

---

# Contents

<b>Before you begin</b>	<b>vii</b>
<b>Topic 1: Investigate current practices in relation to resource usage</b>	<b>1</b>
1A Identify environmental regulations	2
1B Assess compliance with environmental regulation	11
1C Collect information on resource efficiency procedures for the work group	17
1D Identify sources of information to support improvement	23
1E Measure and report current resource usage	26
1F Analyse and document current purchasing strategies	36
1G Identify areas for improvement	45
Summary	49
Learning checkpoint 1 : Identify current practices in relation to resource usage	50
<b>Topic 2: Set targets for improvement</b>	<b>53</b>
2A Seek input from others	54
2B Use external sources of information	60
2C Identify alternative solutions	64
2D Set efficiency targets	70
Summary	72
Learning checkpoint 2: Set targets for improvement	73
<b>Topic 3: Implement performance improvement strategies</b>	<b>75</b>
3A Use tools and techniques to achieve targets	76
3B Apply continuous improvement strategies	82
3C Implement environmental and resource efficiency improvement plans	88
3D Support team members to identify areas for improvement	99
3E Seek ideas on resource efficiency from others	103
3F Implement costing strategies to fully utilise environmental assets	109
Summary	114
Learning checkpoint 3: Implement performance improvement strategies	115

## Example: reduce, reuse and recycle paper

Here is how you could reduce, reuse and recycle the paper you use.

### Reduce

Print or copy as few things as possible. Don't just automatically print an email, but consider first if you need to keep a hard copy. Printing or copying on both sides of the paper will reduce the amount of paper you need. Buying paper made from recycled products reduces the environmental impact.

### Reuse

Wherever possible, use the same paper again. If you have finished with a copy of something, use the reverse side for notes. If it is something that several people need to read, consider setting up a system to circulate one copy for everyone to share.

### Recycle

When you have finished with the paper, make sure it is recycled. Use a box to collect paper for recycling at your desk then transfer it to the recycling bins when it is full.

For some documents, it is important to comply with your organisation's requirements for storage and disposal. Some things, such as client letters or orders, may need to be printed for legal reasons. Other documents may need to be shredded before they are recycled to maintain confidentiality.

## Green workplace policies and procedures

Laws and regulations about the environment exist to protect the public and the environment. They relate to many different things, including how to dispose of potentially dangerous wastes, how to store chemicals safely and how to reduce pollution. Many policies and procedures arise from the need to comply with laws and regulations. Green workplace policies and procedures are used to reduce the workplace's environmental impact.

As an employee, you have a responsibility to follow policies and procedures to ensure the organisation complies with laws and regulations. For example, your workplace may wish to reduce its greenhouse gas emissions, so a policy may be that employees must switch off all lights not in use. In big organisations, a policies

**Example: compliance tools and examples of use**

**Best practice comparison**



Write out a step-by-step best practice procedure. Then write out the current procedure in your organisation. Compare the steps. Where are they different? The differences will help you identify what you need to do to improve your procedure.

**Audit or survey**



Conduct an audit over two weeks; for example, to check if computer screens in your work group are left on overnight. You could count the monitors left on or use a map each day to see if there are obvious trends.

**Checklists**



Checklists are a quick and easy way for employees to identify if key elements are being completed. A checklist lists the key criteria and allows reviewers to rate how well they are being followed. A checklist can be completed regularly.

**Objectives, targets and action plans**



By setting an objective or target for improvement, you can then measure whether or not you have achieved the target. Your action plan should list the steps and when they should be achieved.

*continued ...*

For an initiative to succeed, it is important to provide two types of information, as described below.

### Motivational information

Motivational information explains to people why they should do something. People are more likely to get involved and participate when they fully understand what the benefit is; for example, featuring a short statement on a 'reduce, reuse and recycle' poster about how reducing paper use saves trees and makes the air cleaner.

### Operational information

Even if someone is keen to participate, they can't help you reduce paper usage if they don't know how. Some people may be embarrassed to say they don't know something, so make sure you give them the operational information in a way that is easy to understand. The easier you make it for people to change, the more likely they will be to participate; for example, providing some simple instructions on how to make duplex copies.

## Get the right information

Successfully implementing a green initiative requires people to want to participate and to know how to participate. You need to provide motivational and operational information.

