

BSBSUS401

Implement and monitor environmentally sustainable work practices

Release 1

Learner guide

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Aspire Version 1.1

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BSBSUS401 Implement and monitor environmentally sustainable work practices Release 1

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Before you begin

This learner guide is based on the unit of competency *BSBSUS401 Implement and monitor environmentally sustainable work practices*, Release 1. Your trainer or training organisation must give you information about this unit of competency as part of your training program. You can access the unit of competency and assessment requirements at: www.training.gov.au.

How to work through this learner guide

This learner guide contains a number of features that will assist you in your learning. Your trainer will advise which parts of the learner guide you need to read, and which practice tasks and learning checkpoints you need to complete. The features of this learner guide are detailed in the following table.

Feature of the learner guide	How you can use each feature
Learning content	Read each topic in this learner guide. If you come across content that is confusing, make a note and discuss it with your trainer. Your trainer is in the best position to offer assistance. It is very important that you take on some of the responsibility for the learning you will undertake.
Examples and case studies	Examples of completed documents that may be used in a workplace are included in this learner guide. You can use these examples as models to help you complete practice tasks and learning checkpoints. Case studies highlight learning points and provide realistic examples of workplace situations.
Practice tasks	Practice tasks give you the opportunity to put your skills and knowledge into action. Your trainer will tell you which practice tasks to complete.
Video clips	Where QR codes appear, learners can use smartphones and other devices to access video clips relating to the content. For information about how to download a QR reader app or accessing video on your device, please visit our website: www.aspirelr.com.au/help
Summary	Key learning points are provided at the end of each topic.
Learning checkpoints	There is a learning checkpoint at the end of each topic. Your trainer will tell you which learning checkpoints to complete. These checkpoints give you an opportunity to check your progress and apply the skills and knowledge you have learnt.



Foundation skills

As you complete learning using this guide, you will be developing the foundation skills relevant for this unit. Foundation skills are the language, literacy and numeracy (LLN) skills and the employability skills required for participation in modern workplaces and contemporary life.

The following table outlines specific foundation skills noted for your learning in this learner guide.

Foundation skill area	Foundation skill description
Reading	<ul style="list-style-type: none"> Identifies and analyses complex texts to determine legislative, regulatory and business requirements Reviews reported information to evaluate workplace strategies and improvement practices
Writing	<ul style="list-style-type: none"> Documents findings of investigations from written and oral sources according to organisational requirements Provides updates about progress using formats and language appropriate to the audience and context
Oral Communication	<ul style="list-style-type: none"> Presents information and seeks advice using structure and language appropriate to audience Participates in discussions using listening and questioning to elicit the views of others and to clarify or confirm understanding
Numeracy	<ul style="list-style-type: none"> Analyses numerical information to measure usage and calculates metric measurements, quantities/ratios and financial data using appropriate tools
Navigate the world of work	<ul style="list-style-type: none"> Recognises and follows legislative requirements and organisational policies and procedures associated with own role
Interact with others	<ul style="list-style-type: none"> Selects and uses appropriate conventions and protocols when communicating with internal and external stakeholders to seek or share information Collaborates and consults with a range of stakeholders to achieve shared understanding of individual roles in meeting objectives
Get the work done	<ul style="list-style-type: none"> Develops plans to manage routine and non-routine tasks for own work group with an awareness of how they contribute to the broader organisation Uses systematic, analytical processes to set environmental targets, gather relevant information, identify and evaluate alternative approaches Evaluates outcomes of decisions to identify opportunities for improvement Uses the main features and functions of digital tools to complete work tasks and access information

What do you already know?

Use the following table to identify what you may already know. This may assist you to work out what to focus on in your learning.

Topic	Key outcome	Rate your confidence in each section
Topic 1 Investigate current practices in relation to resource usage	1A Identify environmental regulations	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1B Assess compliance with environmental regulations	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1C Collect information on resource efficiency procedures for the work group	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1D Identify sources of information to support improvement	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1E Measure and report current resource usage	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1F Analyse and document current purchasing strategies	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	1G Identify areas for improvement	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 2 Set targets for improvements	2A Seek input from others	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2B Use external sources of information	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	2C Identify alternative solutions	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident

continued ...

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Topic	Key outcome	Rate your confidence in each section
	2D Set efficiency targets	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 3 Implement performance improvement strategies	3A Use tools and techniques to achieve targets	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3B Apply continuous improvement strategies	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3C Implement environmental and resource efficiency improvement plans	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3D Support team members to identify areas for improvement	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3E Seek ideas on resource efficiency from others	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	3F Implement costing strategies to fully utilise environmental assets	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
Topic 4 Monitor performance improvement strategies	4A Develop evaluation and monitoring tools	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	4B Communicate targets to personnel and key stakeholders	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	4C Evaluate strategies	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	4D Set new targets and apply new strategies	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident
	4E Promote successful strategies and reward participants	<input type="checkbox"/> Confident <input type="checkbox"/> Basic understanding <input type="checkbox"/> Not confident

Topic 1

Investigate current practices in relation to resource usage

The workplace provides many opportunities to reduce our impact on the environment. Some things are required by law, while others can save businesses time or money. Sometimes it may seem like it is too hard to change things, but there are some simple ways to suggest change, encourage people to participate and measure success.

In this topic you will learn how to identify environmental regulations; assess compliance with environmental regulations; collect information on resource efficiency procedures for the work group; identify sources of information to support improvement; measure and report current resource usage; analyse and document current purchasing strategies; and identify areas for improvement.

In this topic you will learn how to:

- 1A Identify environmental regulations
- 1B Assess compliance with environmental regulations
- 1C Collect information on resource efficiency procedures for the work group
- 1D Identify sources of information to support improvement
- 1E Measure and report current resource usage
- 1F Analyse and document current purchasing strategies
- 1G Identify areas for improvement

1A

Identify environmental regulations

There is ever-increasing pressure on organisations to become environmentally friendly. This means taking steps in the workplace to minimise the organisation's impact on the environment. An important part of this is to understand environmental legislation, regulations and codes of practice relevant to your work area, role and responsibilities.

What is environmental sustainability?

So much of what we buy, do or use every day has an environmental impact or effect; for example, the petrol for our cars, electricity in our homes and paper in our offices. In our modern lives, it is not realistic to expect that we stop using our cars or our appliances completely; however, we can start to use them in a way that reduces their environmental impact. Here are some definitions of what is meant by environmental sustainability.

Using the Earth's resources responsibly

Environmental sustainability means using the Earth's resources without affecting the ability of future generations to have access to the same things and enjoy the beauty of the natural environment. Because we can reasonably expect that sun and wind will continue to be available, electricity produced from wind or solar energy is considered a renewable resource. The energy they produce is much cleaner than energy produced by coal. Choosing to buy electricity produced from renewable resources is a good way to promote environmental sustainability.

Using non-renewable resources

Environmental sustainability also means using non-renewable resources such as oil and petrol and resources from the natural environment at a slower rate. For example, using less paper to reduce tree logging; this may, in turn, reduce the amount of greenhouse gases in our atmosphere.

A 'green' workplace

Many organisations pride themselves on being 'green' workplaces, meaning that they commit to reduce their environmental impact.

It is easy to see how large manufacturers could reduce their environmental impact. We can see the pollution they create, the waste they produce that needs to be disposed of, and the large quantities of water they use. However, many of us may wonder how we, in a small organisation, a college or an office, can make a difference. The best way to start reducing our impact is to reduce, reuse and recycle.

If everyone in an organisation aims to reduce, reuse and recycle, not only will the amount of waste produced and energy and water used fall, but so will the cost to the organisation.

Buy or use as little of something as possible or choose items with less environmental impact; for example, using refillable cups for coffee rather than disposable ones, choosing appliances that use less energy, buying products in bulk with less packaging, refusing to accept bags or packaging wherever possible and reducing electricity usage where possible.

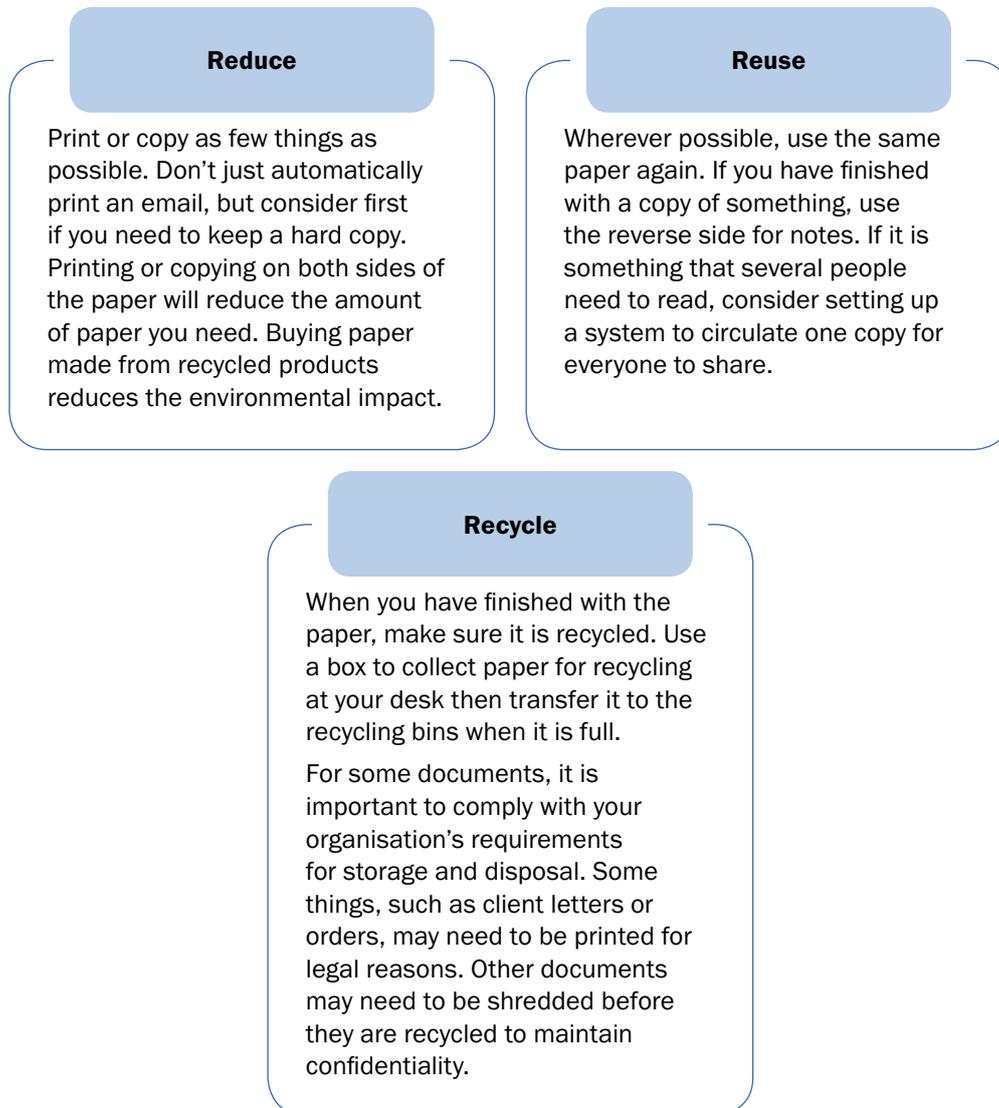


Recycle what is left. A great place to start is to recycle your paper and containers. You can also recycle your office equipment when you upgrade by either donating or selling it to other organisations, or giving it to schools or charities.

Reuse what you have; for example, printing on both sides of the paper, refilling toner cartridges and using leftover water for the plants.

Example: reduce, reuse and recycle paper

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



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

and procedures manual may be available on the intranet or a printed version may be available. Policies and procedures should be explained in an employee's induction. In small organisations, you may need to ask your supervisor or colleagues about workplace policies and procedures.

If you are unsure what the green workplace policies and procedures in your organisation are or you don't know how to comply with them, speak with your manager or supervisor.

Understand environmental regulations

An important part of encouraging good environmental practice in the workplace is complying with laws and regulations. There are many areas that these laws and regulations cover. Areas involving the handling of dangerous materials and the limitation of vehicle exhaust pollution are regulated. So too is the disposal of potentially dangerous wastes.

All organisations are affected by different laws and regulations. These laws and regulations include international laws that have been agreed to by the Australian Government. Some laws vary depending on where the organisation is based; for example, each state and territory has different government departments that are responsible for the environment. Local councils have by-laws, which can vary in each municipality.

You must follow workplace policies and procedures to ensure you are complying with legislation. You may identify an area that you believe needs revised policies and procedures to support the legislation. You should discuss this with your manager or supervisor.



International laws

Australia is signatory to some international environmental agreements, including the Basel Convention, which controls the international movements of hazardous waste, and the Kyoto Protocol, which is an international agreement on greenhouse gas emissions. The Federal Government may produce Commonwealth legislation to ensure that we meet these requirements. Such legislation is amended from time to time, so it is important to check for amendments.



Federal laws

The Australian Government Department of the Environment is responsible for national environmental issues. As policy is developed and legislation is changed, the department's responsibilities may also change.

Matters dealt with by the Department of the Environment include:

- Air quality
- National fuel quality standards
- Land contamination
- Natural, built and cultural heritage
- Environmental information and research
- Coordination of sustainable communities policy
- Development and coordination of domestic climate change policy
- Renewable energy target policy, regulation and coordination
- Greenhouse emissions and energy consumption reporting
- Climate change adaptation strategy and coordination
- Coordination of climate change science activities
- Renewable energy
- Greenhouse gas abatement programs
- Community and household climate action
- Water policy and resources
- Urban environment

Commonwealth legislation

Below are some of the Acts that are administered by the Minister for the Environment.

Environment Protection and Biodiversity Conservation Act 1999 (Cth)

- Aims to protect the environment, particularly land or animals of national significance. It covers world and national heritage sites, threatened species or ecological communities, the Commonwealth marine area and nuclear actions

Hazardous Waste (Regulation of Exports and Imports) Act 1989 (Cth)

- Limited to the movement of hazardous wastes in and out of Australia. Internal movements are governed by state or territory laws.

Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (Cth)

- Manages the manufacture, import and export of all substances that may reduce ozone. It also grants the Commonwealth the power to create a national system to manage these substances.

Renewable Energy (Electricity) Act 2000 (Cth)

- Exists to ensure Australia achieves the renewable energy target of 20 per cent by 2020. It details the targets and defines renewable energy sources.

Environment Protection (Sea Dumping) Act 1981 (Cth)

- Regulates what may be dumped at sea, including what may be burnt at sea as well as artificial reef placements.

Sea Installations Act 1987 (Cth)

- Governs how sea installations such as floating hotels or tourism operations may be used in federal waters, including what may be built or how it may be used.

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Water Efficiency Labelling and Standards Act 2005 (Cth)

- Defines water efficiency standards and labelling procedures including those used on appliances such as dishwashers and washing machines.

