.
- Locate recycling and waste bins near to where waste is generated.
- Provide training to staff and education materials for guests.
- Contract a licensed waste service provider.
- Consult regularly with your waste service provider to identify irregularities such as cross contamination.
- Specify recyclable products and packaging in procurement guidelines, and work with both suppliers and waste service providers to identify opportunities.



What Can be Recycled?

Electronics	Most electronics can be recycled but will need to be sent to a specialised contractor.
Plastics	Plastics 1-3 are recyclable and 4-7 may also be recyclable depending on the country. The plastic numbering can generally be found on the bottom of the packaging. Plastic bags are not recyclable.
Construction waste	Most construction waste can be recycled unless it is hazardous, in which case it will need to be sent to a specialised landfill site.
Organic waste	Almost all organic waste can be reused and reclaimed through composting.
Paper	All paper and cardboard can be recycled.
Glass	Clear, green or brown bottles and jars can be recycled; however, ceramics and broken glass cannot be recycled.

TREAT AND DISPOSE

The treatment and disposal of waste should be carried out through a licensed waste service provider in line with local laws and regulations and in a way that causes the least harm to the environment.

CASE STUDY



THE LANGHAM, BOSTON

The Langham, Boston, founded on more than 150 years of history, is guided by their core pillars of genuine service, captivation of the senses, innovation and design. This hotel recognises that all actions have reactions and joined the EarthCheck program in 2009 to become more environmentally, economically and socially sustainable.

Since then, The Langham, Boston has launched several sustainable initiatives to improve their performance and activities with a proven commitment to sustainability.

The hotel has waste minimisation and recycling strategies in place to reduce the amount of waste sent to landfill. All glass, plastic, cardboard, paper and metal are sorted, stored and sent to a processing plant where they are converted into reusable materials.

INITIATIVES

- 01 – Before soap pumps were installed in every bathroom to eliminate single use plastics, the hotel collaborated with "Clean the World" which enables The Langham, Boston to collect and donate leftover soap to third world countries. Guest amenity bottles were collected and donated to the Boston Rescue Missions, which distributes the contents to various shelters in the greater Boston area.
- 02 – Approximately one ton of food waste is collected every week from the hotel and sent to a facility where it is converted to compost and sent to local farms.
- 03 – Kitchen oil is collected and sent to a processing plant where it is converted