

HOW TO SET UP A RECYCLING SYSTEM:

A SCHOOL'S GUIDE



The Schools Recycle Right Challenge offers a wide range of recycling themed activities, lesson plans and events ideas that have been developed specifically for Australian schools. Each resource has been developed to enable learning by doing, and learning by having fun!



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INTRODUCTION

This is a step-by-step guide on how to establish a recycling system at your school. A recycling system involves collecting recyclable materials at school and taking them to (or getting them collected by) a recycler.

Remember though, it is always better to reduce waste first, reuse where possible, and then recycle.

WHY SET UP A RECYCLING SYSTEM?

Recycling not only benefits the environment (see Box 1) but in some cases can save a school money on waste disposal. Setting up a recycling system is a hands-on, interdisciplinary lesson that educates students about the environment, personal responsibility, community action, sustainability and natural resource management. It can easily link with the curriculums of business studies, commerce, economics, chemical sciences (what materials are made from), geography (mapping and impacts of landfill, agriculture and mining), as well as develop skills in numeracy, and critical and creative thinking. School recycling programs impact students, their families, and the overall waste diversion of a community. They can also provide an opportunity for the school to gain public recognition for its achievements.

A recycling policy can be incorporated into a School Environmental Plan (see Appendix 1). Purchasing items with recycled content could be part of a green purchasing policy (see Appendix 3). If your school needs help becoming more sustainable, see Appendix 2 for details on the Australian Sustainable Schools Initiative.

BOX 1

WHY IS RECYCLING IMPORTANT?

Your students (and colleagues) may ask you this question. So here are some answers:

- ♻️ Recycling reduces the amount of waste going into a landfill, helping to prolong its useful life
- ♻️ Recycling saves energy and thus greenhouse gas emissions
- ♻️ Recycling creates jobs
- ♻️ Recycling saves natural resources such as oil and water
- ♻️ Recycling reduces pollution
- ♻️ Recycling provides raw materials for industry
- ♻️ Recycling makes a difference



STUDENT INVOLVEMENT



Outcomes for schools take the form of economic savings, environmental, social and educational benefits.

This is a great opportunity to get your students involved in a practical, 'real life' situation, from conducting a feasibility study of setting up a recycling program, to the ongoing management. Students can contribute through:

- ♻️ research / data gathering
- ♻️ sharing information / reporting findings
- ♻️ conducting a school / community education campaign
- ♻️ debating options
- ♻️ decision-making
- ♻️ implementing communication strategies
- ♻️ monitoring, evaluating, modifying
- ♻️ celebrating!
- ♻️ Creating a green team

You may wish to consider recognition awards for outstanding individuals or classes e.g. recycling trophies!

Lesson Plans

To get your students enthused, choose from a selection of Planet Ark's **Lesson Plans** that use fun activities to teach kids about recycling and the environmental benefits that follow.

Talks/Excursions

Consider inviting an expert in recycling to talk to your class or school. In some locations, recycling companies such as **Bingo** and **Cleanaway** provide school education programs to help teachers and students understand how each product is recycled.

There are also a number of government-funded organisations that may provide workshops and field trips in your state (e.g. www.wow.sa.gov.au).

Alternatively, contact your local council or recycling company to find out whether they can help you organise an excursion to a recycling facility.



FREE PROGRAMS

There are many free recycling programs that schools can participate in.

'CARTRIDGES 4 PLANET ARK'

Cartridges.PlanetArk.org

'Cartridges 4 Planet Ark' is an innovative recycling program that provides Australians with a free, easy and environmentally-accredited way to recycle their used printer cartridges. 'Cartridges 4 Planet Ark' is an example of an effective extended producer responsibility program. The cost of collecting, transporting, and recycling the cartridges, as well as promoting the program, is paid for by the participating manufacturers - Brother, Canon, Epson, HP, Konica Minolta and Kyocera. The program also provides resources to help schools promote printer cartridge recycling. For a free collection box at your school, [register online](#) or call 1800 24 24 73.