National Greenhouse and Energy Reporting Act 2007 (Cth)

- Provides for the reporting and distribution of information about greenhouse gas emissions, greenhouse gas projects, energy production and energy consumption.

State and territory laws

States and territories have a responsibility for the environment. For example, although the *Sea Installations Act 1987* (Cth) covers what may be installed in federal waters, the first 3 nautical miles from the coast are not federal waters, and each state and the Northern Territory has its own legislation and regulations to govern coastal waters.

Each state and territory has its own departments and agencies relating to the environment. For example, in New South Wales there is the Department of Planning and Environment; and in Victoria the Department of Environment, Land, Water & Planning, and the Environment Protection Authority (EPA) Victoria.

Work health and safety (WHS) requires employers to provide safe premises, safe machinery, safe systems of work, information and training and a suitable work environment. WHS is regulated at state and territory level, and some of the regulations vary quite widely.

You need to be aware that there are laws and regulations that are different in different states and territories, especially if you work for a national organisation. You should review practices in your organisation and consider which may be affected by environmental legislation or regulations.

Regulations

Legislation is the process of making laws (Acts). Legislation is a broad and general directive by a legislative body of what is required.

Regulations are the rules and procedures developed to support legislation. They explain what must be done to comply.

Here are examples of some regulations.

Renewable Energy (Electricity) Regulations 2001 (Cth)

Contains detailed rules on issues including eligibility criteria for renewable energy resources, accreditation of power stations and electricity requirements for solar water heaters. These regulations cover the production of electricity and the use of solar water heaters.

Environment Protection (Sea Dumping) Regulations 1983 (Cth)

Provides information about the permits required to dump items at sea or to build artificial reefs, gives their cost and defines what materials are considered contaminated.

Codes of practice and industry standards

A code of practice or industry standard is a set of guidelines applying to a particular industry. Members are not obliged by law to comply with them, but they do so because they have agreed it is in their collective interest. Not complying may also generate bad publicity for the organisation, which will harm their business.

For example, the Packaging Council of Australia has developed the Australian Packaging Covenant, which is an agreement between companies in the supply chain and all levels of government to reduce the environmental impacts of consumer packaging.

Codes of practice and industry standards exist to protect people and the environment. While you don't need to know all the details, you should be aware that they determine the rules contained in your workplace policies and procedures.

Best practice models

Best practice models provide information to organisations about how to implement environmentally sustainable policies and procedures. Organisations are not required to follow best practice models, but many have found that doing so helps them comply with legislation, operate more efficiently and even save money.

EPA Victoria has guidelines that provide recommendations to major construction sites for:

- managing noise pollution
- dealing with contaminated materials
- minimising waste
- other environmental issues.

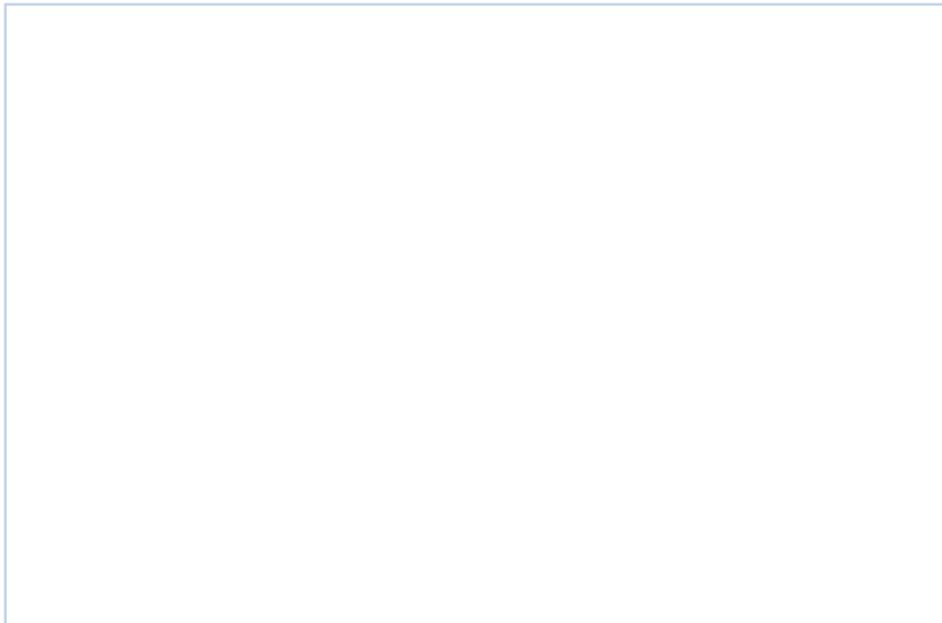
Practice task 1

Read the case study, then answer the question that follow.

Case study

Hano works at Assurance Insurance's Adelaide office. His manager asks him to investigate what can be done to decrease the amount of waste that is sent to landfill. Hano decides to start by identifying laws and regulations that affect Assurance Insurance

What should Hano look at?



1B Assess compliance with environmental regulation

You need to make sure that the environmental regulations relevant to your workplace are complied with. It may be part of your role to look at potential environmental issues in your work area. You may be asked to think about or devise some solutions to these problems. It is important to know your level of responsibility in this area.



Choose the right compliance tool

For most of us, complying with government or council laws and regulations is made easier by the existence of organisational policies and procedures. Procedures and work instructions are developed to ensure that an organisation complies with the legislation. It is important to have regular checks that people are complying with environmental policies and procedures. For example, there is no point having a procedure for the safe disposal of batteries if employees are not aware of it and batteries are being thrown in the bin.

Organisations have a range of compliance tools, which may include forms, workbooks, surveys or observations, to help employees check whether procedures are being followed. It is important to choose a compliance tool that is appropriate to the work area, and also to make sure that different people get the same results when they use the tool. This allows organisations to measure improvement. It is best to keep the tools simple and based on verifiable facts. Sometimes, discussions with relevant individuals can reveal what the real problem is.

Example: choose the right compliance tool



Sally works in an administration role at South West School. She decides to set up a system to reduce paper usage. She sends an email asking all school employees to print only what they need. She later checks the invoices for paper usage and discovers that the school is not using less paper.

Sally is really disappointed. After getting advice from her supervisor, she decides to investigate the cause of the problem. She checks the printers in her area every hour to see whether the pages waiting to be collected are printed on both sides or not. She finds that some copies are still sitting there at the end of the day, and have not been collected. She also finds that some people are regularly printing on one side only, while others are always printing to both sides. Sally speaks to one of the staff who regularly prints on one side only and finds out that they do this because they are not sure how to print double-sided.

At the end of the day, she walks around the desks in her area to see whether there was much paper in people's rubbish bins. She marks on a map which people had paper in their rubbish. It seems that the further they were from the recycle bin, the more likely they were to put paper in the rubbish bin.

Sally now has the information she needs to offer people help to improve things. She provides a box for the people who sit a long way from the recycling bin, so they can transfer the paper more efficiently. She sends around an email with instructions on how to use the duplex printing function. She also talks to the IT department about setting duplex printing as a default setting on everyone's computer to make it easier for them.

Sally will repeat the audit in two weeks and see if anything has changed.



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.

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Environmental performance process



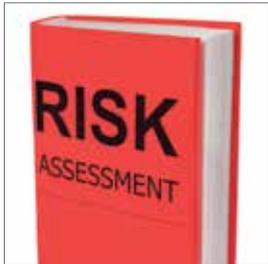
Make regular measurements of key environmental targets and compare them with previous measurements and agreed targets.

Performance reporting



Provide summaries of performance to your supervisor and other key stakeholders. This tells them when you are doing well and encourages them to address any concerns.

Environmental risk register



Make a list of potential environmental hazards in your work area. Consider whether they are in your control, whether they could cause legal compliance issues and how severe the impact would be if there was an incident. This tool helps to prioritise environmental hazards..

Training register



Record the names of staff who attend training. This helps identify any employees who have not been trained, so they can be scheduled for training.

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Quality assurance systems

These are often formal processes for compliance with external quality systems. They may include a range of tools to ensure the requirements of the external system are met, including external audits.

Other assessment methods

Measuring how much of a particular resource your workplace is using is one way to reduce waste. It also shows how well you are doing. For example, the waste contractor could advise if there is an increase in recycled paper collected, or you could analyse the business's electricity bills to see if there have been any decreases compared to similar periods.

There are best practice models and best practice information available. Think about your water bill at home. It compares how much water you use every day with the average household or an efficient household. If you use more, then you know you should think about ways to reduce your usage. The same can apply at your workplace.

Noncompliance issues

Compliance results can be measured to monitor whether a policy or procedure is being followed.

Perhaps people do not know the procedure exists, or they may not understand what they have to do to follow it. In some cases people don't want to change. It is important to point out what the benefits are. Maybe they don't care if the company saves money by using less paper, but they might be interested if you show them how reducing paper use can help the environment.

It is important to keep reminding people about the need for change. Staff meetings or newsletters can be a good way to do this. Telling people how well they are doing is a great way to motivate them to keep going. Alternatively, reminding them if things are slipping back into old ways may give them a nudge to get back into their good habits.

Practice task 2

Read the case study, then answer the question that follow.

Case study

You work in customer service at BigBank. Your manager, Ali, has received his electricity bill at home and feels great because installing new energy-efficient light bulbs and nagging the kids to turn things off have reduced his bill by 15 per cent compared to the same time last year.

Ali asks you to come up with a plan to implement an energy-efficiency program in BigBank's office. After implementing the program, you are to report to him on how well the team is doing on reducing electricity use in the office.

You ring the accounts department to ask for the business's electricity bill for this year and last year.

1. Write a plan for Ali, with at least four ideas on how he can reduce electricity usage in BigBank's office, including things that can be done immediately and things that can take effect over time.

2. Suggest some ways that you could measure compliance with these ideas. Provide at least one tool for each of the ideas.

1C**Collect information on resource efficiency procedures for the work group**

To encourage people in your workplace to act in an environmentally sustainable way, you must keep yourself informed about environmental initiatives. Learn how to source information from credible sources and convey this information clearly to your work group.

Part of your role may be to ensure everyone is environmentally aware as they go about their day-to-day tasks. It is important to communicate any new initiatives or environmentally friendly procedures in a clear and concise way. Remember, everyone is different. They may be from different cultural backgrounds, have different physical and mental abilities, or need information explained in different ways.



Understand environmental issues

Green initiatives, such as reducing paper and electricity use, are simple and can easily be implemented in every workplace. Other initiatives may depend on the industry; for example, warehouses or manufacturers may need specific procedures for storing or disposing of hazardous materials, and transport companies may need specific procedures for vehicle maintenance and controlling emissions.

To ensure that people are environmentally aware in their daily jobs, it is important for you to understand your industry and know the latest initiatives to make suggestions. There are many organisations that publish free information on environmental issues and green initiatives.

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.



Example: implement a waste reduction program



Protecting the local environment while encouraging tourism is important to Geelong Otway Tourism. They decide that reducing their waste is a worthwhile initiative and implement a Waste Wise program in line with strategies developed by Sustainability Victoria. An important part of this program is to take practical action and to measure progress regularly.

The initiatives suggested in the Waste Wise program, Geelong Otway Tourism involve:

- reducing overall waste by 15 per cent, which helps to reduce disposal costs as well
- reducing waste going to landfill by establishing systems to dispose of recyclable and biodegradable waste appropriately, including food scraps
- improving staff attitudes about waste reduction by educating them about the benefits
- encouraging other businesses in the tourism industry to participate.

Communicate with the work group

Communicating information to your work group so that it can be understood is an essential part of presenting information. You need to be clear and concise. Before presenting information, you could ask yourself the following questions.

Who am I telling?

It is important to understand your audience. If it is your own work group, then you will know the right language to use. If it is a group of new employees, you may need to make sure you explain the terms they may not know. If it is an external group, you may choose to use more formal language.

What am I telling them?

Make sure you clearly understand what your message is. When making a presentation, you should:

- tell people what you are going to say (an introduction)
- say what you are going to say
- summarise what you have said (a conclusion)
- use clear and simple language so people remember what you have told them.

Where am I telling them?

Think about where the information will be presented. You need different strategies for different groups; for example, you need to present your information differently if you are presenting to five people sitting around a table compared to a large group, or when writing something in an email. If you are making a verbal presentation, consider giving people something to take with them to refresh their memory.

Why am I telling them?

When you are asking people to change, you need to explain to them why they need to change and what the benefits are to them, the organisation and the environment.

What is important to them?

If you can describe the benefits in a way that seems important to your audience, then they will be more inclined towards your point of view. This is an important part of motivating people to change.

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Why not?

Even the best ideas can suffer if negative comments get a chance to snowball. Try thinking about some of the objections people might raise before you give your presentation. If you have already thought of an answer, then it will be much easier.

Choose the right communication

Understanding your audience enables you to choose the appropriate communication style. Make sure that you are aware of the demographics within your work group so that you are able to have information translated, delivered and readily understood. Some different ways to present information are provided below.

Methods of presenting information

Staff meetings are an easy and informal way of presenting your initiative in a safe environment. These may be regular team meetings, natural work group meetings or a special meeting especially to discuss an initiative.

Posters or visual materials can help remind people about something explained in a meeting or another environment; for example, putting posters or visual materials near where an activity occurs, such as the photocopier, light switches or kitchen. It is not always enough to put up a poster if you don't fully explain the initiative.

Emails can be a good way to get across some detailed information to a large group of people. In many organisations, people receive so many emails every day that they may not read yours in detail. It might help to review the content at a staff meeting as well.

Green teams are especially helpful in large organisations. You can choose one person from each work area to be part of a green team. This person is responsible for explaining the initiatives to their own work area and perhaps for carrying out some specific tasks. Make sure you have permission from their supervisors first.

You should communicate with all stakeholders before you communicate with your team. This may just be your supervisor or the department manager. If these people are supporting you when you deliver your message that can help persuade your group to participate.

Practice task 3

Read the case study, then answer the question that follow.

Case study

Ngoc works as a checkout operator at Superfresh Supermarket. On her tea break she is in the staff room and she notices how many disposable coffee cups are in the rubbish bin. 'That's terrible!' she thinks. 'Why can't people bring their own cups in and wash them, rather than creating so much rubbish?'

Ngoc decides to take action. She writes a memo and puts it on the staff noticeboard outside the staff room. It says: 'Using disposable cups creates a lot of rubbish! Bring your own cups to work and save our environment!'

Satisfied, she leaves the staff room and returns to work.

Later that week, Ngoc's supervisor, Harold, calls her in and asks why she wrote the memo. Ngoc explains that she was concerned about the amount of rubbish the staff generated. Harold congratulated her on her idea, but asked her to think about how she could have done this more effectively.

1. What other information could Ngoc have provided to her colleagues?

2. How else could she have communicated this information?

3. What other things could she have done to make it more effective?

4. How could Ngoc have measured her success?

5. What simple suggestion could you make at your workplace to reduce kitchen waste?

1D

Identify sources of information to support improvement

There are many places from which you can gather information about appropriate environmental initiatives. Wherever you get your information from, make sure you tell your group where you found it. Make sure it is from a credible source. It is important that your source provides valid and verifiable information so your co-workers will be more inclined to participate in your initiative.

