



Win with Waste for Schools

How to set up a recycling programme and drop-off centre

Waste is part of our everyday lives. Everything we buy and do creates waste. Why throw your waste away? Waste can actually be useful. It can be re-used or recycled. Collect waste for recycling and **Win with Waste**.

How can your school Win with Waste?

- Include waste management and recycling in the curriculum
- Set up a Win with Waste task team
- Do a waste opportunities audit of the waste in your school
- Contact recycling companies to find out about recycling options
- Start a recycling programme in your school
- Set up your own recycling drop-off centre (people bring and you sell)

What is recycling?

Steps involved in the recycling process

First, we sort our waste, separating general waste from items that can be recycled. Glass, cans, paper, plastic and electronic items can be recycled.

We put the recyclables out for collection or take them to a collection point.

The recyclables are collected, treated, taken to a factory, broken down or melted and used to make new products.

This whole process is called recycling. We, as the general public, are only involved in the first two steps, i.e. sorting and collection.



Why collect waste for recycling?

Using recyclables rather than virgin raw materials to make new products:

- could use less water and energy
- could mean less air and water pollution during the manufacturing process
- saves natural resources

Less waste going to landfills:

- saves scarce landfill space
- reduces the need for new landfills
- saves transport costs

Collecting waste for recycling could mean:

- more jobs for informal collectors and sorters
- less litter lying around on our streets and veld
- less water and air pollution caused by littering

A recycling programme in your school will:

- help to manage and reduce your waste
- create a cleaner school
- protect the environment from too much waste
- earn money from selling recyclables

How to start a Win with Waste Programme



1. INCLUDE RECYCLING IN THE CURRICULUM

Download [Are You Ready to Recycle?](#) - an education programme on making wise choices about waste. Although it targets intermediate phase learners, you can adapt it for lower or higher grades.



2. SET UP A WIN WITH WASTE MANAGEMENT TEAM

Set up a Win with Waste Management Team consisting of representatives of

- school management and parents
- educators and learners
- cleaning staff

Choose an enthusiastic educator or staff member as a Win with Waste champion to lead the team and the project. Success depends on whole school involvement. Where practical incorporate all the activities as part of the curriculum.



3. AUDIT YOUR WASTE

Waste Creation Audit

Do a walk-through audit of your school to find out the type of waste your school creates. Draw up a survey form with the following headings:

Location/Event	Type of waste	What happens to it?

Do the same exercise for school events and sporting events

Waste Opportunities Audit

As a classroom activity use the information from the waste creation audit to do a waste opportunities audit. Draw up a survey form with the following headings:

Type of waste	No action?	Remain as waste?	Opportunities			
			Reduce?	Re-use?	Repair?	Recycle?



4. MAKE CONTACT

Success depends on good research and planning. Do your homework, find answers to all your questions and decide what you need. Then you will be ready to prepare your business plan.

Before you start a recycling programme or set up a drop-off centre contact **recycling companies** for advice and ask your questions. See page 4 for contact details.

- Will you visit the school to tell us about recycling?
- Do you have recycling programmes for schools?
- Do you have educational materials for the classroom?
- Do you run competitions for schools?
- Where is the nearest drop-off point?
- What is needed to set up our own collection point or drop-off centre?
- What recyclables do you accept and what don't you accept?
- Do you supply bags, drums or containers?
- Do we need to clean and sort?
- Who will collect?
- Where can we deliver?
- How much do you pay?
- What are the health, safety, fire and environmental risks?
- What about security?
- Do you provide training?
- How can you help us to get started?

CONTACT DETAILS

CANS	Collect-a-Can Tel +27 (0)11 466 2939	www.collectacan.co.za e-mail: info@collectacan.co.za
GLASS	The Glass Recycling Company Tel 0861 2 GLASS (45277)	www.tgrc.co.za e-mail: info@tgrc.co.za
PAPER	Paper Recycling Association of SA Tel +27 (0)11 803 5063 e-mail: info@pamsa.co.za	www.recyclepaper.co.za
	Mpact Recycling Tel +27 (0)11 538 8600	www.mpactrecycling.co.za
	Neopak Recycling Tel +27 (0)11 799 7111 e-mail: info@neopakrecycling.co.za	www.neopakrecycling.co.za
	Sappi ReFibre W.Cape: All Other provinces:	www.sappirefibre.com Tel +27 (0)31 713 1473 Tel +27 (0)13 741 3378
PLASTICS	Plastics SA Tel +27 (0)11 314 4021	www.plasticsinfo.co.za e-mail: Rimeij.davey@plasticsSA.co.za
	PETCO Tel 0860 147 738	www.petco.co.za e-mail: info@petco.co.za
	POLYCO Tel +27 (0) 21 531 0647	www.polyco.co.za
	SA Vinyls Association Tel 082 444 6866	www.savinyls.co.za/ e-mail: info@savinyls.co.za
	Polystyrene Association of SA Tel +27 (0)21 010 1493	www.polystyrenerecyclingnetwork.com e-mail: Adri@polystyrenesa.co.za
AEROSOLS	AMASA Tel +27 (0)11 234 0467	www.aerosol.co.za email: execdir@aerosol.co.za
CARTONS (Beverage)	Tetra Pak South Africa Tel +27 (0)11 570 3073	www.tetrapak.com e-mail: Agripa.Munyai@tetrapak.com
e-WASTE	e-Waste Association of SA Tel +27 (0)31 535 7146	www.ewasa.org e-mail: info@ewasa.org
OIL	ROSE Foundation Tel +27 (0)21 448 7492	www.rosefoundation.org.za e-mail: usedoil@iafrica.com

