waste wise business smart

BUSINESS WASTE REDUCTION PLAN

This comprehensive toolkit has been designed to lead businesses through a series of steps to help you achieve your waste reduction goals.

Included in this resource kit, is a six-step guideline with all associated waste assessment forms to assist you along the way

STEP 1 COMMIT TO IMPROVING WASTE REDUCTION IN THE WORKPLACE

FOCUSES ON:

- Obtaining support from senior management
- Assembling a waste reduction team to co-ordinate the program; and
- Training and education staff members.

ASSEMBLE A WASTE REDUCTION TEAM

Depending on the size or your organisation you could either arrange for senior management to formally introduce the program at staff meetings or in a newsletter, circulate an email or put up notices in staff common areas requesting support from fellow workmates.

Once you have a few offers of assistance, arrange a team meeting. It is a good idea to have a Team Leader to coordinate initial planning and liaise with senior management. You will need:

- A Team Leader
- A Waste Assessment Team to
    - Compile Waste Assessment results
    - Do the signage for new bins
    - Review waste management invoices
    - Educate other staff members
    - Report progress to Senior Management
    - Write progress and update columns for circulation to staff, inclusion in newsletters and annual reports
    - Brainstorming sessions to identify systems that are working well and those that need improvement



COMMUNICATION

Regularly communicating plans and progress to all staff members is fundamental to the success of the program. A good way to gauge the level of interest from staff members, and their level of knowledge of current recycling systems, is to distribute a survey. The survey requests current waste avoidance, reuse and recycling activities, willingness to participate and aggregate materials and opportunities for waste minimisation. We have included a sample survey on page 10.

EDUCATION

Motivating staff to separate their waste can be difficult; this is often due to a lack of education about which materials go in which bin. These barriers can be overcome by:

•Setting up practical and easy to use systems
•Providing clear signage, pictures and lists of the materials to be placed in each bin
•Educate staff about the types of materials that can be placed in each bin.
•Conducting occasional compliance checks

Other tips and suggestions
•Make the Waste Reduction Program an official part of the company policy
•Integrate environmental responsibilities into staff position descriptions
•Train staff to undertake monitoring of environmental performance and to review your systems on a yearly basis
•If you work in a small organisation, it may be worthwhile approaching neighbouring businesses to see if they are also interested in the Waste Reduction Program.
•If you are part of an office complex or shopping mall, contact the leasing agent or property manager about implementing a Business Waste Reduction Program.

STEP 2 ASSESS CURRENT WASTE PRACTICES

ASSESS WASTE PRACTICES

Assessing your waste stream will provide you with a better understanding of the main types of waste your organisation generates and how to go about making improvements. To get a good overall picture we recommend that you undertake the following 4 steps:

1. REVIEW RECORDS

This process will help you identify and calculate waste disposal cost savings, resulting from your program. You may need to obtain approval from senior management to review contractor and cleaning information. This information will help you benchmark your current waste management practices but also identify opportunities to reduce collection and disposal costs once your Waste Reduction Plan is in place.

The records you should consider reviewing are:



- Recycling records and contracts
- Purchasing and inventory records
- Maintenance and operating logs
- Equipment service contracts and invoices

Page 12 provides an example record--keeping template to assist you in recording this information.

2. QUANTIFYING YOUR WASTE STREAM

Quantifying your waste stream is a waste assessment and visual analysis of the types and quantities of waste found in your waste stream. It involves walking through your workplace and analysing the contents of your bins. To assist you,
Page 14 contains a Waste Assessment checklist.

3. PREPARING FOR A WASTE ASSESSMENT

You do need to plan ahead for your Waste Assessment, below is a list of considerations;

DATE AND TIME:

The sample needs to be representative of normal waste patterns, this may mean conducting your assessment later on in the day. It is best not to inform staff of the assessment as it may alter their behaviours.

WASTE ASSESSMENT MATERIALS:

Gloves, waste assessment forms, clipboards, pens, calculator, camera and tongs.
Sample waste assessment forms can be found on Page 15 and 16.