MOBILEMUSTER

www.mobilemuster.com.au

MobileMuster is the mobile phone industry's official product stewardship program. It provides an Australia-wide free recycling service for all types of mobile phones, and mobile phone batteries, chargers and accessories. This includes collection boxes for schools, businesses and other organisations. The program also provides learning modules to help students develop a better understanding of the recycling process. [Register online](#) to run a MobileMuster collection or call 1300 730 070 to find out more.

CONTAINER DEPOSIT SCHEME COLLECTIONS

Your school may be able to raise funds by collecting containers that are eligible under state run Container Deposit Schemes. Eligible beverage containers can be returned to designated collection depots to earn a 10 cent refund per container. In all states, scrap metal recyclers may pay a nominal amount for materials such as aluminium cans and car batteries. Ask your local council, or find a nearby recycling company for further information at [BusinessRecycling.com.au](https://www.businessrecycling.com.au).

Schemes are currently in place in SA, NT, NSW and QLD with the WA scheme expected to commence on 1st October 2020. To find out more about the schemes visit: recyclingnearyou.com.au/containerdeposit/index.cfm

BATTERY WORLD SCHOOLS RECYCLE PROGRAM

www.batteryworld.com.au/recycling/school-recycling-program

Battery World offers a national opportunity for schools of Australia to recycle, or responsibly dispose of, all types of used batteries. Recycling packages for primary schools are developed according to each school's needs and can include web based teacher resources, presentations at school assemblies, posters, information sessions for staff, battery recycling bins, and mini recycling bins.

NATIONAL TELEVISION AND COMPUTER RECYCLING SCHEME

recyclingnearyou.com.au/ewastescheme

In 2011 the Australian Government introduced a national, industry funded, recycling scheme for televisions and computers. The scheme prevents millions of old TVs and computers from being sent to landfill by providing opportunities for the community to recycle their unwanted televisions and computers free of charge. Find your nearest recycling option for [computers](#) or [televisions](#).

COUNCIL PROGRAMS

Some local councils provide recycling services for schools. Check with your local council, or visit www.BusinessRecycling.com.au to find a nearby commercial recycling company.



Visit SchoolsRecycle.PlanetArk.org to register your school's events and get information, updates and free resources to help plan your activities.

BOX 3

CONDUCTING A WASTE AUDIT

Use these steps as a guide to help your class conduct a simple waste audit.

1. Choose a day or a week to commence the audit. audit with one class or a number of classes. Ask your students to keep all of their packaging and food scraps from recess and lunch.
2. In the classroom, place nine large containers labelled with the following categories: plastic containers, glass, milk and juice cartons, paper and cardboard, metal, squeeze pouches, chip and snack packets, plastic wrap and bags, and food scraps. On the first day, the class can work collectively to identify their packaging items and sort them into these nine categories.
3. After each recess and lunch, for the duration of the audit, ask your students to continue placing their packaging and food scraps into the correct boxes.
4. Keep a tally, or record the weight, of the items collected in each box over the week or the day. Ask the students to fill in the results on a large chart.
5. Average the number of items collected per day over the five days, then multiply by 20 to obtain a monthly estimate. You can then extrapolate this amount to calculate the waste generation rate for all the classes in the school, or convert each material type into a percentage of the total amount discarded at your school.
6. If you would like a more comprehensive picture of the waste generated by your school as a whole, select different groups of students to also assist in monitoring the waste generated in the library, computer labs and art studios, offices, the canteen and other parts of your school and repeat steps 1 to 5. You may need to modify the container labels for the different materials collected, and you may need a longer audit period (e.g. a fortnight or a month) to get accurate waste generation rates for all areas of your school.

ITEM	DAY 1	DAY 2	DAY 3	DAY 4	DAY 5	TOTAL
Milk and juice cartons						
Plastic containers						
Glass						
Paper and cardboard						
Metal						
Squeeze pouches						
Chip packets						
Plastic wrap and bags						
Food scraps						
Aluminium cans						
Printer cartridges						
Computers and accessories						
Mobile phones and accessories						
Books						
Steel cans						
Metal						
Fluorescent lights						
Other / miscellaneous						



MILK AND JUICE CARTON RECYCLING

FAST FACTS:

- ♻️ Milk and juice cartons are made from a material called liquid paperboard (LPB), which is constructed from cardboard with layers of plastic, and in the case of long-life products, a thin layer of aluminium foil. Cardboard makes up the largest proportion of these materials - about 88% of Tetra Pak 1 litre fresh milk carton for example.
- ♻️ Most councils in Australia collect LPB
- ♻️ For more an 40 years LPB has been used to package a wide range of foods including milk, juices, cream, custard, detergents, sauces and soups.
- ♻️ Flavoured milk and juice cartons under 1ltr are accepted for recycling in states that have container deposit schemes. Find out information about the container deposit scheme in your state. Visit recyclingnearyou.com.au/beverage-cartons



recycling benefits



Like all paper, the specialised paperboard in milk and juice cartons is easily recycled – and most councils around Australia collect them for recycling.

Thank you for recycling

PLANET ARK

IS IT FEASIBLE FOR MY SCHOOL?

There are some important considerations to take into account when evaluating the feasibility of a recycling system in your school.

Why not involve your students in the process by asking them to analyse the costs and benefits of such a system as part of a recycling lesson plan or in combination with other curriculum studies?

1 WHAT MATERIAL CAN WE RECYCLE?

recyclingnearyou.com.au/materials

Many materials can be recycled, however some recycling options and services may not be available in remote locations. Some recyclers provide co-mingled recycling bins, making it easy to recycle items like:

- ♻️ Paper and cardboard
- ♻️ Aluminium cans
- ♻️ Milk and juice cartons
- ♻️ Plastic containers
- ♻️ Glass
- ♻️ Steel cans

In addition to the free recycling programs mentioned in the section above, you can also recycle these materials through dedicated collection systems:

- ♻️ Food and garden scraps
- ♻️ Plastic bags
- ♻️ Clothing
- ♻️ Lights (e.g. fluorescent tubes)



2 HOW MUCH IS LIKELY TO BE COLLECTED?

A collection system may only be worthwhile if your school is likely to collect a reasonable quantity of recyclable materials. If your school has previously done a waste audit, you'll be able to predict the amount of expected materials with good accuracy. If it hasn't done a waste audit before, you could conduct a waste audit with students, using the steps in Box 3 as a guide. You may simply want to choose one or two materials to recycle first, and then review other materials in the future.

3 FIND A RECYCLER

If you are considering participation in one of the free programs mentioned on pages 4 and 5, you can skip ahead to Transportation (step 4).

The first step in finding a recycler is to review your school's current waste management contract. Find out whether the waste removal contract can be renegotiated during the contract term, whether the company your school works with can provide a recycling service or could expand the current service provided, and review any costs that may be incurred by changing or expanding your current waste contract.

If your current contractor can assist you in the way you want, the next step is to consider Transportation (step 4).

If you decide to work with another company, or to get quotes from other recycling providers, simply search on [BusinessRecycling.com.au](https://www.businessrecycling.com.au) for recycling services in your area. You may also wish to contact your local council to find out about any recycling services they offer schools.

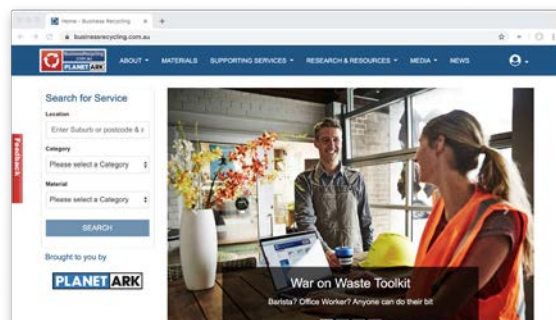
To search:

- go to the 'Search for service' tool
- enter your suburb or postcode
- select the 'Category' of materials you want to recycle
- select the type 'Material' you want to recycle

The results of your search will feature a map and a list of recycling services, separated into 'Drop Off Locations' and 'Pick Up Locations'.

When contacting the recycling services, ask the questions outlined in Planet Ark's [Choose the Right Recycler Checklist and Factsheet](#). This will ensure you secure an environmentally and legally reputable recycling service provider.

Remember to ask for quotes for the collection of your recycling (if applicable), the recycling transportation fees (if any), and any contract management or equipment leasing expenses your school will be liable for.