Once you have identified an initiative to suggest in your workplace, the next step is to decide how to tell people about it. It is important to plan this because how people respond may be the difference between success and failure.

Some examples of credible sources to gather green information from include:

Government departments

Government department websites provide links or suggestions freely on environmentally sustainable initiatives. It is quick and easy to get information from the internet. Here are some examples:

- The Department of the Environment provides documents and examples of sustainability projects at: www.environment.gov.au.
- Sustainability Victoria provides various resources at: www.sustainability.vic.gov.au.

Industry groups

On their websites, industry groups provide resources to help improve environmental procedures.

- Energy and water providers also have information on their websites about how to reduce usage. Your local water authority may have suggestions about how to reduce water usage at home or in the office. Gas and electricity providers often suggest ways to use energy more efficiently.

Sustainable management organisations

Sustainable management organisations have websites that provide up-to-date information on legislation and regulations. They provide suggestions and ideas for implementing practical and effective sustainable practices in workplaces.

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Print and online publications

There are many reputable print and online publications written by sustainability consultants and experts. It is important to check the writer is qualified and skilled in this field before relying on their advice and adopting their suggestions.

Example: use credible resources to gather information

Maria, an office administrator for Sell Now Real Estate, uses credible sources to gather green information to improve her workplace.

Maria wants to do her bit to improve the environment and has already persuaded the manager to start using recycled paper. She has recently noticed that whenever they run out of toner, the cartridges are thrown away and she is sure there is a more environmentally friendly way to manage this process.

Her friend Angelo is really into saving the environment. She asks him about it and he suggests that she look up the Sustainable Living Guide, which covers a range of topics including sustainability in the office. She does this and finds that the website suggests using recyclable or refillable toner cartridges.

Next time she needs to order stationery, she rings the supplier and asks whether they provide recyclable or refillable toner cartridges. They do, but encourage her to check with the printer company about which ones to order. She rings the service number on the printer and gives them all the model information. They tell her which cartridges she can order.

Maria explains to her supervisor that they can reduce their costs by refilling the cartridges, without worrying about any change in printing quality. He congratulates her and approves the change to the new cartridges. Maria can't wait to tell Angelo all about her latest success. And now she is reading the latest information on websites, she has got lots more suggestions up her sleeve.

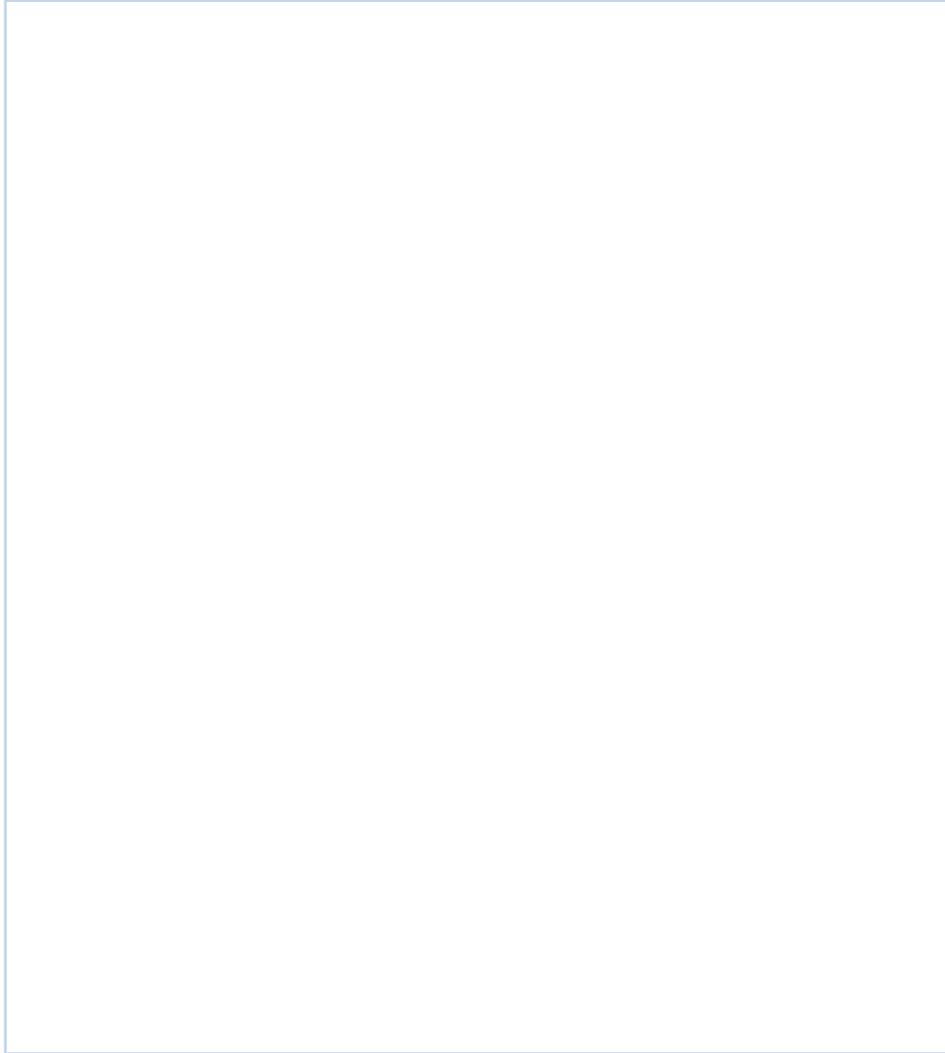
There were several things Maria did that helped her succeed:

- She asked someone for ideas on where she could get information, and then researched it.
- She thought about possible problems the change might cause and checked them out before asking her supervisor to approve the change.
- She impressed her supervisor with the preparation and the information about the cost-saving, which helped to get the approval.



Practice task 4

Identify and explain five credible sources you could use to gather environmental information.



1E

Measure and report current resource usage

One aim of environmental policies and procedures is to reduce the amount of resources used, including energy and water. In addition to using compliance tools to assess whether a workplace policy, procedure or process is being carried out, measuring resource usage is a useful way to gauge the effectiveness of a policy or procedure and review how resources are being used.

You can use resource usage information to track improvements after new procedures are implemented. Measuring resource use can also tell you where to focus your efforts. You may have lots of ideas on how to reduce your organisation's environmental impact, but it is really difficult to start them all at once. You will have a greater chance of success if you start with one or just a few initiatives at a time.

If you have measured your resource use and discovered that while you are recycling a large proportion of your waste water, your electricity use is way above industry best practice, then you may decide to implement the initiatives that reduce electricity use before those that reduce waste water.



Understand and measure workplace resources

In general, resources are inputs – things we use in order to do something. Workplace resources are those things used in our daily work.

Paper

You could measure office paper used and recycled, the paper used in packaging, paper towels used in kitchens and bathrooms or newspapers and magazines distributed among the team. Looking at purchase invoices will give you information about how much is used.

Energy

You could measure the gas and electricity used by each department, if this is available. Heating and air conditioning are key contributors to energy usage, as are common appliances used in your workplace, including office equipment, fridges and televisions.

Transport

Physical distribution consumes large amounts of energy. You can measure the transport required to distribute products to your customers or the travel done for business by your employees. You could also consider how many products are purchased from overseas that could be purchased locally.

Waste

There are different categories of waste, including recyclable waste, such as paper or plastics; biodegradable waste, such as food scraps; waste for landfill; and hazardous waste, such as batteries, that requires special disposal measures. Your waste contractor can help you measure waste in weight, which is more accurate than volume or the number of bags.

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 to view examples of carbon offset projects.

How much does your workplace use?

When it comes to being environmentally sustainable, the question posed quite often is: how will workplace resources be measured? Successful management of workplace resource usage can be divided into three categories.

Consumption

How much of something does your organisation use? An easy way to assess this over a period of time is to assess how much is purchased. Supplier invoices are useful here. You may need to consider how much stock is held if you use this measure.

Waste volume

How much waste does your organisation produce? A simple measure is to work out how many bins are emptied each day or how much waste is collected at the end of the week. You can visually inspect the proportion of types of waste. It is more accurate to use weight of waste or to conduct a physical audit where the waste is weighed and sorted. Your waste contractor may be able to help.

Greenhouse gas emissions

Greenhouse gas emissions are generated when fossil fuels such as coal, natural gas or oil are burnt. These emissions contribute to global warming. You can estimate your emissions using your energy usage information.

Measuring tools

Here are some examples of how to measure resource usage.

Consumption patterns

Review supplier invoices over a period. Success depends on the level of detail provided in the invoice. Your suppliers or contractors may be able to help with more detail.

Visual waste assessments

Inspect all bins in an area to estimate the volume of each waste type (e.g. cardboard, plastic, general). This also helps to assess the effectiveness of recycling; for example, is there paper in the general waste bin?

Physical waste audits

Sort, weigh and record contents of bins and skips.

Waste disposal methods

Use waste assessment/audit information to check whether all recyclable materials are being recycled. What about biodegradable materials like food scraps?

Lighting assessment

Review the workplace and lighting used. Are lights on in areas where people are not working or in areas where there is sufficient natural light to see without them? Review the type of lighting used in each area and how efficient it is. Use a map of the area to determine any patterns.

Heating/cooling usage

Check what temperature the heating and cooling is set to and when it is operating. Does it automatically turn off after hours, on weekends or for holiday shutdowns?

Procurement decisions

Check the energy rating of all equipment purchased. Check whether power-save modes are activated or if equipment can be programmed so the most efficient setting is the default.

Transport usage

Measure the number of kilometres travelled by employees travelling to different locations. Can the same work be achieved using video or teleconference?

Report resource usage

Organisations need to document and report resource usage for future planning purposes. This information helps motivate management and other employees to support green initiatives.

If your initiative is part of existing policies and procedures, there may be specific work instructions explaining what you should measure, who you should report it to and where the data should be stored. The information should be made easy to locate.

It is important to report information to both management and the people participating in the initiative to motivate and encourage them. Present your findings in a user-friendly way to cater for a wide audience. You may want to present the regular measurements as a graph showing the change over time, as the visual display will highlight improvements. Information can also be shared in a staff meeting, or by an email or newsletter.

Consider asking your supervisor or their manager to make an announcement if your project reaches an important milestone or makes a big achievement.



Reporting tools

When reporting information, it is important to remember your green principles. For example, don't report on the success of reducing paper usage by producing a thick report using lots of different coloured ink. Some suggested reporting tools are below.

Spreadsheets

Spreadsheets are useful for reporting changes over time. They also allow you to create simple graphs that illustrate any changes.

Regular reports

You should use regular reports if you measure information regularly. Combining your information with a similar or relevant report is efficient and saves time.

Emails

Emails are useful to summarise information and to share information with lots of people. You can attach spreadsheets or graphs to your emails.

Staff meetings

Staff meetings are good for encouraging participants. They also provide an opportunity for the supervisor or manager to thank the team.

Presentations

Presentations allow you to present details of measurement without producing hard copies. If handouts are needed, try to print several slides to a page.

Posters

Posters are useful for providing feedback to participants near the area where the activity takes place.

Staff newsletters

Staff newsletters are useful for telling members of other departments of your success. They may even encourage other areas to take on a similar initiative.

Example: document and report

Jenny notices that although most staff are making an effort to implement sustainable practices in the office, each person she speaks to thinks they are the only one focused on sustainability. Although Jenny has set up a reporting document on the intranet, staff don't seem to access the monthly reports. Jenny takes the opportunity to look at other ways to report the organisation's sustainability progress. After getting approval from her manager, Jenny organises a visual display on the staffroom wall to let everyone know how much the organisation is improving in reducing energy usage. Using bright colours, Jenny depicts energy use over the month compared with the same month last year. To further add some incentive, Jenny lists actions that each department has taken to reduce energy usage. The following month, Jenny discovers further reductions were achieved and wonders if there is now a bit of competition between departments.

Practice task 5

1. Find out the resource usage in your workplace or home, and answer the following questions:

- What are some of the materials that are used?
- What quantities of these materials are used?
- Are these materials recyclable?

2. Think about the waste produced in your home, school or workplace and answer the following questions:

a) What types of waste can you think of?

b) Could any of this waste be recyclable? If so, how much?

c) How could you reduce the total amount of waste?

d) How could you reduce the amount of waste going to landfill?

e) How would you measure your success?

1F

Analyse and document current purchasing strategies

Reducing resource use is an important part of reducing an organisation's environmental footprint. You should also consider what sort of resources are being used; for example, using less paper is an achievement, and the environmental impact is even less if paper with recycled content is used.

Changing the resources used means looking at purchasing strategies as a way of reducing the organisation's environmental impact.



Rethink purchasing strategies

To reduce the environmental impact of what your organisation purchases, there are several general elements to consider. You may be able to encourage your suppliers to change where they source their raw materials. They may consider changing to a more sustainable source. This will depend on your relationship with your supplier, how big a client you are, and whether you buy a product made just for you or for the mass market.

Key elements to consider when reviewing purchases

- Where do raw materials come from? Is it an environmentally friendly source?
- What production and manufacturing methods have been used?
- How much packaging is used? Is the packaging material reusable or recyclable?
- How is the material distributed? Is it produced locally or overseas?
- Can the product be recycled when we are finished with it?
- Is it efficient to use and operate?
- How will the product be disposed of?

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.

Transport

Consider whether vehicles could be part of a green fleet. A green fleet provides carbon offsets, usually by planting trees, to balance vehicle emissions. Using LPG vehicles instead of petrol is cost-efficient and environmentally friendly.

Waste

Different waste contractors provide different services for disposal. You may find some contractors can recycle biodegradable waste, such as food scraps, or have a more efficient sorting process so that more materials can be recycled. Research the different contractors in your area.

Water

Government legislation states that appliances that use water must display efficiency ratings. Make sure that any equipment purchased uses the lowest amount of water possible. Some washing machines and dishwashers offer an eco-setting, whereby less energy and water are used in the cycle. Washing machines generate fewer emissions when operated using cold water.

Production materials

Review the materials used in your production processes. Are they from an environmentally sustainable source? Are they from a distant location when a local equivalent is available? Could fewer materials be used for the same effect?

Packaging materials

Review the packaging included in products you purchase regularly. Would there be less packaging if you purchased them in bulk? Do you have room to store bulk quantities? If so, there are often substantial savings available for bulk purchases, as well as reducing packaging.

Consider whether packaging is reusable or recyclable when purchasing products. In some environments, you may be able to receive goods on reusable pallets rather than in large cardboard boxes. Speak to suppliers about whether they offer this facility. While they may require a deposit to supply pallets, you save the cost of disposing of the cardboard.