OH&S:

Consult your OH&S officer prior to the assessment for requirements eg. use tongs, wear gloves, do not put an unprotected hand into a bin and wash your hands.

CONFIDENTIALITY

Remember to be mindful of your colleague's privacy when inspecting bins.
Note: Make sure the cleaners and security are informed of your plans.

4. CONDUCTING A WASTE ASSESSMENT

Waste assessors need to examine each area where wastes are produced. The Waste Assessment form can be modified depending on the type of waste materials your organisation generates and the type of materials recovered for recycling. Each assessment team is to estimate (by volume) the proportion of the main material types within each bin (both general garbage, recycling and organics bin).



5. SITE ANALYSIS

This should be conducted at the same time as the Visual Inspection. The site analysis includes

•Examples of waste items that frequently occur (paper cups, cutlery, plastic bags, milk bottles)
•Any waste reduction initiatives that you can see
•Possible reasons why staff aren't recycling
•Page 17 contains ideas for conducting a site analysis

6. COMPILING AND PRESENTING RESULTS

Once you have completed the data forms you will have all the information needed to compile and interpret the results. Some of the most useful data you can use includes:
• Average volume of waste in each bin, you can turn this into an average for each day/week
•Average volume of the different material types in each bin
• Proportion of non-recyclable materials in recycling bins and the proportion of recyclable materials in the general waste bins

STEP 3 DEVELOPING A WASTE REDUCTION ACTION PLAN (WRAP)

A WRAP will help you to identify and prioritise waste reduction opportunities and actions. We have included a WRAP template on Page 20. A brainstorming exercise may help you in developing a WRAP, to help you with this there is a list of waste prevention ideas on Page 18 and 19.

REVIEWING WASTE ASSESSMENT RESULTS

Before you can develop your WRAP, you will need to look carefully at the results of your waste assessment, site analysis and staff surveys. The following questions may assist you to identify opportunities for improvement

•Are all the materials in your waste stream necessary to the functioning of your business and where are they coming from?
•Is non-recyclable or reusable packing a major component of your waste stream? If so what can be done about this?
•Can some disposable materials be replaced with reusable/recyclable alternatives?
•Which recyclable materials in your waste stream are collected and processed by your local council?
•Are your recycling bins being used appropriately? If no, why not?
•Does your collection bins match the size of the volume you are generating?



HOW TO DESIGN A WRAP

By now you should have a list of the main materials in your waste stream, problem areas and ideas for improvement.

SET TARGETS

You may wish to set targets on decreasing your daily/weekly volume of waste, increasing your daily/weekly amount of recycling or increase productivity by a certain percentage of reused materials. Every business is different but you must ensure that your goals are realistic and achievable.

ALLOCATING TIMELINES

Set a date for an overview/assessment of the WRAP. Remember to give your staff sufficient time to adjust to the new waste strategies.

DELEGATING RESPONSIBILITIES

You will need to carefully set out the steps involved in each of the proposed actions to guide staff and nominate staff members responsible for implementing each of these steps.

STEP 4 IMPLEMEMTING A WRAP

Identify any new equipment you need for separating, storing and managing your new waste system/s. Make sure that your new system for receiving/storing waste and resources is:

•Conveniently located; this will maximise collection efficiency. It is also important that they are kept out of walkways and workspaces; this is also an OH&S issue.

•Colour codes and clear signage for easy recognition; signs and colour coding helps to make it clear what goes in each bin and reduces confusion and contamination of your new system.

•The right size; ensure that bins are of adequate size to avoid materials being put in general waste bins due to size restrictions. You can also use the size of the bin to gauge how much waste is being produced eg. ¾ or ½ full.

•Clean and easy to move; it is wise to purchase strong and sturdy bins that can easily be moved and cleaned. This will reduce negative feelings toward the bins as well as avoid odour issues and fly infestation.



STAFF EDUCATION AND COMMUNICATION

Develop and implement a staff education program aimed at training staff in aspects of the WRAP implementation. Develop a feedback system for staff to provide suggestions to management and/or the team charged with the responsibility of implementing the WRAP.