Contact the solid waste department of your **local municipality** and ask:

- Do we need a licence or permission to set up a drop off centre, especially if it will be open to the public?
- Do we need to submit building plans?
- Where is the nearest municipal garden site or drop-off centre?
- How can you help us to get started?

Click on [My Waste](#) or e-mail info@mywaste.co.za to find your nearest drop-off centre.



5. DISCUSS AND DECIDE

What will be the best for your school? Think very carefully about the safety and security implications before you decide

- Separate and take to a drop-off centre?
- Set up a drop-off centre for school use only?
- Open your school drop-off centre to the public?
- Encourage learners to sort recyclables?
- Learners to actively collect waste from neighbourhood sources?

Present the idea to the principal, school governing body and the learners, and obtain the necessary approval.

Use the information from the waste audits and work with the recycling companies to set up an internal recycling programme for your school.

Start your planning exercise to set up a recycling drop-off centre. Where practical, make as many of the activities part of classroom activities. Consider two Win with Waste Task Teams - one to manage the internal recycling programme and the other to manage the drop-off centre.



6. FIND A SITE

Identify a suitable site on your school premises. Ask recycling companies for advice on the layout of the site. Prepare a rough floor plan.

1. Consider:

- unused space the size of a double garage
- space next to outside fence or wall for easy access by parents, the public and collectors
- location away from high traffic areas
- not visible from neighbouring properties
- nuisance value of odours, flies and bees
- health and safety risks
- possible fire and environmental risks
- security aspects to prevent pilfering or damage to containers

2. Estimate your space requirements based on:

- volumes and type of recyclables to be stored
- period to be stored
- containers (type, size and quantity)
- need for sorting tables
- storage space for baling equipment
- access, turning space and headroom for collection vehicles



3. What will you collect?

- Cans
- Glass
- Paper
- Plastics
- Used oil
- Electrical and electronic waste (e-waste)

Oil and e-waste are potentially hazardous and special precautions need to be taken. Discuss with the relevant recycling companies or agents.



4. Possible sources of recyclable materials

- Own school waste
- Learners and educators bring from home on special days
- Parents bring in recyclables

Think carefully about the following possible sources:

- Open your site to the public to bring in recyclables
- Identify and actively collect from neighbourhood sources. This should only be done in consultation with owners/managers, under strict educators' supervision and with the necessary permission from parents.
 - nearby schools
 - restaurants
 - sports stadiums
 - outdoor events
 - shopping centres
 - offices





7. DECIDE WHAT YOU WILL NEED

Here is a checklist to help you decide

ITEMS	YES	NO	SOURCE?
1. Labour			
Security			
Housekeeping			
Sorting			
Other tasks			
Quantity			
2. Volunteers (from school)			
Tasks			
Quantity			
3. Services			
Access to taps for cleaning and washing			
Access to electricity			
Access to ablution facilities			
4. Security			
Fencing			
Walls			
Lockable gate			
5. Offloading area			
Parking space for vehicles			
Paving to support heavy trucks			
Paving to prevent mud during rain			
6. Sorting area (if required)			
Covered or uncovered?			
Protection from wind and rain			
Paving			
7. Storage area			
Covered or uncovered?			
Paving			
Easy to clean			
Recyclables need protection from rain, storm water runoff and fire			
8. Administration			
Access to telephone			
Access to office equipment for recordkeeping			
Access to "paymaster" to receive payment and manage finances			