Motivational information means explaining the benefit of doing something in a way that is relevant to the person you are telling. For example, it may not be necessary to tell the customer-service team in an office how to manage a hazardous material spill, and a team in a manufacturing plant may not need to know about saving paper.

If you are going to try to introduce an initiative to reduce waste, you could tell your team about an example where another company has successfully achieved this.



**Water**

Dishwashers, washing machines, toilets and gardens require large amounts of water, as do some manufacturing processes. Look at the water usage information from your supplier for this information.

**Production materials**

You could review the materials used to produce goods or services for sale to customers, where they are from and whether they are able to be recycled. You could also look at the energy and water used. You may need help from other areas for this.

**Packaging materials**

You could measure how much packaging is used in things your organisation consumes by measuring the waste disposal. You could also measure how much packaging you used in producing your own goods and services by monitoring invoice values.

## Environmental footprint

Environmental footprints are measurements that indicate the amount of land needed to regenerate per person based on national resource consumption, depletion and regeneration. It is worrying to realise that if everyone in the world had the same environmental footprint as the average Australian, we would need three times as much land as there is on Earth to contain it.

Organisations can neutralise their carbon emissions by reducing overall energy use, maximising use of renewable energy resources and offsetting or balancing the remaining emissions through counter actions. Planting trees is a common form of carbon offset.

You could investigate one of the carbon offsetting plans available and present the information to your manager for approval. Log onto [www.carbonneutral.com.au](http://www.carbonneutral.com.au) to view examples of carbon offset projects.

## Example: purchase strategies for resources

The following are several key points that can help your organisation save operational resources.

### Paper

Paper made from recycled materials has the least environmental impact. This is ideal for internal documents. For some organisations, it may be important to use paper made from non-recycled sources for formal or external documents. If this is the case, ask yourself whether this practice needs to continue. Make sure you get approval for any change.

If you do need paper made from non-recycled materials, research which brands use materials made from plantation forests. Paper that is made from old-growth forests has the largest environmental impact and should be avoided.

If you use letterhead paper, talk to your printer about whether the paper used has any recycled content. Ask to see samples of paper quality with different amounts of recycled content. Remember to seek approval for any change.

### Energy usage

There are two ways to reduce the environmental impact of electricity: by reducing how much is used and by using more environmentally friendly sources.

Some office equipment has a 'power-save' mode, which means it switches to a lower energy use after a certain period. These features should be part of your purchasing decision. You could also research whether the company has a program for recycling the equipment you are replacing.

Sometimes equipment may be using more energy because it needs a repair or service. In general, a regular maintenance program will ensure your equipment lasts longer. If there is a problem with the equipment, consider repairing it rather than replacing it.

### Renewable energy

When purchasing new office equipment, consider the energy-efficiency rating. Government legislation requires manufacturers to display this information. Sometimes, the more efficient equipment may be more expensive. However, saving energy will save money and help to make up for the additional expense.

Energy companies offer the facility to purchase electricity from renewable sources such as wind or solar energy. Research the sources used and environmental impact of alternative suppliers.

## Sustainable procurement



Sustainable procurement processes require a balanced approach to acquiring goods and services. The needs of the organisation are met in a way that benefits not only the organisation itself, but also society, the broader economy and the natural environment.

Sustainable procurement has two interpretations. The first of these is product based, and refers to an organisation that has examined the supply chains for its products and ensured that all practices and procedures are socially responsible and ethical. The second focuses on suppliers. This is where an organisation assesses the level of risk of having an environmental or social issue imposed on them by non-compliant suppliers.

Organisations that have sustainable procurement processes may develop policies, procedures and action plans to assist their employees with maintaining standards. These documents spell out the ways in which the organisation addresses sustainable procurement and provide guidelines for implementation.

# 1G

## Identify areas for improvement



By using compliance tools and measuring resource usage, you can see if an initiative is making improvements or if people are slipping into old habits. This also gives you the opportunity to see where you need to improve performance.

### Know when improvement is needed

Best practice models and benchmark data are useful for comparing how an initiative is performing. Even if there has been some improvement, there may be room for more. If it is part of your role to make people environmentally aware in their daily activities, you should be striving to continually improve your performance and your team's performance.

Some of the tools used to find areas for improvement are summarised below.

#### Observation

- **Opportunity:** People in a work area are not printing on both sides of the paper.
- **Suggestion:** Create a procedure for printing and photocopying using both sides of the paper.