This will ensure that any fine--tuning of the WRAP can be carried out prior to the assessment of success. It will also help make staff feel a part of the process.
You may also like to develop a staff reward system that encourages successful implementation of the WRAP.

STEP 5 REVIEW THE PROCESS

You will need to review the processes and outcomes to determine which targets have or have not been met and to determine which steps need to be modified.

This process involves:

REVIEWING WASTE CONTRACTOR INVOICES

You can use the same sheet used during Step 2: Assessing Waste Practices.
Compare the original with your new summary of costs; remember to note any costs recovery incurred as part of selling materials for reuse by other businesses.

REVIEW PURCHASING RECORDS

Again you can use the same purchasing form found on Page 13 to compare current purchasing records with those recorded at the beginning of the project.

- Has there been a decrease in the quantities of materials ordered?
- Are there any cost savings associated with this decrease in materials?

CONDUCT A FOLLOW UP WASTE ASSESSMENT

Conducting a follow up waste assessment will allow you to evaluate how well you have achieved your targets. The results of this assessment will also serve as a guide to how you might improve your ability to meet those targets.

MEASURING PROGRAM SUCCESS

Now it is time to look at purchasing, waste contractor and waste assessment results collectively. Here you will need to assess the total costs/cost savings of implementing your WRAP and revisit the waste avoidance and reduction targets set out in your WRAP. Page 21 and 22 provides a table to help you track changes in waste generation



and composition as well as costs. Page 23 provides a table that helps to set and achieve targets. Don't forget that a positive image of your business as a result of implementing a WRAP should be taken into consideration when measuring program success.

Report findings to staff and senior management.

Sharing the success of your WRAP with fellow staff and senior management will allow you an opportunity to provide recognition to all staff who contributed, which will also help them to stay motivated. As part of your reporting you should

- Highlight successful actions
- Identify actions that need improvement
- Identify future actions

Contributing staff should also be encouraged to give feedback on the usability of the new systems and any ways that it could be improved.

STEP 6 IMPROVE WASTE ON AN ONGOING BASIS

Your waste reduction program will evolve over time as the efficiency of your waste reduction systems improve, and staff become more familiar with and supportive of the program. You may also find that you are consistently meeting your taste reduction target for certain actions and can now have the capacity to revise targets in a way that increases waste avoidance and recovery. This step is about monitoring your progress at regular intervals and feeding the information back into the development of your WRAP.

It is important to keep management and general staff up to date with the progress reports on the success of WRAP implementation to ensure the focus, continuity and positive evolution of targets and actions.

Don't forget to promote your success! We love to hear about business doing the right thing, so get in touch with kim@newaste.org.au for FREE promotion for your business!

Business Waste Reduction Project Toolkit

Toolkit Checklist

Step 1: Commit to improving waste reduction in the workplace

- [x] Support from senior management / colleagues.
- [ ] Waste reduction team organised.
- [ ] Conduct staff survey.

Step 2: Assess Waste Practices

- [ ] Waste management and purchasing records reviewed.
- [ ] Waste assessment organised / conducted.
- [ ] Site analysis organised / conducted.
- [ ] Data compiled and main findings reported.

Step 3: Developing a Waste Reduction Action Plan (WRAP)

- [ ] Waste assessment results reviewed
- [ ] Waste reduction opportunities identified (use the waste hierarchy)
- [ ] WRAP developed –
  - Setting targets
  - Allocating timelines
  - Prioritising actions
  - Delegating responsibilities

Step 4: Implementing a Waste Reduction Action Plan

- [ ] Equipment / bins purchased and new systems set-up.
- [ ] Reuse arrangements identified and in place.
- [ ] Staff and management informed and trained on new systems.

Step 5: Review the process

- [ ] Company records reviewed and compared with previous.
- [ ] Follow-up waste assessment conducted and compared with previous.
- [ ] Report findings and cost savings to management and staff.