Search for Service

Location

Enter Suburb or postcode & s

Category

Please select a Category

Material

Please select a Category

SEARCH

4 TRANSPORTATION

In the event that the school needs to transport its recycling to a drop off point, you may consider establishing a roster of volunteer staff or parents. You'll need to think about how often the recycling will need to be transported, who will coordinate the volunteers, how the recycling will be transported (e.g. inside bulka bags or cardboard boxes) and whether there are any insurance or health and safety considerations.

5 ESTIMATING THE COSTS /SAVINGS AND TIME REQUIRED

Estimate the costs (if any) your school will incur for establishing and maintaining the recycling service including transport, equipment (e.g. bins), storage facilities, as well as the time needed for students and staff to implement the system.

Discuss with your principal whether any funds can be allocated to the program. Consider highlighting the potential for waste minimisation initiatives to save the school money by reducing waste disposal expenses, as well as the environmental benefits and linkages to the curriculum. Reducing paper usage not only saves money, but also reduces landfill use.

6 COLLECTING AND STORING EACH MATERIAL

The best way to collect and store recyclable items will differ from school to school. Things to consider include:

- ♻️ **Location of collection receptacle** – examples include the school canteen or a well-frequented, covered area in the playground. Involve your students, by asking them to map the school and suggest recycling collection points as a lesson in local geography.
- ♻️ **Type of collection receptacle** – will it be outdoors or indoors, big or small, secured or unsecured? Will it need wheels? Whichever type of container you choose, it will need to be easy to remove the items from the container when the recycler collects them, or when they are emptied for transport to the recycler.
- ♻️ Who will be responsible for **monitoring and emptying** the collection receptacle? Can students take responsibility as part of the school's sustainability program or the Student Representative Council? If not, your school's cleaners, groundskeeper, or rostered volunteers (if you have them) may need to regularly empty smaller collection containers into a single, large container for collection by the school's recycling contractor.
- ♻️ Any **health and safety** issues that need to be addressed. Assess any OH&S risks that may arise from your proposed recycling program, and discuss these with your school principal before you begin.
- ♻️ Ensure you have **effective signage** at the collection points (see Step 8 for further information).

7 GOALS, RECORD-KEEPING AND REPORTING

Set a recycling goal based on your original waste audit results (step 2). Ensure your goals are measurable, achievable, and time-bound. Keeping records of any the costs incurred by your recycling program, and reviewing the frequency of collections / drop off trips will help to determine if what you have in place is appropriate for the amount being recycled.

Decide early on whether other data should be collected for a thorough assessment of the program. For example, you may wish to monitor and record the number of wheelie bins / skips of recycling that are collected, compared to the amount filled with rubbish. You may also decide to include records of information sessions and conversations with students and teachers about the new programs and how it works, or even their level of awareness of, and participation in, the new program.

Use this data to evaluate your achievements in relation to your goals. You will then be able to review the effectiveness of your program, make any improvements or adjustments to the way the program works, and to establish new goals for the program in the future. A range of monitoring tools and resources can be found in Sustainability Victoria's '[How to reduce, reuse and recycle waste in schools](#)' guide

8 BUILDING SUPPORT, AWARENESS AND PARTICIPATION

Once your school has established its collection system, it's important to build awareness amongst students, staff, parents and perhaps even the local community. School assemblies, day sheets, school newsletters and signage can all help with communicating your message within the school community.

When staff and students understand how a recycling system can benefit both the school and the environment, they are more likely to support and participate in the scheme, and less likely to contaminate the collection with other waste materials.

Designing signs can be a class activity if you would like to have tailored signs and posters for your school. Alternatively, you can download signs as PDFs for printing from Planet Ark:

schoolsrecycle.planetark.org/coords/signage.cfm

recyclingnearyou.com.au/resources/posters

For handy tips on effective signage and creating behaviour change, see '[Sending the right signs](#)' on page 13 and '[Getting a foot in the door](#)' on page 14.

Communicating the success of your recycling program to staff and students is also important, as it will show that their actions are leading to worthwhile results. Where possible, encourage your students to initiate these communication and feedback mechanisms by reporting in:

- ♻️ Newsletters
- ♻️ Annual reports
- ♻️ Special noticeboards
- ♻️ The school's home page on the internet
- ♻️ Speech nights
- ♻️ Charts around the school showing the number of full bins of garbage collected each week, the amount of paper recycled, the amount of paper used etc.