*continued ...*

---

## Topic 2

# Set targets for improvement

Establishing green workplace procedures can reduce an organisation's environmental impact. It is important to set clear targets for improvement that provide a goal for the organisation to work towards and help to ensure there is continued focus on the goal. To succeed, new policies and procedures need to be thoroughly researched and discussed with experts and key stakeholders, and customised to suit the organisation.

In this topic you will learn how to:

- 2A Seek input from others
- 2B Use external sources of information
- 2C Identify alternative solutions
- 2D Set efficiency targets

## Internal advice

It is helpful to consult with all areas inside your organisation, particularly those that will help to implement your program, such as the IT department, technical specialists, other teams, senior managers and colleagues.



### Internal experts from within your organisation

Don't forget to take advice from the people around you. Sometimes, people who have worked for an organisation for a long time remember ways things were done previously, which may be helpful. Or ask your supervisor for suggestions.



### Historical records

Many organisations have historical records of previous sustainability surveys and environmental monitoring procedures within the organisation. In many cases, where procedures have been developed, there is also data that can be accessed and used to investigate trends over time.



### Workplace environmental policies and procedures

Your organisation's environmental policies and procedures may contain useful information about green initiatives. They may be stored on an intranet or in a training module. Ask your supervisor for assistance if you can't find this information.

*... continued***Library**

Speak to staff at your local library. They may be able to help with information about local organisations and reference materials.

**External stakeholders**

Consult stakeholder websites for further information.

**Your own network**

Talk to friends, family and acquaintances about your ideas and see what they suggest. You may need to verify some of this information.

## Consistent information

When launching and implementing your proposal, it can help to explain where your information came from. This means it needs to be from a reliable source. Try to use updated and reviewed information from large and reputable organisations.

Information should be consistent. Some information, particularly information available on the internet, may contradict other information you have; for example, there are some groups that dispute climate change.

You may not be able to judge whether technical information is right or wrong. Sometimes you have to make a judgment based on the source of the information. If one opinion is on a website you trust or you have seen it in a number of places, then it is more likely to be valid than a single opinion on another website. You may need to consult a technical expert who can explain the difference to you.



## Get started

No matter how well you plan a new initiative, issues you haven't thought about often arise. You should conduct a pilot, or a trial in a limited area, to test the new procedure in a controlled environment, resolve any concerns and refine the procedure before going any further.

For example, launching a commingled recycling initiative for 200 staff at once could be overwhelming. If the number of recycling bins required is underestimated and they are not located in the correct areas, people may become frustrated. In this case, a pilot program would help identify and resolve such issues in the early stages.



Select your pilot group carefully, ideally from a team that is either very responsive or notoriously difficult. Meet with the pilot group and provide clear information about the program. Ask for their feedback throughout the process to gather information on how to improve the procedure.

Depending on the scope of the program, implementing your scheme in phases may be the best option. Consider how to meet the specific requirements of each department, explain the objectives and coordinate the launch on a smaller scale.

## Individual and team targets

Depending on the objective, it can be helpful to set targets that are specific to the department, work group or even an individual. Breaking up a target into smaller targets like this is called cascading a target. Assigning a specific target to a smaller group of people helps them take responsibility for that target.

## Action plans

An action plan is a critical part of implementing an environmental initiative. Action plans are simple but effective tools for managing any type of project.

An action plan summarises all the elements of SMART targets in a table format. The status column is helpful for presenting a snapshot of progress. A project is green when it is on track to be achieved or is completed. A yellow project may be slightly off track, but there is a recovery plan in place. Red projects are not progressing to target and are not expected to meet timing. Some action plans also include gap information; for example, by how many percentage points a target is currently being missed.

The following is an example action plan.

Area of activity	Target	Actions		Person responsible	Timing	Status
Office paper	No office paper with general rubbish.	Recycle	Remove individual bins near desks.	Administration manager	Within three weeks	Green
Rubbish	Reduce cardboard packaging in rubbish by 60 per cent.	Reuse	Work with suppliers to introduce reusable packaging.	Purchasing officer	Within six months	Yellow
Litter	Reduce cigarette butts around door by 90 per cent.	Introduce butt bin outside the door.		Facilities manager	Within four weeks	Red

## Green office programs

Some organisations refer to the initiatives targeted at improving the environment as green office programs. For example, the actions listed in the action plan may form a small part of the green office program for an organisation. The green office program could focus on common office issues such as recycling, reducing paper wastage, reducing energy usage and commingled recycling programs. These initiatives may also form one part of an organisation's EIP.