Step 6: Improve waste practices on an ongoing basis

- [ ] Progress monitored at regular intervals and WRAP modified accordingly.
- [ ] Review goals.



Business Waste Reduction Project Toolkit

Staff Survey

As you may be aware, we are currently reviewing our waste management practices to reduce the quantity of waste w send to landfill and our impact on the environment. The Business Waste Reduction Project is likely to bring man long-term benefits to our organisation and the environment. However, we need your cooperation if we are to succee All suggestions and offers of assistance will be greatly valued.

Please complete this survey (either electronically, or by paper) and return it

to:..... By (date).....

Thank you for your cooperation

---

1) Please provide an importance rating to the following issues:

	***Least* important**	**1**	**2**	**3**	**4**	**5**	***Very* important**
Waste reduction and recycling at home		☐	☐	☐	☐	☐	
Waste reduction and recycling in the workplace		☐	☐	☐	☐	☐	

	Yes	**No**
2) Do you recycle at home?	☐	☐

Please list the materials you most commonly recycle at home:

.....

	Yes	**No**
3) Do you participate in waste reduction, reuse or recycling in the workplace?	☐	☐

4) Please answer yes or no to the following questions/statements:

		Yes	**No**	**Not Applicable**
a)	Do you have a recycling bin in your workspace?	☐	☐	☐
b)	Are you aware of the types of materials that are able to be recycled at work?	☐	☐	☐
c)	The signage on the different bins is easy to understand and user friendly	☐	☐	☐
d)	The recycling bins are conveniently located to encourage recycling	☐	☐	☐
e)	Documents and emails are viewed and filed on computers rather than being printed out	☐	☐	☐
f)	Is your printer set to print double-sided by default?	☐	☐	☐
g)	Do you recycle one-sided document paper for draft reports/notepads etc?	☐	☐	☐
h)	Would you like to receive waste reduction training?	☐	☐	☐

NSW EPA newaste north east waste



Business Waste Reduction Project Toolkit

Staff Survey

5) Do you undertake any other personal waste management practices in the workplace (for example, use a water glass and / or coffee mug instead of plastic disposable cups; purchase recycled items such as paper; refill printer cartridges; before giving customers a plastic bag / spoon / straw ask whether they want one first)? Please list below:

.....

.....

.....

6) Take the time to think about what kinds of waste reduction initiatives you would like to see in place at work and / or what waste reduction activities would benefit your workplace. Please list below:

.....

.....

.....

.....

7) Please list any possible reasons why you think current recycling systems are not effective or why waste reduction initiatives may not work in the future:

.....

.....

.....

8) Are you willing to segregate reusable and recyclable materials at work and place them in the appropriate bins / receptacles? **Yes** ☐ **No** ☐

9) If no, what would prevent you from doing so?

.....

.....

~ Thank you for your assistance ~

Your responses assist us to find better waste reduction solutions for your workplace

NSW EPA newaste north east waste



Business Waste Reduction Project Toolkit

Reviewing Records

Information on *current* waste management practices:

Record details on all waste collection, disposal and management services and costs. If there is not enough space on the table below, create a separate table specific to your business. Details to include are:

- Service details and charges from Waste Collection and Disposal Contractors (individually itemised);
- Costs associated with transporting waste and recyclables to the landfill or transfer station;
- Landfill and transfer station fees;
- Waste charges in Council rates notices if you use Council Waste Services;
- Bin hire, cleaning, repair;
- Equipment maintenance fees (i.e. compactor);
- Record details on revenue received for recycled materials (scrap, metal, aluminium).