Visit SchoolsRecycle.PlanetArk.org to register your school's events and get information, updates and free resources to help plan your activities.



USEFUL TIPS AND ORGANISATIONS

- ♻️ Register your school for the **Schools Recycle Right Challenge** (October-November each year) to gain access to Planet Ark's **Waste-Free Lunch Guide** and other great waste reduction ideas for your school.
- ♻️ Schools can collect useful items like clothes and even household items for nearby charity shops or as part of school fundraising initiatives.
- ♻️ A compost or worm farm is one of nature's best recyclers of food and garden scraps. To find out more, or to establish a compost bay or worm farm at your school, check out these resources:
 - **Costa's Guide to Organics for Schools** schoolsrecycle.planetark.org/coords/videos.cfm
 - **BusinessRecycling Information – Food Scraps** businessrecycling.com.au/recycle/food-scraps
- ♻️ Some schools choose to establish chook pens, which are great lunch scrap recyclers and which provide opportunities to explore the responsibilities and rewards of animal husbandry.
- ♻️ **FluoroCycle** is a voluntary recycling recognition scheme that schools can participate in if they recycle their used fluorescent globes.
- ♻️ Schools could raise awareness about the new **Aldi Battery Recycling** program. Families can recycle their used batteries simply by dropping them into the dedicated bins at their nearest Aldi store. Any AA, AAA, C, D and 9V batteries (both rechargeable and non-rechargeable) are accepted.
- ♻️ **SCRAP** stands for School Communities Recycling All Paper Ltd. It's a non-profit company in NSW, existing to help schools, other educational, government, non-profit bodies become environmentally-friendly through paper recycling, worm farming, and waste auditing.

USEFUL RESOURCES

Planet Ark's Schools Recycle Right Challenge provides free recycling activity guides, lesson plans and events ideas for Australian schools. The resources have been designed to engage students and teachers to learn by doing and learn by having fun!

RecyclingNearYou.com.au provides information on community reuse organisations that offer excellent opportunities to reuse resources.



Visit SchoolsRecycle.PlanetArk.org to register your school's events and get information, updates and free resources to help plan your activities.



Sending the Right Signs

Encouraging people to switch lights off, use the correct recycling bin or save water all have positive environmental outcomes, but finding the best way to do it can be a bit daunting. As a Green Team Member or Sustainability Manager there are lots of tools available to you to encourage positive environmental behaviour, and signs and prompts are some of the most useful ones.

Lots of people want to do the right thing but with everything else that goes on at the workplace it's easy to forget. Even with the best of intentions it's easy to forget to turn off the lights when leaving a meeting room. For example, talking to colleagues, checking mobile phone messages and packing up notes are all common distractions.

By using signs and prompts you can help them remember. You also help create an organisational 'norm' or expectation that supports the positive behaviour you're aiming for - like turning the lights off. There are a few tricks that you can use to make your signs as effective as possible:

Make the sign or prompt noticeable: Make it stand out with bright colours or an eye-catching image. Once a sign has been in the same place for a few weeks people stop noticing it so changing the colour or moving it around a bit will ensure people keep on noticing it.

Make the signs self-explanatory: If you want people to switch off the lights when they leave a room, make sure that's exactly what the sign says. Something like "Please switch off the lights when you leave the room," is more likely to be effective than one like "Save the planet, turn me off."

Put the sign as close to the action as possible: If you want people to use the correct recycling bin, put the sign on the lid of the bin, or just above it. You can create an association between the desirable action and the location where it happens.

Make the sign positive: 'Don't' isn't a nice word and most people get resentful being told not to do something. So when ever possible, make your signs positive. Words like "Thanks for turning your computers off at night," is much more likely to be effective than 'Don't leave your computers on over night.' And because it's a nicer message and makes people feel good about the actions they have undertaken, it increases the likelihood that the actions will be carried out in the future.

These little things can have a big effect in the workplace.

These tips have been adapted from 'Fostering Sustainable Behaviour' by Doug McKenzie-Mohr and William Smith.