Buy for the good of the environment

When we buy something, we are sending a message to the manufacturer that we prefer their product over their competitors'. If there are two similar products available and you decide to purchase the one that is better for the environment, you are telling that supplier that you value their choice to make an environmentally friendly product. If sales go up, they will continue to produce these products.

You are also sending a message to the competitor that they have lost an opportunity by not having an environmentally friendly product. If enough people switch to the other product for the same reason, then the competitor may consider changing their practices.



Supply chain sustainability

A supply chain is a system that covers all aspects of getting a product or service from where it is made or provided to the final consumer. Raw materials (including natural resources) and manufactured components are converted into the final product, which is then available to the customer.

Supply chain sustainability is the management of the supply chain in a way that is environmentally responsible. This environmental responsibility is balanced with social and economic requirements. This way, the production of goods and services is sustainable in the long term, which benefits all stakeholders.

Organisations that have sustainable supply chains do so to comply with laws and regulations and to meet the needs of the business. It is also to support principles of environmental responsibility and satisfy the expectations of society. Organisations use the following tools and strategies to develop and maintain sustainable supply chains.

Supplier codes of conduct

Supplier codes of conduct set out the expectations that an organisation has with respect to the way their suppliers manage their businesses.

Supply chain maps

Supply chain maps set out all the activities, organisations and people who are involved with the entire process of bringing a product to the marketplace. Maps need to be produced for each product that is manufactured or delivered.

Risk mapping and management

It is necessary for organisations to identify what risks are involved with the production of their goods and services at all stages. Human rights, labour management, potential sources of corruption and environmental irresponsibility are all areas of potential risk that need to be examined. For each, the likelihood and severity of the risk needs to be documented.

Monitoring and reporting

Organisations encourage best practice by comparing their own performance against industry benchmarks. Self-evaluation through monitoring of performance and attention to continuous improvement are critical components of the process. Reporting of the outcomes of these processes enables transparency and provides encouragement for other organisations.

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.

Natural environment considerations

When it comes to the procurement of goods and services that benefit the natural environment, it is necessary to consider the entire life cycle of items. For example, a product that appears to be environmentally friendly may have a short life compared to comparable products, and will need to be replaced sooner. This will not only affect the environment (again), but will also raise questions about the value-for-money aspect of the procurement.

Natural environment issues that need to be considered when looking at the life cycle of products and services are shown below.

Goods and services life cycle considerations:

- Energy consumption
- Type of energy required
- Water consumption
- Impact on water quality
- Resource use
- Type of resource (renewable or non-renewable)
- Volume and type of waste that is generated
- Toxicity and associated hazardous substances or waste
- Recycling options at resource 'end of life'
- Impact on the natural environment
- Noise issues
- Pollutants and emissions

Quality assurance and sustainability

Quality assurance is a system that incorporates a number of well-documented procedures and rigorous ways to monitor outcomes. The monitoring process has to be designed so that the data collected is statistically valid and the results are accurate.

The purpose of having a quality assurance system is to maintain a required standard for the production of goods and services. When a process also has a sustainability requirement, the standard has to apply to the entire production cycle and sustainable practices need to be incorporated at all stages.

Organisations with quality assurance (QA) systems have documented quality assurance policies and procedures. These documents spell out the requirements of the QA system for the organisation and provide guidelines for staff so that the required standards can be implemented and maintained.

Purchasing power

The ability to influence what other businesses are doing based on your buying decisions is called purchasing power. While one sale may not make a difference to what businesses do, consider what the impact could be for larger purchases. For example, what if an electricity company won a contract to supply a large manufacturer just because they used renewable sources, or if a small business in a country town chose to buy their five company cars at a particular dealer because they offered LPG cars on a green fleet?

If enough people start to make decisions based on green principles, then the people we buy from will start to adjust their production to suit.

Document purchasing strategies



In most organisations, it is important to document the reasons behind a purchasing decision. Sometimes this is part of the approval process to spend the money. Sometimes it is simply part of workplace procedures.

Suppose you are requesting approval for choosing a certain type of printer. You might list the features and price of the products you reviewed. A table listing the features and comparing models is a simple way to do this. Your reason may simply be that your chosen printer has the most features for the best price.

You may be recommending a more expensive printer because it has more features or because it is more environmentally friendly. You should clearly list your reasons for valuing these features more highly, especially if there are long-term cost savings. Explaining the cost savings will usually help secure approval.

Depending on your role, your workplace procedures will indicate who you should share this information with, where the document should be stored and for how long. This is more likely to be required for capital equipment purchases, such as printers, than regular purchases, such as paper.

Practice task 6

Read the case study, then answer the question that follow.

Case study

Andreas is an administration officer for Prestige Printing, which is renovating its kitchen and installing a new dishwasher. The manager, Samantha, is concerned that the renovation is costing a lot of money, so she asks Andreas to look for the best value dishwasher.

Andreas does some research online. Here is his research. He has narrowed it down to three dishwashers and needs to make a presentation to Samantha for approval to purchase his preferred dishwasher. Andreas understands Samantha wants to save money, but he thinks it is important to save water and energy. Now he just needs to convince Samantha.

Feature	WashQuick	SuperClean	QuietWash
Water efficiency rating (higher is better)	4 stars	5 stars	3 stars
Energy efficiency rating (higher is better)	3 stars	4 stars	3 stars
Eco settings available	No	Yes	Yes
Maintenance plan included	Yes	No	Yes
Fast wash available	Yes	Yes	No
Child-safe features	No	Yes	Yes
Load sensing	No	Yes	No
Noise level (dB) (lower is better)	52	45	41
Price	\$1100	\$1500	\$950

1. Can you help Andreas? Which dishwasher do you think he should choose? Why?

2. Write a short report for Samantha, explaining your reasons for choosing your preferred dishwasher.

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.

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Audit

- **Opportunity:** There are a lot of paper and food scraps in the general waste bin.
- **Suggestion:** At the next staff meeting, remind staff of the importance of separating rubbish. Create signs to place near specific bins. Request more bins so they are closer to people's workstations.

Review resource usage

- **Opportunity:** Invoices show electricity use increasing as weather warms up.
- **Suggestion:** Encourage staff to use blinds when the sun is shining on their window. Ask maintenance to increase the temperature setting to 23°C to reduce energy usage.

Lighting assessment

- **Opportunity:** Lights remain on in the toilets, storeroom and conference rooms when no one is present.
- **Suggestion:** Create signs for doors reminding staff to switch off lights. Research installing sensor lighting.

Compare best practice model

- **Opportunity:** A report in a local paper features a supermarket creating compost with its food scraps to use on its car park garden.
- **Suggestion:** Speak to supervisor about initiating a similar program to reduce landfill waste.

Compare benchmark data

- **Opportunity:** Monthly measurements show that the percentage of waste going to landfill has reduced from 50 per cent to 30 per cent; however, you read an article about a company whose landfill waste is only 15 per cent.
- **Suggestion:** You contact the environment officer at the company to find out about their processes and see if they have any new ideas.

Use benchmarks

A benchmark is a base measurement or a reference point for a measurement. Once a base measurement has been set, subsequent measurements can show trends over time and enable progress to be measured.

Common benchmarks include:

- current usage rate of resources (e.g. utilities such as electricity, gas, water)
- current consumption of renewable resources (e.g. paper, green energy)
- current consumption of non-renewable resources (e.g. fuel, fossil fuel derived energy)
- disposal and reuse of all recyclable items (including plant and food items that can be fed to animals or composted).

Improve information flow

Just because you have reduced your resource usage, and with it the environmental footprint of your organisation, does not mean you can't reduce it further.

Continuous improvement means that you can always do better, regardless of how well you are doing right now. Once you have achieved one objective, it is time to set another. You may want to improve performance in the current initiative or to maintain current levels in that initiative while introducing another.

Involve others

When people are involved in developing a plan or know the reasons behind an initiative, they are much more willing to participate. People should be fully informed of the benefits and feel involved. For complex schemes, you should explain your idea to a few team members before you tell everyone so you can practice your communication strategy, identify any possible concerns and make any modifications in advance.

Take the time to talk to people about an initiative and ask for their feedback. They may tell you it is a wonderful idea or they may have some suggestions for improvement. Informal chats can provide helpful information.

Good ideas can come from anywhere. Encouraging people to participate in a suggestion scheme can really get ideas rolling. Not every initiative needs to be complex or expensive. Sometimes a very small change can make all the difference. For a suggestion scheme to be effective, you need to respond to all suggestions. Depending on the situation, a noticeboard, newsletter or personal discussion may be appropriate.

Example: involve others

Toby noticed that although staff attended meetings and stated they agreed with making continuous improvements to reduce, reuse and recycle, they were not as forthcoming when it came to getting input on how to improve. Toby decided to trial an anonymous opportunity for improvement (OFI) system. Rather than installing the usual suggestion box, Toby decided to install some old letterboxes he found in the recycling yard at his local tip. After painting them bright colours, he printed the letters 'OFI' on each letterbox. A month later Toby was able to report at the staff meeting that he had received a number of opportunities for improvement. The brightly coloured letterboxes attracted people's attention and the opportunity to comment anonymously seemed to be a good strategy to get others involved.



Practice task 7

Most homes, workplaces and organisations recycle at least some of their waste materials. Choose a group that recycles. It could be a home, school, shopping centre or workplace.

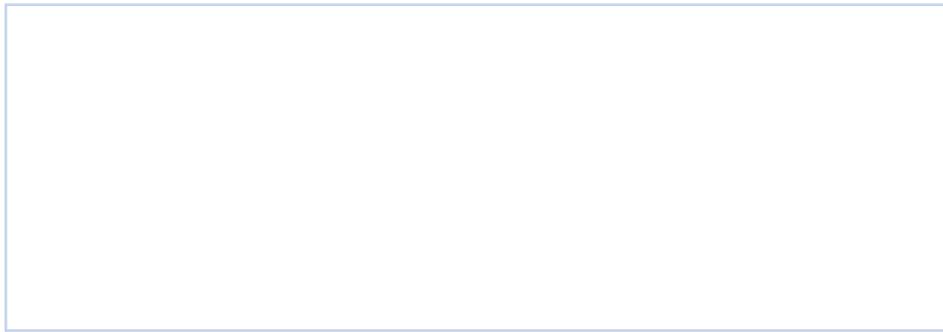
1. Provide a brief summary of what materials are recycled and what the systems are for collecting waste materials; include an outline of the different categories of waste collected.

2. Consider how waste could be recycled more effectively. Remember to consider each step of 'reduce, reuse and recycle' in your response. List at least three suggestions for improving waste recycling.

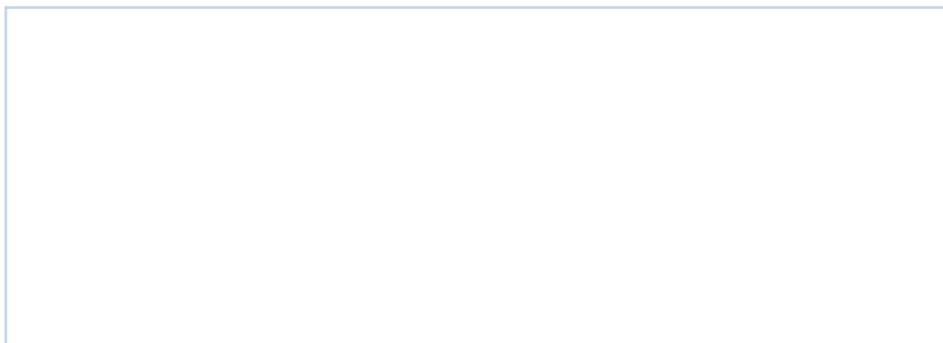
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3. Consider your ideas for improvement. What would you do to try to implement the improvement?



4. Explain how you would measure your success.



Summary

1. Environmental regulations are an important part of workplace policies and procedures.
2. It is important to ensure that you, and others, are following environmental procedures accurately.
3. Good communication skills are essential when following or relaying information about environmental practices.
4. Resource usage should be analysed and documented to encourage improvement.
5. All workplaces have the power to make informed purchasing decisions.
6. Analyse work processes and access information to promote continuous improvement.

Learning checkpoint 1

Identify current practices in relation to resource usage

This learning checkpoint allows you to review your skills and knowledge in identifying ways to improve resource usage.

Read the case study, then answer the questions that follow.

Case study

Felix works at SoFresh, a local greengrocer. It is a big, busy store. Felix helps with receiving deliveries and stocking the shelves with fresh fruit and vegetables. He checks everything for damage and throws spoiled things away. Felix also pulls the big leaves off things like broccoli and cauliflower, and he throws them in the skip with all the other rubbish.

Sometimes Felix works on the register, which he really likes because he can chat to customers about their purchases. But he is always amazed at the customers who put everything in separate plastic bags, even things like potatoes and pumpkin. Then they carry them all home in more plastic bags. 'Where do they put them all?' he wonders.

One Saturday morning, it has been really busy and he notices how many customers mention they have forgotten to bring their own carry bags. As he wanders out for his lunch break, he sees a big pile of boxes he needs to break up before they can go in the skip. Felix has an idea. Maybe SoFresh could offer the boxes to customers instead of plastic bags.

The owner, Stefano, is having his lunch at the same time, so Felix decides to mention his idea. 'Oh, people won't want to do that,' says Stefano. 'They'll complain the boxes are too heavy.' Felix points out that they carry their shopping to the car anyway, just in plastic bags. He asks if it would be all right to put some boxes near his register that afternoon and see what happens. Stefano agrees.

That afternoon, Felix offers a box to anyone who has not brought their own bags. He is surprised that so many people accept. He starts to get enthusiastic; after all the more people who accept, the fewer boxes he will need to break up later. He decides to go home and think about a way to persuade Stefano to change his mind.

After a couple of weeks, Stefano pulls Felix aside. Customers have really responded to Felix's idea and are talking about how good it feels to shop somewhere that cares about the environment. Stefano wants to get the local paper in to write a story about how SoFresh is putting the 'green' back in greengrocer. He wants to know if Felix has any more ideas about reducing plastic bags or any other waste-reduction strategies.

Felix takes his new ideas to Stefano, who loves them. He puts Felix in charge of 'greening' SoFresh. He also wants to make sure that his store in a nearby suburb can do the same thing and asks Felix to help. He asks Felix to suggest some ways to make sure new staff understand the procedures.

1. Why should Stefano change his system? List at least three reasons why using boxes is better than using plastic bags.

2. Explain how Felix could get other people to follow his suggestion.

3. Describe how Stefano will know if Felix's idea will benefit his business.

4. Can you think of other ways SoFresh could reduce their waste? Make at least three suggestions.

5. List three sources Felix could use to get more 'green' ideas.

6. Describe how Felix could help transfer the procedures to the other store.

7. Explain how Felix could make sure new staff follow the SoFresh procedures.

8. What environmental procedures existed at SoFresh before Felix implemented his new procedure? What environmental procedures exist afterwards?