Waste stream	Service Provider	Volume Generated			Estimated Volume of bin space / year	Cost of service / year
EXAMPLE:	*Mr. Waste*	No. of Bins *(eg. 1)*	Bin Size *(eg. 240ltr wheelie bin)*	Frequency of collection *(eg. weekly)*	*e.g. 1 x 240ltr bin/week: 1 x 0.240 x 52 = 12.5m³ per year (or 12,480 L/year)*	*$4500*
General waste						
Paper / cardboard recycling						
Glass recycling						
Steel recycling						
Aluminium recycling						
Plastics recycling						
Commingled recycling (i.e. a mix of recyclable materials accepted by your council)						
Paper & commingled recycling						
Food organics recycling						
Garden organics recycling						
Toner cartridges						
Computers						
Oil recycling						
Equipment maintenance						
Hazardous waste						
Pathogenic waste						
Other						
Other						
Total						

NB: Make sure you use consistent units of measurement when recording data so that comparisons can be made (i.e. grams, kilos or tonnes if recording by weight, or litres / cubic metres if recording by volume).

Business Waste Reduction Project Toolkit

Reviewing Records

Information on purchase items:

Record details on material items and consumables purchased for the necessary running of your business. When reviewing your records, it is more effective to record quantities of materials used within a set time period (i.e. 6 months or 1 year).

Examples of common business purchase items are: paper; stationery; food; maintenance; guest/patient/client; and aesthetic items. Once again, if the table below does not allow enough space for your purchase items, you can simply create a separate table more specific to your business.

Material Item	Service Provider	Quantity ordered			Cost
EXAMPLE ITEM		Quantity Ordered	Date Ordered	Price / unit	
Document Paper	*Office Works*	*10 rheems*	02/02/06	10.00	$100.00
Document Paper	*Office Works*	*18 rheems*	26/06/06	10.00	$180.00
Document Paper	*Office Works*	*7 rheems*	14/08/06	10.00	$70.00
Total Cost of Paper					**$350**

Total

Business Waste Reduction Project Toolkit

Waste Assessment Checklist

- [x] Approval to conduct waste assessment
- [ ] Date and time of visual assessments scheduled_____
- [ ] Inspection team/s organised
- [ ] Waste reduction team organised
- [ ] Inspection team briefed on: procedures, OH&S & privacy issues
- [ ] Consult OH&S officer
- [ ] Waste Inspection materials organised (gloves, tongs, clipboard, pencil/pen, waste assessment and analysis forms, camera)
- [ ] OH&S officer and security informed (if necessary)

Table for organising visual inspection waste assessment:

Work Area	Date of Inspection	Time of Inspection	Waste Assessment Team	Number and type of bins to survey
EXAMPLE: *Reception area*	*5th June '06*	*4.30pm*	*Paul and Julie*	*2 x waste and 2 x recycling*

Business Waste Reduction Project Toolkit

General Waste Data Collection Form

Date: _____ **Waste Assessment team:** _____

NOTE: *You will probably need to photocopy this sheet or create another table to cover all workplace areas*

General garbage				Contents (Visual Inspection)	Content % of total bin	Main material items
Sample No	Bin Location	Bin Size	% of bin full			
EXAMPLE: *Garbage (1)*	*reception area*	*20 L*	*100% full*	General Waste	*25%*	*Plastic packaging*
				Recyclable Paper	*20%*	*Old note pads; excess photocopies*
				Recyclable cans, plastics, bottles	*30%*	*Milk cartons, polystyrene cups*
				Other (specify) - *Food organics*	*10%*	*Lunch leftovers*
				Other (specify) - *Garden organics*	*15%*	*Dead flowers/leaves*
				Other (specify) - *Pathogenic waste*	*5%*	*Tissues and a nappy*
Garbage ( )				General Waste		
				Recyclable Paper		
				Recyclable cans, plastics, bottles		
				Other (specify)		
				Other (specify)		
				Other (specify)		
				Other (specify)		
Garbage ( )				General Waste		
				Recyclable Paper		
				Recyclable cans, plastics, bottles		
				Other (specify)		
				Other (specify)		
				Other (specify)		
				Other (specify)		

Total No of bins	N/A	Average size	Average % full	Total General Waste (L)	Total Recyclable paper (L)	Total Recyclable cans, plastics (L)	Other Total (L)

Business Waste Reduction Project Toolkit

Recycling Data Collection Form

Date: _____ **Waste Assessment Team:** _____

NOTE: *You may need to photocopy this sheet or create another table to cover all workplace areas and / or contents*