... continued

### Triple bottom line reporting

A system of measuring an organisation's performance that considers profit, people and planet

For more information, visit [www.environment.gov.au](http://www.environment.gov.au).

## Use the waste-management hierarchy

In essence, the waste-management hierarchy adopts the principle that prevention is better than cure. If there is no waste generated in the first place, then it will not need to be recycled or otherwise disposed of. Disposal is the smallest part of the pyramid because it is the least preferred method of dealing with waste. This waste-management hierarchy forms part of some environmental legislation.

Recovering materials means to take materials that have been recycled and use them, without any further processing. A builder may use bricks, doors or bluestone salvaged from one project for another project.

Treatment, on the other hand, means using materials that have been recycled, but require an additional step before they can be used. Waste water, or grey water, can sometimes be reused depending on what else is in the water. However, it often requires some treatment to remove any contamination first.

Disposal means sending waste to landfill. This is the least preferred method and should only be considered as a last option.



... continued

#### Use more efficient fuel sources

Vehicles that use LPG gas instead of petrol are more efficient. Hybrid or electric vehicles may be appropriate for your fleet. Consider this when purchasing or replacing vehicles.

#### Use teleconferencing

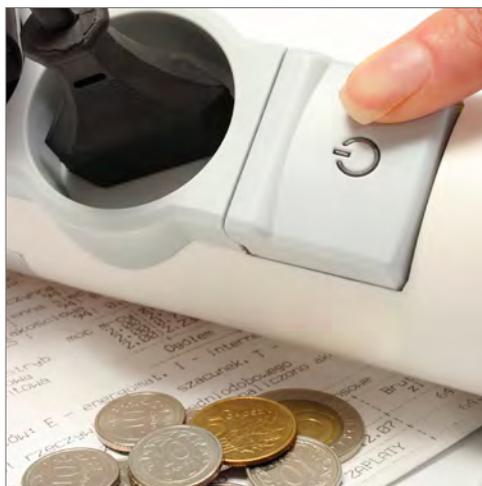
Question whether all meetings require personal attendance. Can someone attend by phone or videoconference?

## Make compliance easy

A system encouraging environmentally responsible choices will help people reduce their environmental footprint.

Try to set things up so that saving energy or reducing waste is the easiest choice. For example, use timers for appliances, equipment and lights where possible. The investment for timers will be funded by the energy saved in the long run. Sensor lighting in areas that are not used all the time, such as storerooms or conference rooms, can help ensure lights are not on unnecessarily.

This approach can also be taken for reducing and recycling waste. If the bin for recycling is closer than the bin for general rubbish, then people will be more likely to use it. Use a larger bin for recycling than for general waste. Schedule regular collections to ensure recyclable waste is not put in with general waste because there is no room left. Remove disposable cups, cutlery and plates, and replace them with reusable ones.



## Make changes to individual schedules

For a workplace to achieve its environmental goals, all staff affected by the changed work practices and procedures need to support the changes. This may involve making changes to their own work schedules.

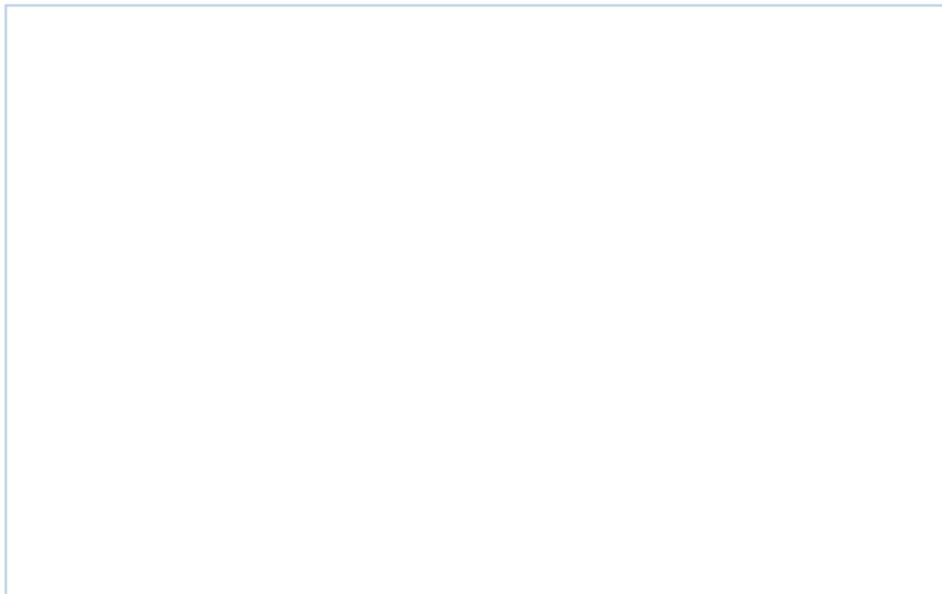
When you are responding to a change in work procedures, take into account the time lines associated with implementing the change. For example, a new procedure may need to be in place by a certain date (the organisation may have promised shareholders that an environmentally damaging practice will be phased out by a certain date, or a monitoring procedure may need to be carried out within a particular time period), or an audit of the organisation's office waste may be carried out over a two-week period.