9. List any legislation or regulations that may affect SoFresh.

10. What compliance tools did Felix use to develop and implement his idea?

11. Were there any purchasing decisions involved? If so, what were they.

12. How did SoFresh promote continuous improvement?

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

2A

Seek input from others

To initiate change, you must consult or discuss your proposal with other stakeholders so you are aware of any potential problems, concerns or additional opportunities in advance. When people have been involved in developing a process, they are more likely to be supportive, which helps you achieve your goal.

Stakeholders may be internal, such as your colleagues or managers; or external, such as customers, suppliers and local community groups. Your supervisor can help you identify key stakeholders for your initiatives.

Stakeholders may include:

- customers
- suppliers
- operational staff
- shareholders
- supervisors or managers
- the public
- colleagues and team members
- other departments
- other interested parties.

Get advice from the experts

No matter how good you are at your job, you are not expected to know everything. Sometimes, you need information from experts in particular areas to successfully carry out your idea for change.

For example, if you want to switch to green power, you need information from your energy supplier. If you want to change how people use their computers, you need to consult with the IT department.



External advice

You may need to consult with a number of external organisations to implement a green workplace solution. You may just need to review information provided on websites. Or you may need to contact the organisation and meet with a representative for more detailed information.

Below is a list of some of the external organisations you can seek advice from.



Suppliers

Suppliers can help with information on resource usage, such as energy, water, packaging or paper, or information on more effective use of resources. Waste contractors can advise you on recycling.



Investors

Investors may be able to support with funding, information about possible initiatives or contacts among other stakeholders.



Customers

Customers may be surveyed about their opinions on green initiatives. For example, if a supermarket is considering changing its policy on plastic bags, it may survey its customers to understand their reaction before making a change that could affect its business.



Government bodies

Government bodies can be a useful source of information. Each state or territory has their own department responsible for the environment, and these are listed on the Australian Department of the Environment website: www.environment.gov.au.



Councils

Local councils are a good source of local information, particularly on waste disposal. Most councils have detailed websites, or you could call them directly for assistance.

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Universities and other research organisations



Research bodies such as universities and research organisations are sources of sustainability and environmental advice. Since material is almost always published in peer-reviewed journals, it is likely to be reliable and supported with research results.

Research programs can provide excellent ideas for developing practical and effective sustainability measures for workplaces.

Technical specialists



Technical specialists may be required depending on the complexity of your proposal. Industry bodies or suppliers may be able to provide information about appropriate specialists.

Local community



The local community may be surveyed to understand their response to a potential proposal or to understand their needs before developing an initiative.

Industry bodies



Industry bodies can be a useful source of best practice information and benchmark data. Industry bodies list contact information on their websites.

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.

Communicate clearly with others

Effective communication is an important life skill. You need to research and understand your audience and tailor your style of communication to suit them, especially when you are dealing with external groups and seeking information or assistance from stakeholders.

You must clearly understand the message you are trying to convey. Present the information as simply and concisely as possible, recap, and summarise the key points so that they are easily understood and remembered.

If you are visiting an external stakeholder, make sure you have everything you need. Think about how many people will be involved. Consider giving them something to refresh their memory or follow up with them later if appropriate. Listen carefully to any information your audience provides and acknowledge their help.

Consider possible objections people may raise before you speak with them. This will give you time to consider how you will respond, without being under pressure.

When dealing with people, ask yourself the following questions:

- Is English their first language?
- Do they all have a similar education level?
- Do they all have the same cultural or ethnical background?
- Do they have the same physical capabilities?

Example: communication styles

Kirsty has been given the task of communicating strategies to motivate staff to implement sustainable practices. She knows that people have specific preferences for how they take in information. Some people prefer to receive information visually, some prefer to hear the information and others prefer to be shown how to do things. She also knows that generally people need to receive information more than once. Kirsty decides that she doesn't have the time or resources to check with every staff member regarding their preferences, so decides she will communicate using all three methods.

The first issue Kirsty decides to tackle is the recycling bins in the staffroom kitchen. She develops colour-coded posters and places them above each bin with pictures explaining what each bin is for and what can be disposed of in each bin. Kirsty does a verbal presentation at the staff meeting, speaking about each key point and providing opportunities for staff to ask questions. She then takes all the staff into the kitchen and demonstrates how to use the recycling bins. The following month, Kirsty changes the posters and her presentation for the meeting to communicate the points again, but in a slightly different format.

Practice task 8

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

Case study

Abraham works in the finance department at Fashion First, a chain of clothing stores. He is the finance green team representative. They plan a meeting to discuss introducing a commingled recycling scheme. The green team chairperson, Molly, asks Abraham to conduct some research.

Abraham does not know a lot about commingled recycling but he is sure he can find something on the internet that will give him some ideas. He finds out that commingled recycling is a recycling system where paper, cans, bottles and any other recyclable materials are all put into the same bin. The waste contractor sorts the materials later.

Can you help Abraham find some more information?

1. Conduct an internet search and prepare a short summary of the key steps involved in launching an office recycling scheme.

2. List the websites you found most useful.

2B

Use external sources of information

Reviewing external sources regularly can help provide fresh ideas for green proposals or can provide the information you need to launch or improve an existing proposal. There are many ways to access credible external information. The internet is a useful source of information, with information provided by government websites or large, well-known organisations usually accurate and regularly reviewed. Be aware that not all websites are credible.

Your local library may be able to assist you with additional external sources. Contact or visit an environmental organisation and explain what you are trying to achieve. Many of the people involved in these organisations are enthusiastic and willing to help. Try calling people listed as contacts on websites for detailed information.

Example: external sources for information



Hanna is asked to download a copy of the Green Office Guide from the internet to support the organisation's sustainability processes. Hanna searches online only to discover that the Green Office Guide has been archived by the Department of the Environment because the information in the guide has been superseded. She realises that she needs to find current information for her organisation. After further searches, Hanna finds the Sustainable Living Guide, which uses some relevant information from the Green Office Guide. She also decides to check some other websites to ensure the information she has is current and useful.

Choose the right information for your workplace

It is important to research and ensure you choose the right information and appropriate initiatives for your workplace. If you work in a bank, then a successful mining industry initiative may not be relevant to you. Factory workers may not relate to an initiative about office paper, but may be interested in a lighting initiative that improves their work environment and saves electricity.

Your proposal must not breach existing workplace policies and procedures. Work health and safety requirements must always be considered; for example, changing the setting on heating or air conditioning can dramatically reduce electricity bills, but there may be guidelines in place about temperatures for the work environment.

You may need to consider other workplace policies; for example, some documents may need to be shredded for privacy reasons. Some documents may need to be stored both as a hard copy and electronically. Use PowerPoint for presentations and reports instead of printing notes. If people want a copy, email it to them after the meeting.

If you consult with the right internal stakeholders, you can develop a proposal that still meets the policy requirements and helps the environment too. Your supervisor can help you identify which existing workplace procedures may need to be considered.

Create information resources

Research can be time-consuming. It can save a lot of time if you create a database or list of useful information sources. Sharing this information can save a lot of time in the long run, particularly if you are a member of a green team with representatives from different areas.

The following resources may be useful in your research.

Resource list or database

This is used to record useful websites, information sources and details of further reading

Intranet

This is used to access workplace policies and procedures. It may also provide examples of other initiatives.

Internet

This provides access to all sorts of information. Make sure the information is credible.

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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.



Practice task 9

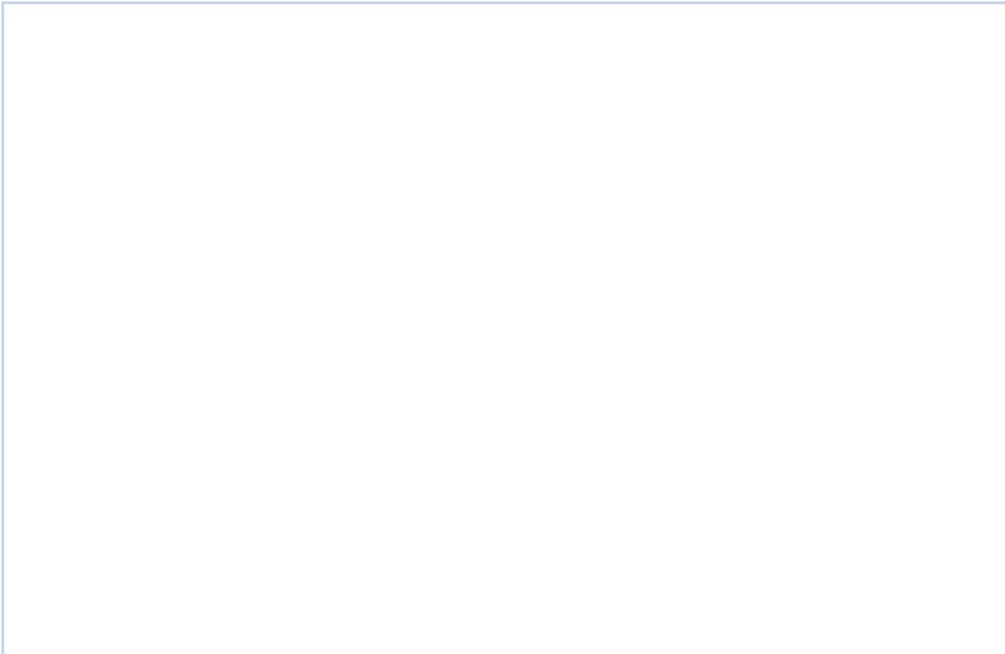
Read the case study, then complete the task that follows.

Case study

Frank works in accounts at North East Stationery Supply. As well as managing invoices and receivables, Frank is responsible for implementing green workplace initiatives. One day, Frank's supervisor Isabella calls him into her office with great news: he is going to be promoted!

After congratulating him, she asks what he needs to do to train his replacement. He replies that one of his colleagues can train them about the accounts procedures, but no one else is familiar with his green workplace initiatives. After some discussion, she suggests that Frank compile a reference containing useful research, contacts and websites. She also asks Frank to organise the information so that his replacement will know which information relates to which initiative.

Help Frank to develop a collection of useful information by using the external sources listed in this topic and any others you are aware of. Briefly describe the information contained in each resource so that someone reviewing the database can quickly identify the most useful information.



2C

Identify alternative solutions

After researching external sources, collecting internal information and consulting with appropriate stakeholders, you will probably have a lot of information, ideas and possibilities. This can be exciting or overwhelming. Once you have identified opportunities for environmental initiatives in your workplace, it is time to evaluate and develop your own alternative solutions.



Problem statement

Developing a new solution is, essentially, trying to solve a problem. When solving problems, you must understand the reason behind each problem.

It is helpful to begin by writing a problem statement. This does not need to be complicated. Let's say you are trying to reduce the amount of paper used in an office. Your problem statement might be: 'People are using too much paper and not using the recycling bins'.

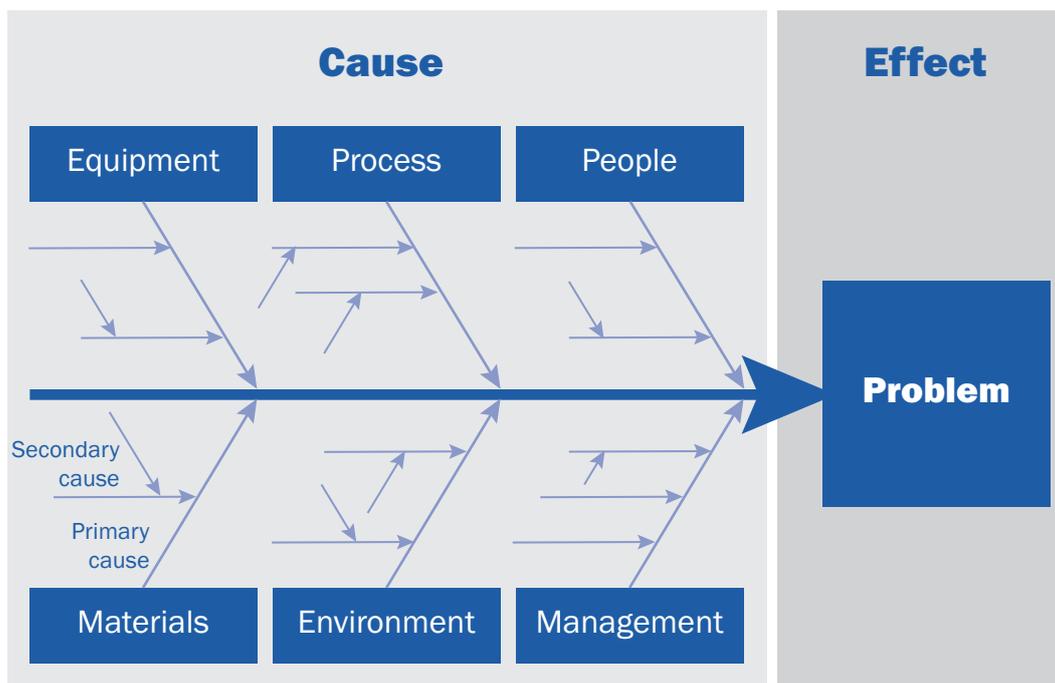
However, this does not help you identify the best solution. First, consider separating the two points: using too much paper and not recycling. See if you can identify the real reason for each point. There may be more than one. When you have done this, the solution will be more obvious.

Consider all possible reasons for the problems. It may be helpful to use some data in your problem statement. For example, you may extend 'not using recycling bins' to 'only 15 per cent of paper is being recycled'. This is helpful because it gives you a base from which to measure your improvement.

Fishbone diagram

The fishbone diagram is very useful to note down and visualise different reasons clearly. Mark the main problem on the central line or spine. Then, as you identify each contributing reason, mark these on the side lines or bones. The diagram starts to represent a fishbone, with the problem at the head of the fish. This is a useful way to summarise key points, especially when working in a group or making a presentation. It is also known as a cause-and-effect diagram because it summarises why the key problem occurs.

The following is a basic example of a fishbone diagram.



The five whys

Asking 'why' five times is a useful way to analyse the issue deeper and identify the real reason behind a problem. You may not need to ask all the five whys if you have identified the reason. These newly identified reasons should be added to your fishbone diagram. When referring to the paper usage problem, what might be the five 'whys' that could form part of the fishbone diagram?

When dealing with the paper usage, the five 'whys' may include:

- People are only printing on one side of the page. Why?
- They don't know how to use the duplex printing function. Why?
- They don't understand how to set it up on their computer. Why?
- No one has explained the steps to them. Why?
- No one has raised it before. Why?