Recycling				Contents (Visual Inspection)	Content % of total bin	Main material items
Sample No	Bin Location	Bin Size	% of bin full			
EXAMPLE: *paper recycling*	*reception area*	*240 L*	*65% full*	Recyclable Paper	25%	*Document paper*
				Recyclable, cans, plastics, bottles	20%	*Aluminium cans, glass bottles*
				Other (specify) – *garden organics*	27%	*Grass clippings*
				Other (specify) – *scrap metal*	25%	*Roofing iron*
				General Waste*	3%	*Plastic packaging*
				Recyclable Paper		
				Recyclable, cans, plastics, bottles		
				Other (specify)		
				Other (specify)		
				General Waste*		
				Recyclable Paper		
				Recyclable, cans, plastics, bottles		
				Other (specify)		
				Other (specify)		
				General Waste*		
				Recyclable Paper		
				Recyclable, cans, plastics, bottles		
				Other (specify)		
				Other (specify)		
				General Waste*		

Total no of bins	N/A	Avg size	Avg % full	Total general waste (L)	Total recyclable paper (L)	Total recyclable cans plastics, glass (L)	Totals for others (L)



Business Waste Reduction Project Toolkit

Site Analysis

Below are some questions to consider when conducting a site analysis. The type of questions you will need to consider will depend on the type of waste your organisation generates. A site analysis should be conducted for the main waste-generating areas (i.e. office areas, kitchen areas, production areas).

Workplace area: .....Inspector .....Date .....

Site Analysis Questions	Comments / explanation
Are the waste / recycling bins placed in convenient locations?	Waste:
	Recycling:
Are they of adequate size (i.e. not overflowing or at half capacity when being emptied)?	Waste:
	Recycling:
Do the waste bins contain recyclable materials?	
Do all workstations / work areas have recycling bins? If no, what areas don't and why?	
Do the recycling bins have clear signage?	
Are the recycling bins contaminated?	
If recycling is contaminated, is there a visible reason why (eg. waste bin full, inconvenient location)?	
Are products purchased in bulk, limiting the waste of smaller, individually wrapped items?	
Does your workplace consider waste when comparing alternative products and purchase items with recycled components?	
Is paper reused (eg. notebooks and draft copies) where possible?	
Is the workplace able to implement the use of a worm farm or composting for food scraps?	
Are items reused where possible (eg. food containers, coat hangers, etc)	
Is there obvious wastage of materials (e.g. stationery, cardboard, food, fabric, other)?	
What other examples of good practice can you see (e.g. reuse of envelopes as interoffice envelopes, 'BYO' ceramic mugs replacing throwaway cups)?	
What opportunities can be implemented in the short term to reduce waste (eg. giving customers options such as straws in drinks only when requested)?	
What opportunities can be implemented in the longer term (more research may be necessary) to reduce waste (eg. setting up a recycling cooperative with other businesses)?	
Other Observations	

Business Waste Reduction Project Toolkit

Examples of Waste Avoidance and Reduction Opportunities

Office Environment

Waste avoidance and reduction

- Opt for double-sided copying and printing. This may mean purchasing printers and copier machines with this capacity to make it easier for staff to use this option;
- Make the minimum number of copies required;
- Keep mailing lists current to avoid unnecessary use of paper;
- Circulate or share documents, publications, and telephone books. Creating a shared, centralised filing system can be a good way to achieve this;
- Post general announcements in a central location, such as a bulletin board;
- Use inter-office emails instead of hardcopy memos or messages;
- Store documents electronically rather than as hard copies (where feasible);
- Edit and proofread documents on the computer before printing. This can be done using the track changes and comments options in Microsoft Word;
- Eliminate fax cover sheets by using a stamp with company details;
- Fax directly from a computer to eliminate unnecessary printouts;
- Purchase durable, or easily repairable office equipment and furniture;
- Use rechargeable batteries rather than standard batteries where possible;
- Perform routine preventative maintenance of office equipment to ensure longer life.