ITEMS	YES	NO	SOURCE?
9. Containers			
Size			
Type (for each waste stream)			
Quantity			
Closed (to prevent wind-blown litter)			
Secure (to prevent pilfering)			
Containers for contaminated waste, non-recyclables, general waste from site			
Labels/signage for containers			
10. Equipment			
Scales			
Sorting tables			
Baling machines			
11. Housekeeping equipment			
Hoses			
Buckets			
Rakes			
Brooms and brushes			
Cleaning liquids and disinfectants			
Insect and fly repellents			
12. Safety equipment			
Protective equipment and clothing			
Fire extinguisher			
First aid kit			
13. Signage			
Signboards to include: name of site, hours of operation, materials accepted/not accepted, contact details, sponsorship if applicable			
Direction signboards - negotiate with local municipality			
14. Other			



8. MANAGE AND OPERATE THE SITE

Success depends on good management and constant monitoring

1. Drop-off centre management

- Draw up procedure and controls
- Monitor volumes
- Phone for collection
- Monitor payments
- Manage staff and volunteers
- Monitor housekeeping, health and safety

2. Collection

Based on the information from recycling companies, identify potential collectors to service your site. Consider whether to use one collector to take all materials or different collectors to take different types of materials. Make your decision based on:

- Type of material collected
- Price offered
- Payment methods and frequency
- Minimum volumes required to be collected

3. Payment for recyclables

Negotiate with recycling company or nominated agents, but it depends on:

- Market demand
- Sufficient volumes
- Sorting and preparation of recyclables
- Quality and level of contamination

4. Security and access control

- Security during hours of operation
- Security after hours
- Access for vehicles
- Access for public

5. Recordkeeping

- Keep records : weights, volumes and types of recyclables sold
- Prices paid by collectors

6. Pollution control

- Drainage system to sewer, for storm water runoff and effluent from site
- Dust and emission control measures

7. Housekeeping

- Keep site and containers neat and tidy at all times to prevent bees, flies, rats, odours, unsightliness and accidents
- Sweep, wash and disinfect the site regularly
- On a daily basis pick up litter inside and outside of the site's fence
- Check and maintain containers and equipment

8. Safety and emergency

- Safety, emergency and fire protection plans and procedures
- Access to telephone to contact fire, police, or emergency service personnel in an emergency

9. Training

- Sorting, baling and weighing, if applicable
- First aid, safety and emergency procedures

10. School communication programme

- Ongoing communication plan
- Identify communication channels – assembly, educator meetings, staff meetings, notice boards, newsletters, posters. Include information on:
 - reasons for controlling waste
 - advantages of controlling waste
 - Win with Waste programme objectives and how it works
 - fact finding and audit process
 - launch date
 - implementation and operation guidelines

11. School awareness programme

- Ongoing awareness plan
- Implement internal recycling programme in the school
- Include recycling-related activities in the curriculum
- Launch recycling programme
- Series of competitions with winning entries to be used for launch activity and ongoing awareness programme:
 - Drama/song using costumes and musical instruments made from waste
 - Poster competition
 - Leaflets
 - Slogans
 - Art from waste
 - Teaching aids from waste
- Join in competitions organised by recyclers or other organisations
- Arrange school outings to landfill sites, recycling depots, etc.
- Check your local environmental education centre to see if it offers education programmes on waste and the environment

13. Advertising (if open to the public)

- Click on [My Waste](#) or e-mail info@mywaste.co.za to advertise your drop-off centre free of charge
- Local community newspapers
- Library notice boards
- Recycling companies

14. How to keep it going

- Keep the site clean, neat and tidy
- Monitor containers
- Phone for collection
- Keep records of collections
- Manage money (income and costs)
- Promote its use



9. DRAW UP A "BUSINESS PLAN" AND BUDGET

Prepare a business plan as if you were about to start a formal business. Use the following headings:

1. General

- Name of school and recycling centre
- Physical, postal and e-mail addresses
- Contact persons and telephone numbers
- Management and staffing structure

2. The operation

- Description of the operation (cans, glass, paper, plastics, oil, electronic waste - collection by recyclers)
- Goals of the operation
- Area of operation
- Description of the market (available recyclables, source of recyclables, price for recyclables, competitors)
- Start-up funding needed and available
- Working funding needed and available

3. Start-up costs

- Site preparation, containers, labels for containers, equipment
- Security, walls/fencing, signboards
- Administration costs - Telephone, office furniture, advertising, education of public

4. Labour requirements

Number, type and cost

5. First year plan – month-by-month

- Recycling targets, sources of recyclables
- How and to whom you will sell recyclables
- Price you will get for recyclables
- Estimated income and expenditure
- Estimated profit or loss

6. Second year plan

As for first year plan above, but quarter-by-quarter (every 3 months)

And finally – don't forget the very important **programme review**

- What works and what does not?
- Are people participating?
- Is it being used correctly?
- Do the results justify the efforts?
- What changes are required?

GOOD LUCK!



Compiled by Liz Kneale

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