Sign Up for GreenWorks e-newsletter at BusinessRecycling.com.au/GreenWorks



Getting a Foot in the Door

Asking staff at your workplace to make small changes to their behaviour is one of the best ways to get them to make bigger changes in the future. It's the old 'foot in the door' trick.

In a classic experiment, a group of researchers in the US asked home owners for permission to install a 6 foot by 3 foot sign saying 'Drive Carefully' in their front yard. Not surprisingly, only 17% of residents said they would allow the sign. But by making one small change to the experiment the researchers were able to get permission from a staggering 76% of residents.

What was the change?

Two weeks before asking the residents for permission to erect the sign they asked them to display a small, relatively inconspicuous sign in their front window with the words 'Drive Carefully'. After displaying this small sign for two weeks the residents were significantly more likely to agree to hosting the large.

Why?

Well the evidence suggests that by agreeing to the small sign the residents began to see themselves as the 'type of person' to be concerned about worthy causes - like careful driving. And we like to be consistent with these types of values. So when we've made a public statement in support of something we're more likely to make another - even bigger statement in the future.

So how can you use that in your workplace to encourage more sustainable behaviour?

Look for ways to encourage people to do small actions, like switching their computer off at night or using a reusable coffee mug. As long as they do it willingly and if you publicly acknowledge the behaviour, then they are more likely to undertake other, more significant activities in the future.

Reference: 'Yes! 50 Secrets From the Science of Persuasion' (Chapter 14). For more information about this book visit www.scienceofyes.com. If you've got any comments, questions or feedback on this article just e-mail greenworks@planetark.org

Sign Up for GreenWorks e-newsletter at BusinessRecycling.com.au/GreenWorks



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Appendix 1 - Establishing a recycling policy

Establishing a recycling system and policy, and incorporating it into an integrated School Environmental Management Plan (SEMP), can embed recycling and sustainability in the culture of a school.

A SEMP is a document that sets out the school community's intentions in regard to environmental education and environmental management. A SEMP helps to integrate environmental considerations into whole-of-school planning. Evaluations of school waste reduction programs indicate that success in achieving waste management outcomes occurs when schools adopt a whole-of-school approach.

Appendix 2 - Australian Sustainable Schools Initiative

The **Australian Sustainable Schools Initiative (AuSSI)** is a partnership of the Australian Government and the states and territories that seeks to support schools and their communities to become sustainable.

Each school can participate within each state's network, which explores the sustainability of school operations, supports the integration of sustainability into learning programs, and facilitates recognition of achievement. Individual schools may choose to focus on certain areas that are of most relevance and interest to their school community.

Check out the resources and school networks in your state or territory.

Australian Capital Territory

www.actsmart.act.gov.au/what-can-i-do/schools/actsmart-schools

New South Wales

www.sustainableschoolsnsw.org.au

Northern Territory

www.sustainabilityinschools.edu.au/school

Queensland

www.sustainableschools.qld.edu.au

South Australia

www.sustainabilityinschools.edu.au/school

Tasmania

www.education.tas.gov.au/parents-carers/programs-and-initiatives/sustainability-learning-centre

www.sustainabilityinschools.edu.au/school

Victoria

www.resourcesmartschools.vic.gov.au

Western Australian

det.wa.edu.au/curriculumsupport/sustainableschools



Visit SchoolsRecycle.PlanetArk.org to register your school's events and get information, updates and free resources to help plan your activities.

Appendix 3 - Green purchasing

Buying items made from recycled materials closes the loop for resources. It helps to maintain a high demand for recyclables, and therefore for community recycling programs. Green or sustainable purchasing will help to support products with a lower environmental impact.

Using locally made recycled office paper is a simple and positive thing your school can do for the planet. You can check out all the facts about making the switch to **Planet Ark Paper**.

Some other products that can be targeted include:

- ♻ Planet Ark Endorsed **Naturelle 100% recycled toilet tissue**
- ♻ Refillable or **recycled pens**
- ♻ **Recycled ink**
- ♻ Planet Ark Endorsed **cleaning products**
- ♻ Rechargeable batteries

For more ideas and further information, check out the 'Green purchasing' section of Sustainability Victoria's [How to reduce, reuse and recycle waste in schools](#).