Recycling & Reuse

- Recover single-sided sheets of paper for reuse in printing draft copies, or as scrap paper;
- Collect toner cartridges for reconditioning and purchase only reconditioned toner cartridges;
- Purchase reusable items such as refillable pens;
- Reuse office supplies, such as inter-office envelopes, binders, file folders, paper clips, etc;
- Establish a system and / or central location for reusable office supplies; and donate reusable furniture, equipment, and supplies to schools, community groups, or charitable organisations.

Cleaners

Waste avoidance and reduction

- Purchase – or ask contractors to use – concentrated cleaning supplies, such as detergents, to reduce packaging;
- Use washable cleaning utensils in preference to disposable paper towels;

- Opt for vacuum cleaners with non-disposal collection bags over those with disposal paper bags;
- Maintain the serviceability of equipment such as vacuums and upholstery cleaners to prolong their life.

Food Preparation and Serving

Waste avoidance and reduction

- Purchase products in bulk and / or concentrated form and dispense them in reusable / refillable containers;
- Purchase reusable serving dishes and utensils over disposable ones;
- Use bulk dispensers for condiments (e.g. sugar, milk, jams, and coffee whiteners) instead of individually wrapped packages;
- Opt for produce suppliers that can provide meats, baked goods and dairy products in reusable containers or, work with existing suppliers to reduce or eliminate packaging where feasible;
- Practice effective inventory management to prevent spoiled and out of date products (including screening the used by dates of goods received);
- Track daily food production volumes versus waste generation volume and, where necessary, adjust production amounts accordingly to reduce waste (e.g. controlling or minimising portion sizes).

Waste recycling and recovery

- If you generate used cooking oil, consider using this byproduct as bio-diesel fuel - cooking oil recyclers can provide you with drums for storing the oil and can arrange to have these picked up on a regular basis.

Landscape Gardening

Waste avoidance and reduction

- Buy consumable materials in bulk to reduce the amount of packaging used;
- Eliminate plastic bags from outdoor litter baskets and / or use durable bags for collecting landscape waste and litter;
- Practice inventory management to prevent equipment unnecessarily going out of service (i.e. prolong the life of your equipment).

Waste recycling and reuse

- Mulch / compost garden organics; or sell wood chips from tree lopping for mulch.

General Recommendations

- Minimise packaging at the source by working with your product suppliers, or self regulate by buying in bulk, or choosing alternative brands or products with less packaging;
- Minimise consumables by opting for reusable over disposable products;
- Look for ways of effectively using by-products (including packaging). If your company generates a significant amount of a particular type of waste material, the NEWF may be able to assist in identifying a market for this material;
- Maintain the serviceability of your equipment to avoid premature disposal (i.e. reduce the rate at which you send old equipment to landfill). You may even wish to pass on redundant equipment for spare parts

Business Waste Reduction Project Toolkit

Waste Reduction Action Plan

NOTE: You will probably need to photocopy this sheet or create another table to cover all actions and steps you have identified

Action	Steps	Who	Target	Timeframe	Expected outputs
EXAMPLE: **1. Reduce food waste**	1. Identify food waste reduction options and decide on the most appropriate method for our company		Achieve an average of an 80% reduction in food waste in waste bins	**Complete Step 1** by July 30th 2006 **Complete Step 2** by August 30th 2006 **Complete Step 3** - Monitor the success of the new system every fortnight for first month, then once a month until successful. Achieve reduction target within 6 months of introducing new system. **Complete Step 4** -Ongoing monitoring to be carried out every 6 months for the first two years, then every year thereafter.	Providing bins throughout the complex for recycling and composting has the potential to reduce waste by up to 23%, based on an 80% recovery rate.
	2. Purchase equipment for the new collection system if necessary				
	3. Monitor the effectiveness of new reduction options and tailor the system to improve its effectiveness until satisfied				
	4. On-going monitoring of program effectiveness				
2. Provide ongoing education / signage throughout the business	1.				Educational tools that help promote or aid in effective recycling are crucial to waste reduction success. **All other Actions are dependent on this Action**
	2.				
3.	1.				
	2.				
4.	1.				
	2.				
5.	1.				
	2.				