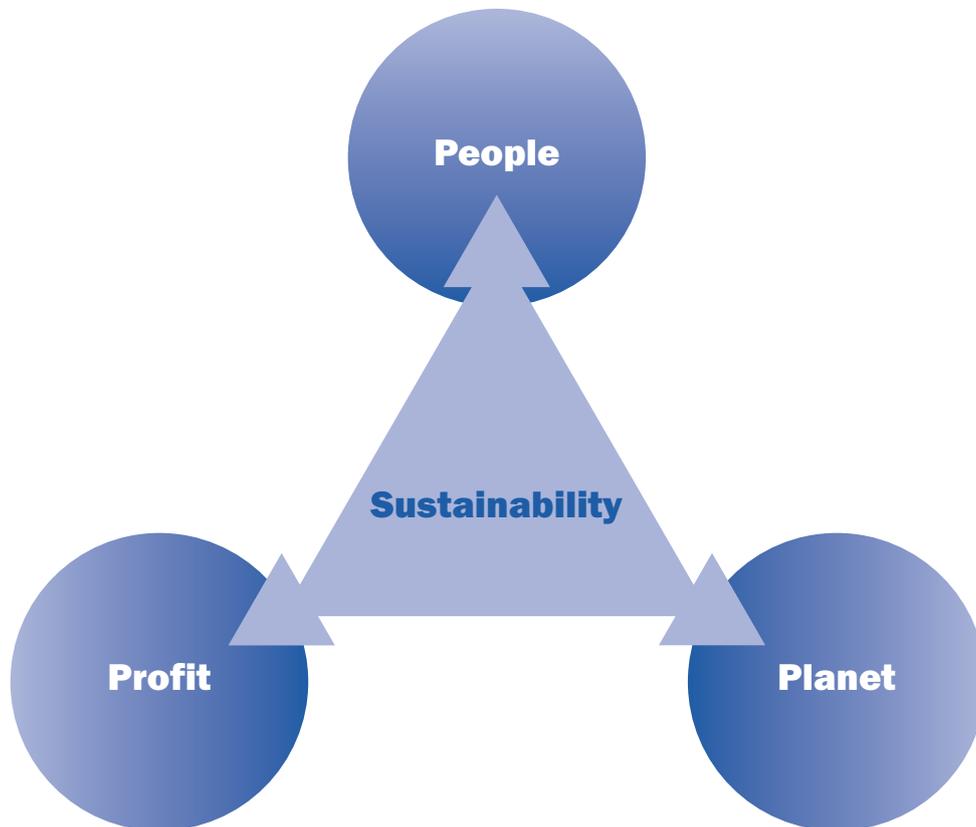
Reflect on different approaches

Before you can implement a solution, you need to evaluate it to be sure that it is appropriate to your workplace. You need to think about the impact on employees and also the investment required.

Traditionally, companies judged performance on profit or bottom line. If they made a large profit compared to their costs, they had done well. However, values are changing and two other criteria are now also considered: people and planet. Together, they are known as the triple bottom line. This principle can also be applied to assessing individual proposals and initiatives.

For a green workplace initiative, profit may include considering the investment required for the plan, as well as potential savings. People may include the effect on morale of implementing the proposal, or the effect on workplace safety. Planet may include reducing the environmental impact by conserving resources.

It is important to consider all three factors when assessing a workplace initiative.



Make solutions relevant to your workplace

Research is an effective way to identify best practice solutions used for similar problems in other industries or organisations. You may also choose to use your colleagues and other employees to help develop a solution. Any solution you develop needs to be appropriate for your organisation. It should be practical and needs to comply with workplace policies and procedures.

Brainstorming ideas

- └ Team members can be a great source of ideas. One way to develop ideas is to hold a brainstorming session. You can schedule a brainstorming session with colleagues, direct reports, supervisors and technical experts.
- └ Explain to the group as clearly as possible the problem you are trying to address; for example, that only 15 per cent of office paper is being recycled. You may need to define some boundaries, such as the investment available to support the idea or remaining consistent with existing policies and procedures.
- └ Establish some rules for the session, which may include the following:
 - There's no such thing as a bad idea.
 - Watch the clock. Set a fixed time for generating ideas and stick to it.
 - Record your progress using flip charts, post-its or other tools to make sure every idea is captured and readable.
 - Quantity not quality. Brainstorming is about creating a lot of ideas. Good ideas can be identified later.
 - Encourage creativity. Try to think differently. Use colours, games and fun to encourage people. Small rewards for people who make lots of contributions can help.
 - Involve everyone. Monitor the group and ask quieter people for their suggestions. Don't let the rowdy ones dominate the session.
- └ Make sure you clarify each suggestion. You can do this by paraphrasing the suggestion or repeating the suggestion back to the person in different words. At the end of the session, thank the participants for their ideas. You are now ready to prioritise your list.

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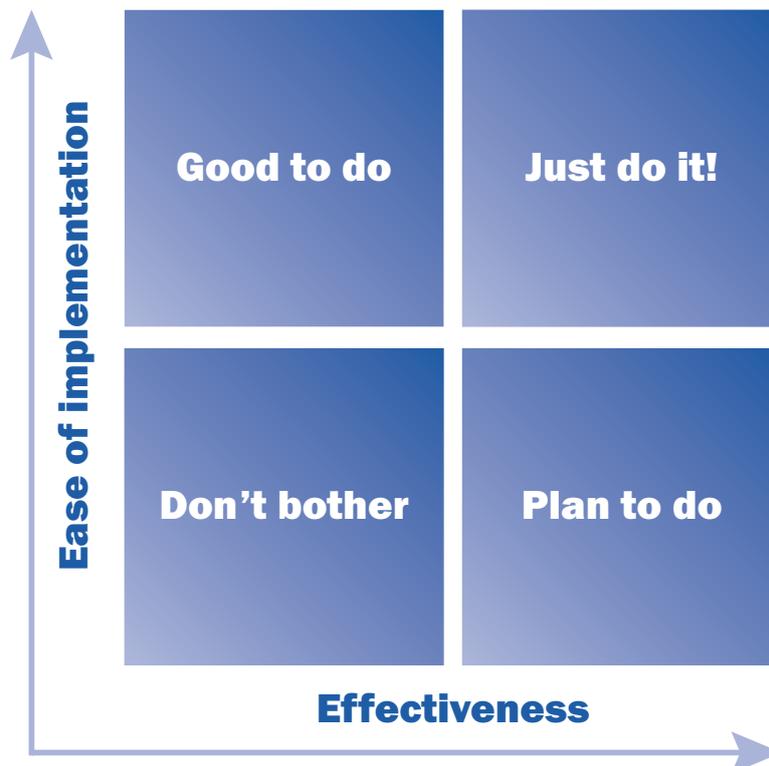
Prioritising ideas

Choosing the best idea can be difficult when there are a lot of options available. Use the brainstorming group to help with this task. Apply a scale consistently; for example, by assigning points of high, medium and low. Think about each idea in terms of its effectiveness and ease of implementation, and complete an assessment matrix similar to the one shown here.

Once you have categorised your ideas in this way, you can easily prioritise them. If an idea is very effective and easy to implement, then it should be implemented. These ideas are sometimes called 'low-hanging fruit', as they are easy to pick. They can also really motivate a team.

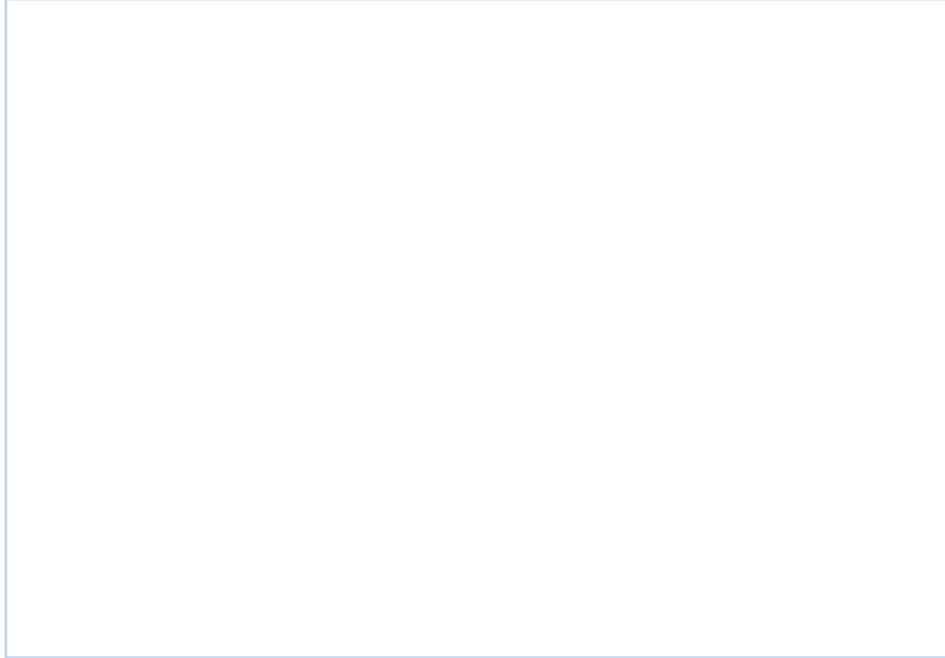
Ideas that are very effective but difficult to implement should still be considered. They may take more planning and may require approval from management or other areas. But because they are very effective, they should still be seriously considered.

Ideas that are easy to implement but not particularly effective require some further analysis. Don't bother with ideas that are ineffective and difficult.

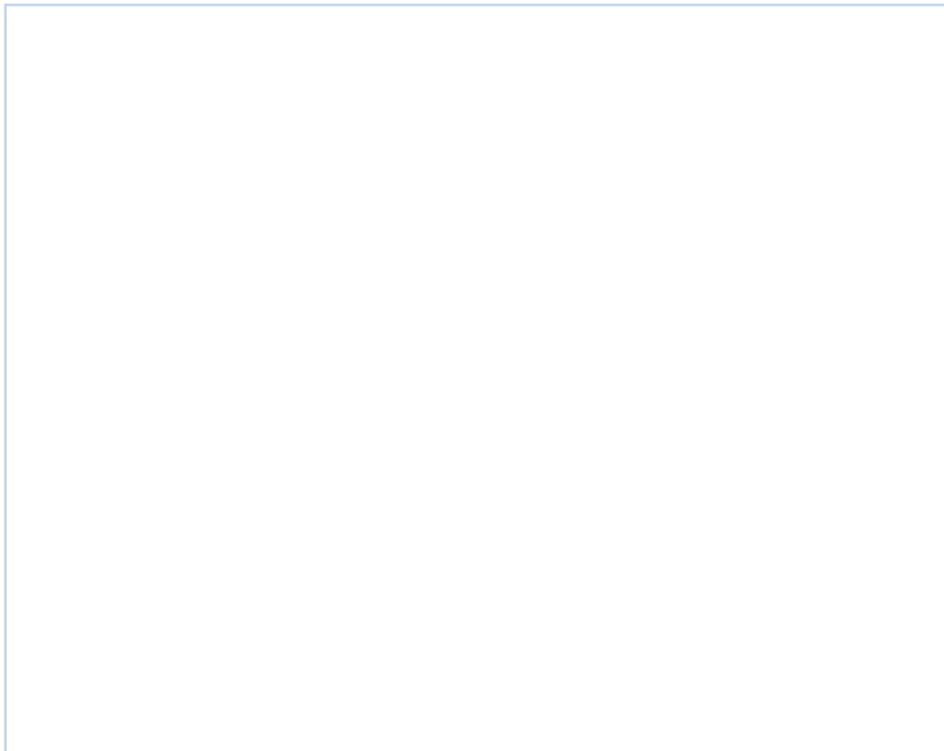


Practice task 10

1. Take a large piece of paper and develop the fishbone diagram for the problem statement: 'People are not using recycling bins'. Try to identify the root cause of why people are not recycling paper. There may be more than one cause.



2. Use the fishbone diagram you have just created to help you develop some solutions for this problem. Draw a matrix and prioritise these solutions in terms of their effectiveness and ease of implementation. Explain your reasons for where you have positioned each solution.



2D Set efficiency targets

Having defined the problem and identified the most appropriate solution, you are nearly ready to launch your green workplace procedure. Before you do so, you must develop a target for improvement. This is an important part of justifying investment in the procedure and can also help motivate people to participate.

Create targets

You should consider setting efficiency targets for your green workplace proposal. If your proposal requires some initial investment, then you need to set a target for resource usage reductions or other costs savings to offset the initial investment.

Reporting progress on efficiency targets can also be motivating. You could display a poster near the photocopier and printer that shows the percentage of paper that is recycled. It may spur people on.

Targets need to be challenging, but realistic. They also need to consider the balance between available funding, resources, support and compliance with other work procedures.

Define your objectives

Before setting your target, you must be clear about your objective. Regularly review your objective. Make sure it is consistent with other workplace policies and procedures, particularly with regard to work health and safety. You should also make sure it fits with your work group's role and responsibilities, and the overall vision of the organisation.



Ways to set targets

Setting the right target is an important part of achieving your objective. It is easy to set a target that you know you will achieve, but that doesn't necessarily deliver the best result. If a target is too high, it may seem impossible to participants, which can decrease motivation. The best targets are SMART targets.

Specific

Do your targets state exactly what you need to do?

Measurable

Can you demonstrate you have met your target?

Assigned

Have tasks been clearly assigned where required?

Realistic

Can you meet the target?

Time-bound

Have dates been set for each target?

Communicate with stakeholders

Your supervisor, managers and other people involved in achieving a target must support the target. Where possible, these stakeholders should be involved in defining the target to ensure they understand the reason behind it.

You need to communicate all progress towards achieving the target to all stakeholders. If you are on track to achieve the target, tell the team responsible to keep them motivated. If you are falling behind, advise the team so you can develop a recovery plan.

Practice task 11

1. Why is it important to set efficiency targets?

2. What are the key elements involved in setting targets?

3. Imagine you are launching a procedure to increase the amount of paper that is recycled in your organisation. What targets might you set for this initiative?

Summary

1. Input should be sought from a variety of stakeholders.
2. It is important to access external sources of information when necessary.
3. Alternative solutions should be analysed thoroughly before implementation.
4. Always consider expected outcomes when setting efficiency targets.

Learning checkpoint 2 Set targets for improvement

This learning checkpoint allows you to review your skills and knowledge in setting targets for improvement.

Read the case study, then answer the questions that follow.

Case study

Hiromi is a green team representative for the communications department at Mountain TAFE. One of their stated objectives is to reduce greenhouse gas emissions for the TAFE by 20 per cent in the next three years. The team knows this is a big task, but they are excited about the possibilities. The green team have all been assigned an area to research how much they can contribute to this target. Hiromi has been assigned to reducing electricity usage in the offices of support staff and teachers. There are 200 people in the offices, including 200 desktop computers, 20 networked laser printers, five fax machines, five scanners and five photocopiers.

In one month, the team are getting together again to present their proposal. The team will then develop a consolidated proposal for approval by management. The team have been told that there is limited funding available, so they need to save money on resource usage to fund any purchases. Can you help Hiromi develop her plan?

