



CARRY OUT A PLASTIC WASTE AUDIT

When embarking on a journey to reduce plastic waste, it's good to know how much plastic is currently being thrown away. It also allows you to monitor the impact of any changes you make.

A plastic waste audit is a great way to understand how much plastic your organisation is throwing away. Also, it gives you an idea of the type of plastic items that are most often thrown away and where you could make improvements.

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Preparing for the bin audit

Before completing the bin audit, complete a risk assessment for the task. If you are looking to get employees or members involved with the audit, you may wish to send out consent prior to the event. Set a date and time for the bin audit. Get in touch with the person(s) responsible for collecting the bins (caretaker or site manager) to ensure bins are not collected on that day, and that they can provide you with the correct bin bags to replace when collecting the bins for the audit.

Resources you will need

- A group of helpers
- Ground sheet/ floor covers
- Bin labels
- Rubber gloves
- Old clothing or something to protect your clothing
- Bin bags

- Measuring scales, digital usually provides a more accurate reading
- Recording sheet
- A number of plastic bags for weighing items (if needed)
- Clipboards and printed worksheet 1 for each location

How to decide the location where you will collect the bins from

Select a number of locations to audit, ensuring these locations give a wide spread across your organisation. Try to choose locations that give a true overview of your organisation. Make a note of the exact area to collect the bins from, for example staff room, office, etc. Print a recording spreadsheet and ensure all groups know how to record measurements using the same metric.

Preparations on the day of the bin audit

- Collect the bins from your chosen locations
- Collect both general waste and recycling bins (if applicable).
- Ensure you clearly label the bins with their location during collection.
- Once you have collected all bins, lay out a number of ground sheets. One for each bin location. (Consider doing one location at a time, rather than all of them at once).
- Ensure the bags containing the plastic are labelled with the location.

Carrying out the bin audit

- Explain health and safety issues to people getting involved, for example, gloves must be worn at all times, they must wear something to protect clothing, and stop auditing if they see any sharp objects in the rubbish, etc.
- Ensure all groups have a recording sheet and pen/pencil
- Think about separating the plastic out into different types. For example: plastic water bottles, milk bottles, other plastic bottles, drinks cartons, crisp packets, other food packaging, etc.
- Once all items from that location have been sorted you can start weighing the items. Depending on the type of scales you have, it may be useful to pop all the items for each type in a carrier bag or pot to allow you to weigh them all at once. For example, place all the milk bottles in a bag and then weigh the contents.
- All plastic types should be weighed in grams and written on Worksheet 1.
- It may be useful to place the contents in a large bag after they have been weighed and recorded. The smaller bag can then be reused to measure other items.
- When all the plastic has been sorted, weighed and recorded, replace the waste in the appropriate area for its normal collection.

Data from your bin audit

You have now audited a number of locations rather than all the waste generated at your organisation. Working out the percentage of waste is often the best way to report on your findings.

- Using Worksheet 2, work out the total weight of all waste audited (e.g. 1000g)
- Then, work out the total weight of each type of plastic audited.
- Now, work out the total weight of all plastic audited. (e.g. 400g)

Work out the percentage of plastic waste compared to all other waste for each location. This will give you an idea of how much plastic you are generating compared to other waste.

- To work out the percentage, divide 100 by the total waste, then multiply by the plastic waste. E.g. $(100/1000) \times 400 = 40\%$ of all waste is plastic waste.
- Now work out the percentage of plastic waste by type for each location, using Worksheet 2.
- 100 divided by the total plastic waste, then multiply by the total of each plastic type. For example, if there are 80g of plastic water bottles the calculation would be $(100/400) \times 80 = 20\%$ of all plastic waste is plastic water bottles. Now do this for all plastic items in Worksheet 2.

How to monitor change after your bin audit

Now, you have analysed the plastic waste at your organisation, you can report on the findings. It's important to note the types of plastic items that were seen most frequently in your bin audit and any key locations they were found. This should give you an idea of the types of items to target. For example, if you've found that a large proportion of plastic waste is plastic water bottles, then asking staff and students to bring in a reusable water bottle, could help reduce this number.

If you are keen to find out the impact any changes you make, then it may be worth completing another bin audit after a set period of time. Whether that is 3 months, 6 months or even a year is up to you. If completing a second bin audit, try to follow the same guide, choose the same day of the week and time as your first audit and try to ensure it's a normal working day.

Waste audit - Worksheet 1

Organisation name:

Date waste was collected:

Time waste was collected:

	Grams (g)										
Location	Location description	Plastic water bottles	Milk bottles	Other plastic bottles	Drinks carton	Crisp packets	Other food packing	Straws?			

Location	Location description	All other waste (g)