Business Waste Reduction Project Toolkit

Summary of waste assessment records

Complete these forms at the beginning and end of each assessment interval and compare results over time. You may need to photocopy this sheet or create another table to cover all records.

Review Records – Waste Management details and costs - EXAMPLE -		
Waste Stream	**Total Volume of bin space available / year**	**Total Cost per year**
General Garbage	73 m^3	$1,865.00
Cardboard Recycling	26 m^3	$530.00
Glass Recycling	13 m^3	$300.00
TOTAL	**112m^3**	**$2,595.00**

Review Records – Waste Management details and costs		
Waste Stream	**Total Volume of bin space available / year**	**Total Cost per year**
TOTAL		

Review Records – Purchasing - EXAMPLE -		
Material item	**Total Quantity consumed / year**	**Total Cost per year**
Paper	145 rheems	$630
Envelopes	30 boxes	$220
Disposable cups	10 x boxes of 100	$110
Total	-	$960

Review Records – Purchasing		
Material item	**Total Quantity consumed / year**	**Total Cost per year**
TOTAL		

Business Waste Reduction Project Toolkit

Summary of waste assessment records

Note: You may need to photocopy this sheet or create another table to cover all records

Review Records - Waste Assessment Results - EXAMPLE -				
Waste Stream:	**General garbage**	**Paper and cardboard recycling**	**Commingled recycling**	**TOTAL**
Volume Generated	52m^3	25 m^3	8 m^3	**85 m^3**
Average volume / staff member	0.52 m^3	0.25 m^3	0.8 m^3	**0.85 m^3**
Composition of general waste bin	45.8 m^3 (88%)	0.4 m^3 (1.5%)	0.00%	**46.2 m^3**
Composition of paper recycling bin	3.1 m^3 (6%)	24.6 m^3 (98.5%)	0.04 m^3 (0.5%)	**27.74 m^3**
Composition of commingled recycling bin	3.1 m^3 (6%)	0.00%	7.96 m^3 (99.5%)	**11.06 m^3**

Review Records - Waste Assessment Results				
Waste Stream:	**General Garbage**	**.....** **Recycling**	**.....** **Recycling**	**TOTAL**
Volume Generated				
Average volume / staff member				
Composition of general waste bin				
Composition of .....recycling				
Composition of .....recycling				
Composition of .....recycling				

Business Waste Reduction Project Toolkit

Reviewing Progress

NOTE: You will probably need to photocopy this sheet or create another table to review all actions and steps you have identified

Target	Steps	Timeframe	Tasks met	Net change in waste	Net costs / costs recovery
EXAMPLE: Achieve an average of an 80% reduction in food waste in waste bins	1. Identify food waste reduction options and decide on most appropriate method	Complete Step 1 by July 30th 2006	Yes	Obtain results from the start and finish of your assessment period from the completed forms in Appendix 9: 'Summary of Waste Assessment records' • Review records – waste management details and costs; • Review records – waste assessment results For each of these two forms, subtract results for the initial assessment from the final assessment to get net change in waste figures.	Obtain results from the start and finish of your assessment period from the completed forms in Appendix 9: 'Summary of Waste Assessment records' • Review records – waste management details and costs; • Review records – Purchase items; For each assessment, sum the total costs of waste management and purchasing. Subtract the initial costs from the final costs to see if attempts to achieve this target have resulted in costs incurred / saved.
	2. Purchase equipment if necessary	Complete Step 2 by August 30th 2006	Yes		
	3. Monitor the option's effectiveness and tailor the system to improve its effectiveness until successful	Monitor the success of the new system every fortnight for first month, then once a month until successful.	Yes		
	4. On-going monitoring of program effectiveness	Complete Step 4 -Ongoing monitoring carried out 6 monthly for first two years, then every year thereafter.	In progress		