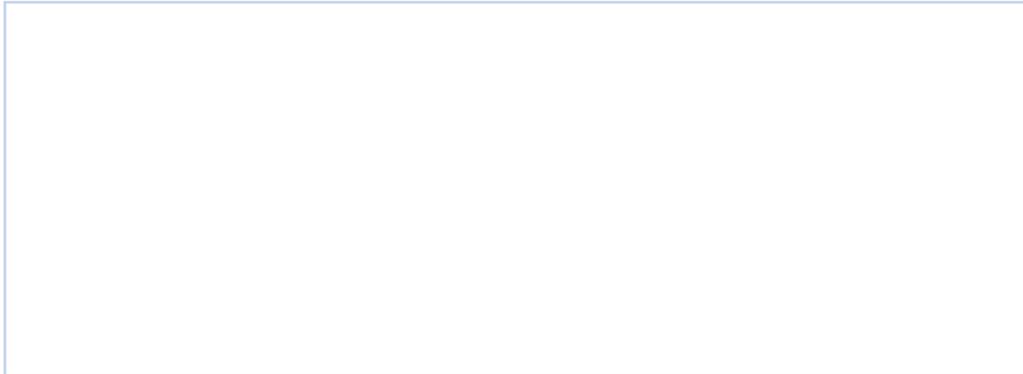
1. Conduct some external research for suggestions on how to reduce electricity use in an office environment. Create a table listing the resources you have identified and some of the initiatives suggested for reducing energy use and greenhouse gas emissions.

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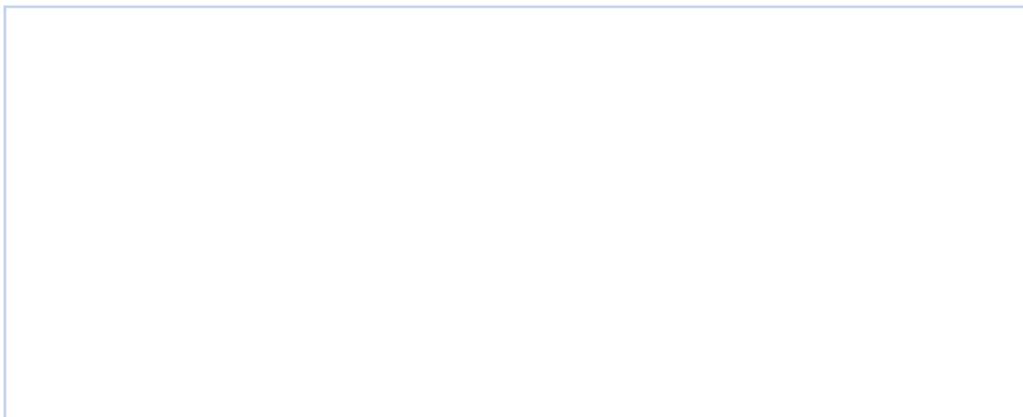
2. Make a plan for involving internal stakeholders. Create a table listing the people you would talk with and the information you would request.

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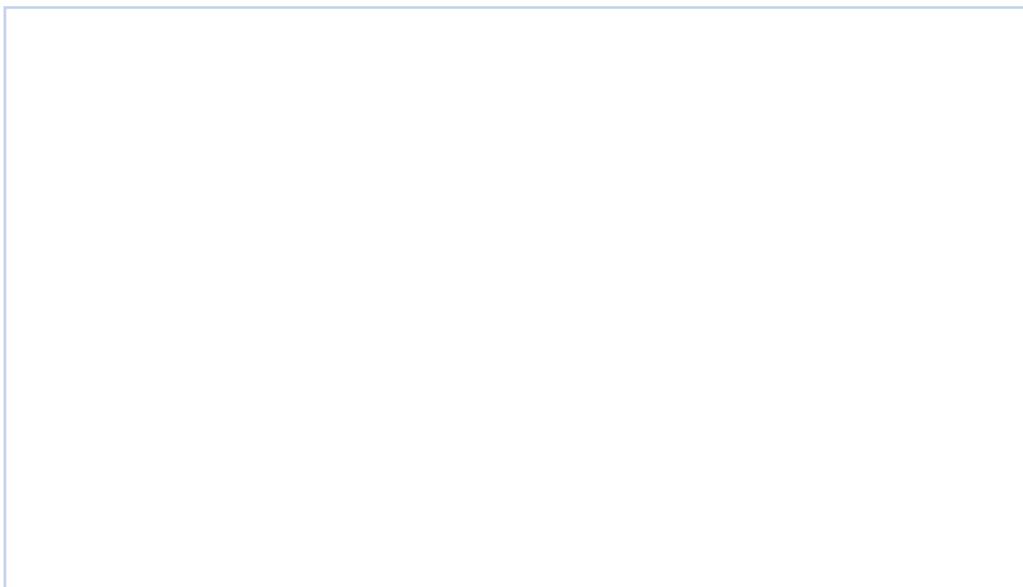
3. Develop a list of initiatives that you may use to reduce electricity use and reduce greenhouse gas emissions. Use a matrix to prioritise this list according to effectiveness and ease of implementation.



4. List the key tasks you would consider for the proposal to management. Develop an action plan for these tasks. Be sure to justify any spending required.



5. Determine an appropriate efficiency target for your initiatives. Describe how you will monitor and communicate the progress of achieving this target. Consider developing interim targets over the three-year period.



Topic 3

Implement performance improvement strategies

Clearly defining your goals and objectives is an important part of any initiative. Setting a clear target provides participants with something to strive for and a clear measure of their success. An overall vision or improvement plan can provide a focus for individual initiatives and targets.

Setting and achieving initial targets is only the beginning of the process. Continuing to review processes, implement changes and set new targets is part of the continuous improvement cycle. Using this philosophy helps to ensure that we continue to reduce our environmental impact in the workplace.

In this topic you will learn how to:

- 3A Use tools and techniques to achieve targets
- 3B Apply continuous improvement strategies
- 3C Implement environmental and resource efficiency improvement plans
- 3D Support team members to identify areas for improvement
- 3E Seek ideas on resource efficiency from others
- 3F Implement costing strategies to fully utilise environmental assets

3A Use tools and techniques to achieve targets

Measuring and reporting progress is an important part of achieving any target. Without it, targets tend to become too general and less is achieved. This section focuses on how to measure progress towards achieving a target.

Tools to measure targets

How you measure your targets will depend on your objectives. It is important to measure progress regularly so you can identify any concerns and implement improvements where necessary.

If you are collecting measurements regularly, they need to be easy to collect. If they are too difficult to gather, they might take up too much time or might not be collected.

It is important that measures are objective. Test this by asking two people to use the same measures. If they get different results, you may need to clarify your measures further.

There are many different tools that can be used to measure or demonstrate progress towards a target. Some of these tools and their common uses are summarised below. As long as the tool is objective, gives consistent results and is relatively easy to use, you can use any information at your disposal to measure progress.

Fishbone diagram

Description: Shows cause-and-effect relationships.

When to use: Use when trying to define the problem and understand the root cause.

Resource usage trends

Description: Uses supplier invoice data to measure use of a resource such as paper, energy or water.

When to use: Use to monitor the success of programs designed to reduce resource usage or to monitor changes in waste collection

continued...

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Workplace audits

Description: Verifies current usage patterns.

When to use: Use to understand potential weaknesses and reasons for poor performance.

Benchmarking

Description: Compares organisational performance to best practice data.

When to use: Use to identify opportunities for improvement and to set realistic targets

Graphical data summary

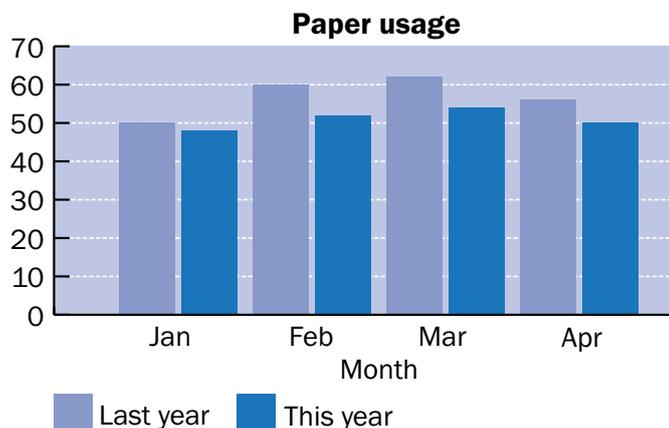
Description: Shows complex data visually and simply to display trends.

When to use: Use to communicate progress compared to target.

Measure trends in results

It is important to note any changes in your measurements. Measuring changes over time can demonstrate trends. Consider using Microsoft Excel or a similar spreadsheet software to plot your results. Try comparing the data from two or more periods.

For example, the following chart shows that paper use in March is higher than in February, which may suggest the initiative is not working. However, it is considerably less than the same time last year. The increase compared to February could be explained by a higher number of working days in March than either February or April, or greater demand during that period.



Create goals

A goal is often a general statement about an organisation's direction; for example, to improve employees' environmental awareness. Objectives are more specific; for example, to reduce electricity usage by 10 per cent within 12 months. Meeting objectives is an important part of achieving goals.

Your green objectives must be in line with the environmental goals of your organisation.



Achieve goals and objectives

Senior management often define the workplace goals, while other levels of the organisation may be involved in setting objectives that are consistent with these goals. When setting objectives, it is important to have them approved by your supervisor and others who may be affected.

It is a good idea to encourage all staff to participate in an initiative. You may need to ask staff outside of your area to do something to help. For example, you may need help from maintenance in setting up new rubbish bins or changing light bulbs. Or you may need help from IT in adjusting network settings for printers.

If you do need support from other areas, you must get approval from the area supervisors, as their teams may be assigned to other activities; for example, the maintenance team may be assigned to reconfiguring the warehouse. In most organisations, you must seek the manager's approval before asking someone from their team to do something for you.

Talking with supervisors and managers from other affected areas helps you to ensure that your initiative is consistent with other workplace policies and procedures. These people can guide you on whether your objectives are unrealistic or not challenging enough.

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.

Think of it this way. Your organisation may have an objective to reduce paper usage by 15 per cent before the end of the year. At a group level, the appropriate target may be to reduce paper usage by six packets a week.

Monitoring individual or team performance, even when the objective is set for a department or organisation, can help identify any weak areas. If one team is not reducing their paper usage at all, meeting with that team or conducting an audit can help reveal concerns. Equally, observing a strongly performing team can provide useful information about how to improve performance elsewhere.

Prioritise targets

Using a prioritisation matrix helps prioritise different alternatives for resolving a problem. This can also be used to prioritise different targets if they cannot all be addressed together for cost or resource reasons.

If you are in a situation where targets must be prioritised, remember that procedures that are required for safety or legal compliance must be followed, regardless of the ease of implementation or effectiveness.

Contingency planning

Identifying potential risks is an important part of planning. That is not to say that you should always assume the worst, but considering what may go wrong, in advance, gives you the opportunity to alert management to the possibility before they approve the initiative. It also allows you to prepare for this outcome. This is called contingency planning.

Imagine you have an objective to reduce electricity usage in your department by 15 per cent within 12 months. As well as switching off lights, changing screensaver settings and turning off equipment at the end of the day, a big part of your strategy may be to update three printers to more energy-efficient ones. One element of your contingency plan may be to identify the risk that your timing for achieving the objective will be extended if delivery is delayed beyond the expected date.



Practice task 12

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

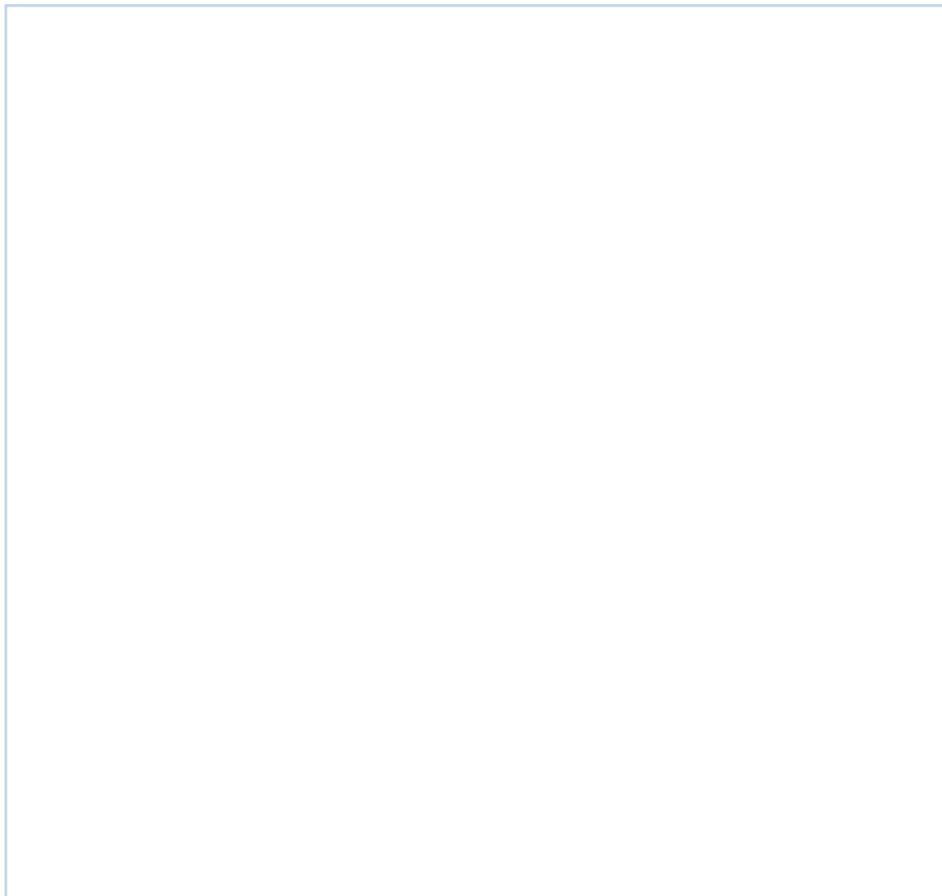
Case study

Mark works for Safe Properties, a large home insurance company. He is coordinating a project to replace the current lights in the offices with more energy-efficient light bulbs. He has met with the facility manager, who agrees to assign his staff to change the light bulbs. There are 200 light bulbs that need to be changed. However, because of other urgent commitments, they cannot focus on this project full time and will complete a phased implementation over three months.

Mark is disappointed at the delay, but can see that it is better than waiting for three months before any lights are changed over. Simona, his supervisor, understands the delay but requests a monthly report on how the implementation is progressing.

Help Mark to prepare a template for a standard monthly report on the implementation of the new lights. Consider the following:

- What should his objective be?
- What measures should Mark use to track this?
- How would he collect them?
- Who else should receive this information?



3B

Apply continuous improvement strategies

Continuous improvement is a management approach that focuses on constantly introducing small changes to a process. These changes help improve the quality and efficiency of the process. Continuous improvement is not just about fixing problems as they arise; it is also about creating an environment where further improvement is encouraged, even if things are running smoothly and targets have been met. Adopting this mindset can benefit all areas of the workplace, for individuals, teams, departments and whole organisations.

Continuous improvement aims to reduce the errors and waste in a process. This usually results in reduced workload, reduced cost and improved employee and customer satisfaction.