To make a change regarding practices or procedures at your workplace, you may need to:

- adjust your own work schedule to incorporate the change
- familiarise yourself with the new instructions or procedure; for example, a new procedure for dealing with an environmental hazard or new guidelines for purchasing
- ask if you are not sure about something
- request more information or training if necessary; for example, you might need instructions about how to operate the energy-saving or duplex feature of a new photocopier
- assist your work team in making the change.

### Practice task 15

Describe some ways in which you might encourage people to follow environmental procedures



**Eliminate materials**

Reducing the materials required to produce a product or service is one part of reducing environmental impact. Eliminating hazardous materials or substituting different, less damaging materials is another way to reduce environmental impact.

**Use purchasing power**

Purchasing more efficient products is a way to benefit the environment. So is purchasing products that use recycled material, such as office paper, cardboard, plastics, packaging and other products.

In addition, organisations can support other organisations that act in an environmentally responsible way. If these businesses are favoured because of their environmental practices, their competitors may seek to match their advantage by changing their own environmental policies. Organisations that have achieved accreditation in ISO 14001 or other environmental programs will generally be environmentally conscious suppliers.

## Change-management skills

When implementing a change strategy, it is important not to leave any participants out of the communication process. If it is a large organisation, this will take a lot of time, but it is a good investment in the success of your initiative. You will need to do more than communicate for your initiative to be successful, but if you don't, it will be much harder to succeed.

**Start at the top**

Gaining your supervisor or manager's support will encourage other staff to participate. If colleagues see senior staff following the new procedure, they are more likely to do so.

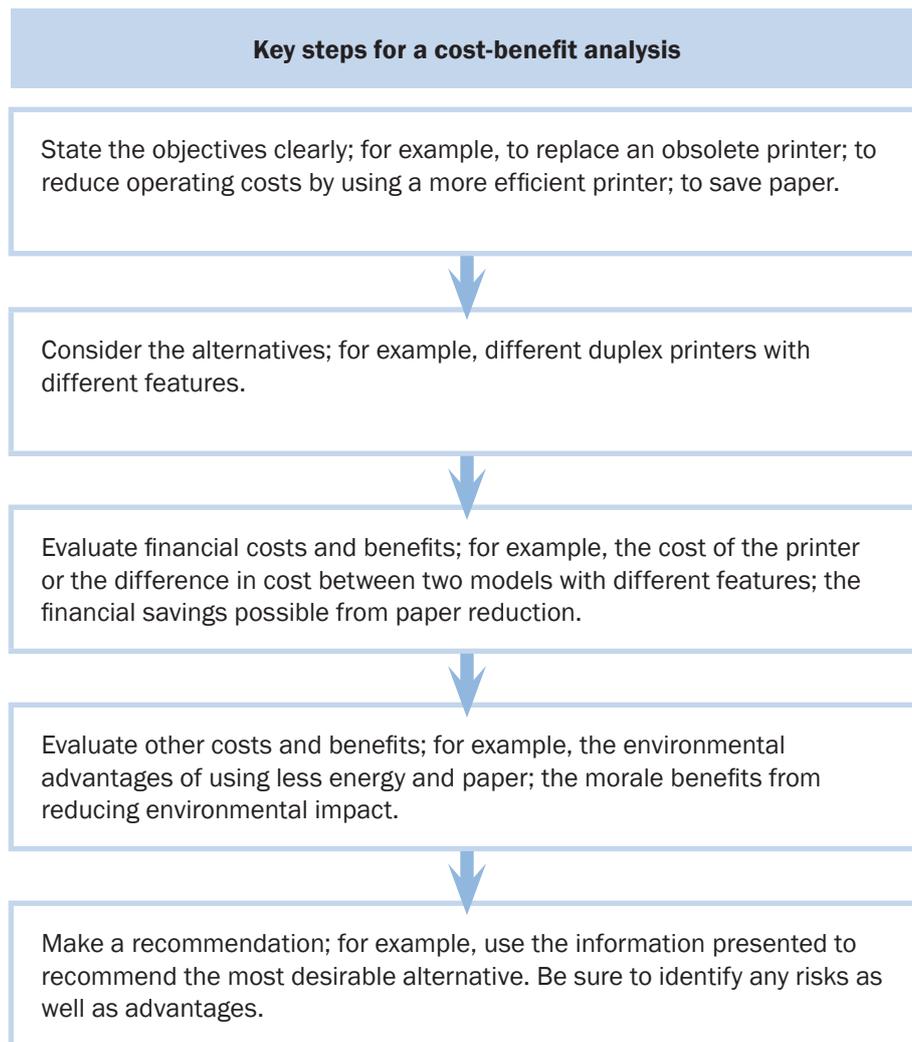
**Lead by example**

Make sure that you follow the procedures yourself.

*continued ...*

## Cost-benefit analysis

Cost-benefit analysis is a tool with broad applications. It involves evaluating the cost of an investment decision against the financial benefits of that decision. The analysis can include social and environmental benefits, which can help you justify a range of environmental initiatives and other workplace proposals. Clearly summarising advantages and disadvantages of a decision is an excellent way to persuade your supervisor to accept your recommendation.



### Energy use

To monitor energy use, you may:

- keep records of your energy usage; for example, from your power bills
- carry out a lighting assessment to find out whether your office equipment has the Energy Star rating
- find out whether the energy-save function of office equipment is activated
- monitor how much equipment is left on unnecessarily.

### Purchasing

To monitor purchasing, you may keep records of:

- quantities of consumables you purchase; for example, paper, toner and stationery
- the type of things you purchase; e.g. Does the equipment you purchase have an Energy Star rating? Does the product have unnecessary packaging? Can the product be refilled, reused or recycled?

## Example: monitor purchasing



Christian decides to monitor the packaged food purchased by his workplace for its employees. Over a week, he records that his organisation bought five small jars of coffee, six boxes of teabags, six cartons of milk and three boxes of sugar sachets. Once he has written a list, it is easier for him to see how much has been bought. It doesn't seem as much when it is purchased little by little during the week. He wonders if they could improve on the environmental impact the packaging is creating by buying bulk items.



1st place	2nd place	3rd place	4th place
<p><b>Public recognition:</b> Acknowledging efforts and success publicly is a simple and effective way to reward performance. Involving more senior managers can also be helpful. Recognition may occur individually, in team meetings, or via newsletters, group emails and visual displays.</p>	<p><b>Team events:</b> Celebrating a success recognises the efforts made, builds team morale and fosters teamwork. Making a short speech about the reason for the event can also be helpful.</p>	<p><b>Providing rewards:</b> Your organisation may provide prizes, bonuses or other rewards when targets are met. These may be promotional material, movie tickets or rewards appropriate to your work group. Ensure you have approval before communicating these.</p>	<p><b>Development rewards:</b> Some people may be motivated by the opportunity to participate in training or other development activities. You may require approval before authorising this.</p>

## Practice task 22

Read the case study, then complete the task that follows.

### Case study

Con is the green team representative for the sales department at a daily newspaper. He has worked for three months to implement a scheme to reduce paper usage and increase paper recycling in the department. He is feeling really pleased because he has just reviewed the invoices for the last two months and paper usage has decreased by 25 per cent, which is 5 percentage points over their target. Also, the waste contractor has advised that the amount of paper recycling collected has increased by 30 per cent and that there has been a reduction in mixed rubbish collected.

Con is really proud of the team. He is even happier after he attends the green team meeting and realises that the 15 people in the sales department are the only ones to beat the reduction target. In fact, because the finance department missed their target, it was the over-achievement by sales that meant the company-wide objective was achieved.

What would you suggest to Con as an appropriate reward strategy? List the key things you would do and provide a reason why.