Employees and continuous improvement

A critical element of continuous improvement is the involvement of the employees who are responsible for carrying out the process. The people who see a process in action all the time know how to improve it. In some organisations, giving equal weight to suggestions from all levels of the organisation may require some cultural change.

Regular meetings with key participants in a process are a good idea to review performance measures and discuss how to improve the process. Suggestions from all levels should be encouraged. All suggestions should be evaluated and recognised. Not recognising suggestions may discourage some participants.

Measurement and continuous improvement

Measurement is an important part of continuous improvement. Regular measurement of performance provides regular feedback on whether the refinements have been successful. This success encourages more suggestions and further improvement.

Measuring the results of a procedure also provides objective data. It is much easier to discuss changing a procedure with employees if the reasons for the change are objective, rather than a criticism of their work.



Continuous improvement and environmental performance

Continuous improvement techniques suit environmental initiatives. Even when an initiative has successfully reduced resource usage or the size of an organisation's environmental footprint, further improvements in performance are always beneficial.

Continuous improvement may work differently in different work environments; for example, in a manufacturing environment reviewing performance figures may be a regular part of group meetings. A large organisation may have representatives from each department form a green team, and they may regularly meet to review performance in green workplace initiatives. A smaller organisation may simply present the results and discuss improvements as part of regular staff meetings.



Quality assurance systems

Here are some aspects of quality assurance systems that you should know about.

Quality assurance systems

Quality assurance systems use statistics to monitor the performance of a process. Some variance in quality performance is normal.

If you are producing hundreds of the same item every day or performing the same service over and over, it is likely that some defect will occur a few times.

Quality assurance systems are best suited to monitoring a process where the same thing is done over and over again.

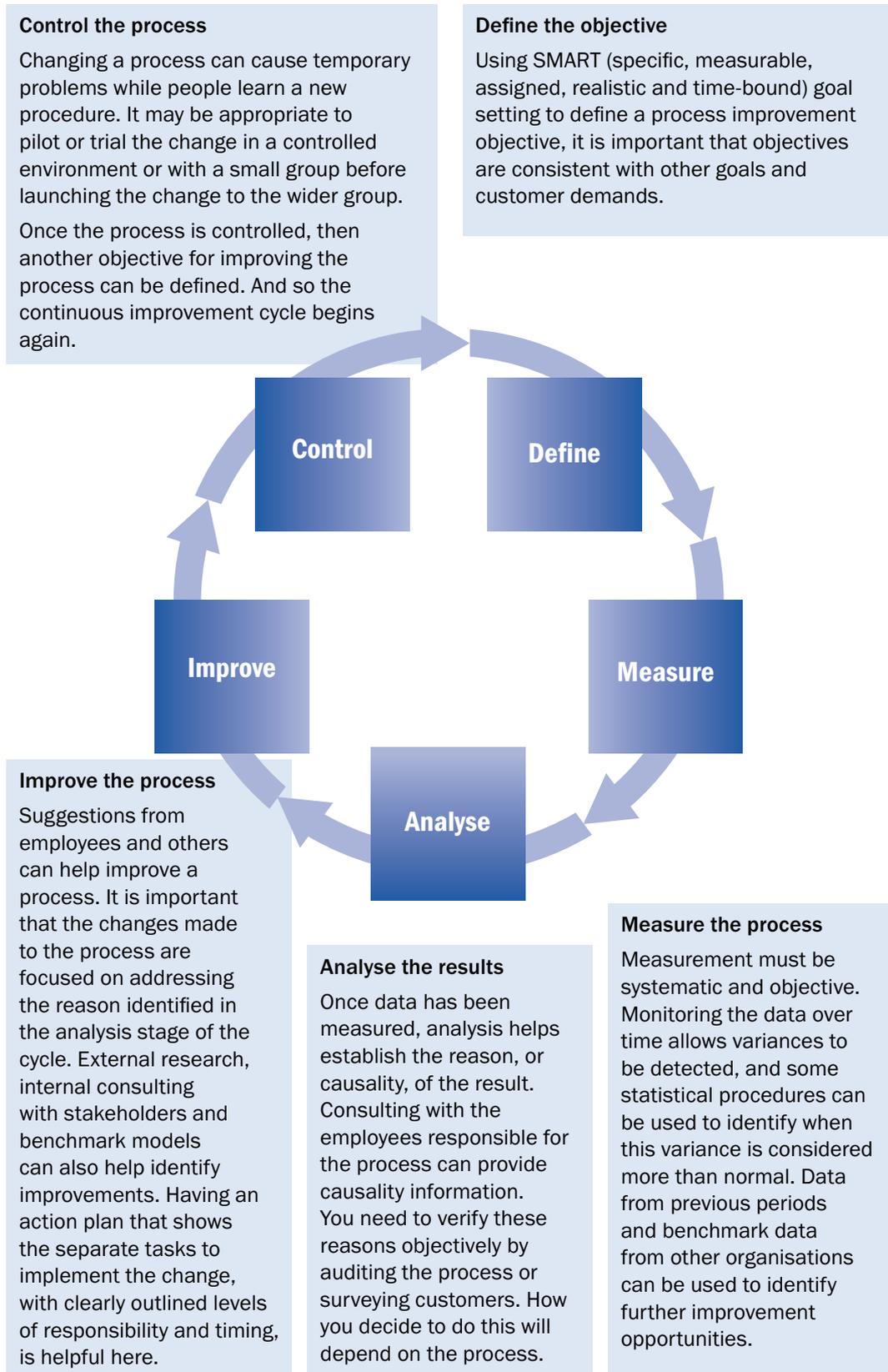
They usually measure the number of defects or problems produced by the process.

Statistical process charts are one tool used to monitor when the number of defects increases beyond the expected level.

This helps to identify potential concerns and provides a trigger to investigate these and prevent recurrence.

Continuous improvement cycle

It may help to see continuous improvement as an ongoing cycle made up of a series of steps. Because it is a cycle, one step flows into the next. These five steps form a continuous improvement cycle.



Encourage participation in continuous improvement

Communication is critical for the success of continuous improvement. This communication must be two-way; that is, employees must be able to provide feedback to management, as well as management providing information to employees. There are many ways to encourage this kind of communication, some of which are described below.

Suggestion schemes

Employees are encouraged to submit ideas for improvement. This could be through providing a box for suggestions in a common area or encouraging ideas in group meetings.

Committees

Green teams are made up of representatives from different areas who provide updates to their team in their usual meetings.

Bulletins

Bulletins are a useful way to provide feedback on the latest measures. Managers and supervisors should make an effort to acknowledge improvement, through bulletins or other communication forums, to motivate employees.

Brainstorming sessions

Gathering a group of people to help identify suggestions can be a helpful way of generating solutions.

Practice task 13

Read the case study, then complete the questions that follow.

Case study

Chantal works for East West Council. She has just implemented a paper recycling scheme in her workplace, which has around 100 participants from several departments across the organisation.

According to their waste contractor, there has been an increase in the amount of recycled paper collected, but there is still some paper and cardboard being mixed with general rubbish. Chantal reviews the steps she took to implement the scheme and is unsure of what to do to improve the result.

1. Explain how Chantal could use feedback to reduce the amount of paper in the general waste.

2. How might she apply the principles of continuous improvement to this problem? List your suggestions.

3C

Implement environmental and resource efficiency improvement plans

An environmental improvement plan (EIP) is an agreement between an organisation, the community and the local environmental regulatory body. It lists a series of projects aimed at achieving specific environmental objectives. An EIP is an action plan for major environmental initiatives and should attempt to cover all aspects of a company's environmental performance.

The community is an important element of an EIP. Information about community relations, health and safety issues, and community requirements for the reporting progress may be included.

The Environment Protection Authority (EPA) Victoria provides information on how to prepare an EIP. This information can be viewed at: www.epa.vic.gov.au.

What an EIP generally includes

- A summary of the environmental goals of an organisation
- A time line for these goals
- Ongoing monitoring and reporting of environmental performance
- A medium-term plan, which is regularly reviewed and updated

What the proposals in an EIP may include

- Waste minimisation
- Cleaner production technologies
- Water and energy efficiencies
- Assessment of new and emerging technologies
- Green office programs operating in the organisation

Implement sustainability initiatives

Developing an EIP is a large undertaking and is usually done by a committee of internal and external stakeholders. It may be your role to be part of a committee, or you may be responsible for implementing some of the initiatives in the EIP.

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.



Environmental management systems

Just as an organisation has a financial management system for monitoring its financial performance, many organisations have an environmental management system (EMS) to monitor their environmental performance.

The EMS is a series of measures related to environmental performance. These measures should be consistent with the measures being used for achieving individual targets for each procedure or initiative. It may be that each area collects information about their waste-reduction targets and this information is fed into the organisation's overall figures on waste management, which may be part of the EMS.

Standards and guidelines

There are some international standards and guidelines that organisations use to achieve environmental and financial gains from effective environmental management. They help organisations identify what they need to do to successfully implement environmental management systems.

The International Organization for Standardization (ISO) has developed internationally recognised standards in many fields. These help organisations to reduce their environmental impact and comply with legislation and regulations.

It is generally larger organisations that seek ISO certification, as there are significant costs associated with certification and requirements for ongoing audits to maintain certification. Many organisations benefit from being certified, not just as a result of the initiatives they have implemented, but from the goodwill and publicity generated by achieving certification.

Achieving certification is a major undertaking and is likely to be done by a group of people in a larger organisation. You may be part of this group or responsible for implementing some of the requirements in your area.

ISO 14001 is the international standard for EMSs, which specifies requirements for:

- establishing an environmental policy
- assessing the environmental impact of products, services or activities
- planning objectives and targets
- carrying out corrective action
- reviewing management.

Environmental approaches

Regardless of where you are in an organisation, whether in the office, a student, in manufacturing, in transport or the cleaning staff, there is a way your position can affect the environmental performance of that organisation.

There are many different approaches an organisation can take to improve its environmental performance. Some of these approaches are summarised in the table below.

Ecological footprinting
<p>Measures the amount of land that would need to be regenerated to compensate for the resources used by an organisation.</p> <p>Example: Use calculators available on the internet to estimate your footprint.</p> <p>For more information, visit www.epa.vic.gov.au/ecologicalfootprint.</p>
Energy efficiency opportunities bill
<p>Encourages more efficient use of energy by organisations that use large amounts of energy.</p> <p>Example: Requires large users of energy to register their plans to reduce energy, including deadlines.</p>
Global reporting initiatives
<p>Provides guidelines for environmental reporting.</p> <p>Example: Industry-specific environmental measures and indicators, benchmarking data, training materials.</p> <p>For more information, visit www.globalreporting.org.</p>
Green purchasing
<p>Making purchasing decisions based, at least in part, on the environmental impact.</p> <p>Example: Choosing more energy-efficient equipment and using companies with a good reputation for environmental management.</p>

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Greenhouse challenge

A government program to encourage Australian companies to reduce energy usage and greenhouse emissions.

Example: Provides tools and support for member organisations.

For more information, visit www.environment.gov.au.

Life cycle analysis

A tool for assessing the impact of a product, service or activity.

Example: Define units of energy used in extraction of materials, transport, manufacture, distribution and disposal of a product or activity.

Product stewardship

Assumes the producer or importer of a product takes all reasonable steps to minimise environmental impact from production, use and disposal of a product

Example: Manufacturer redesigns a product to reduce, reuse and recycle materials used.

For more information, visit www.environment.gov.au.

Supply chain management

The process of planning, implementing and controlling the operations of the supply chain as efficiently as possible

Example: A manufacturer may work with its packaging supplier to reduce the amount of material needed to safely transport its products.

Sustainability covenants

Voluntary agreements between local environmental legislative groups and an organisation to explore ways of reducing environmental impact

Example: EPA Victoria, Pilkington (a producer of glass), Sustainability Victoria and the Australian Industry Group have a four-year statutory agreement to increase resource efficiency of glass products.

For more information, visit www.epa.vic.gov.au.

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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.

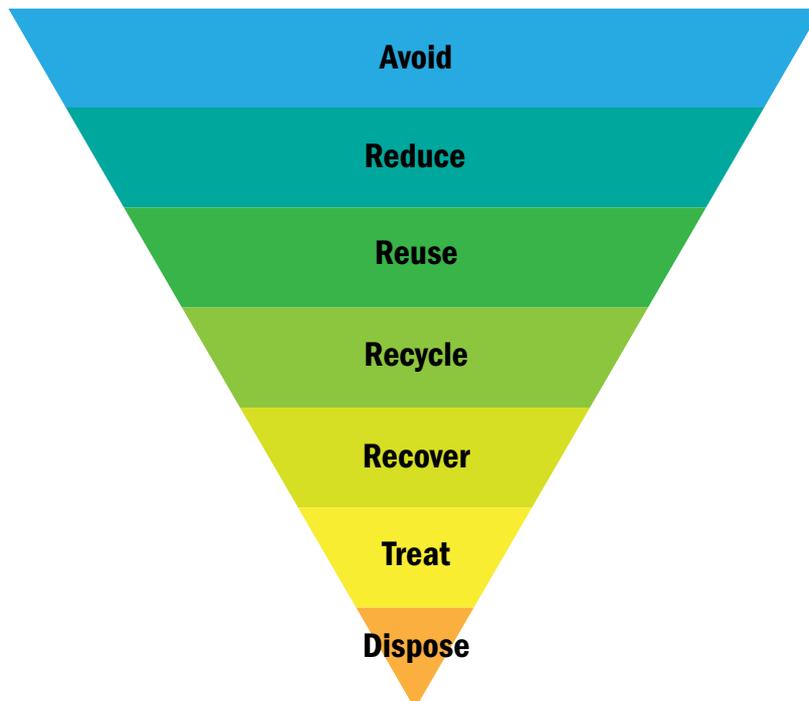
Use the waste-management hierarchy

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.

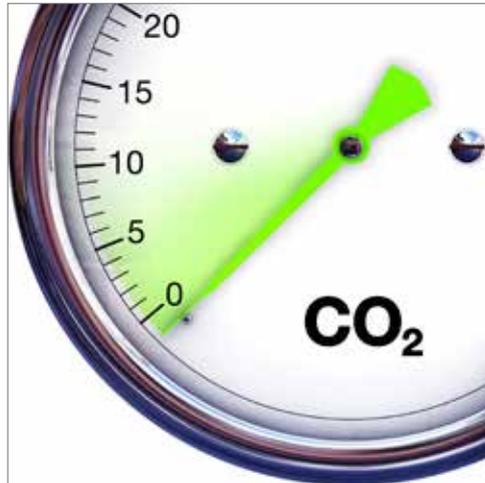
Recovering materials means to take materials that have been recycled and use them, without any further processing. A builder may use bricks, doors or bluestone salvaged from one project for another project.

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.



Reduce energy consumption



Greenhouse gases are made up of water vapour, carbon dioxide, methane, nitrous oxide, ozone and chlorofluorocarbons (CFCs). Greenhouse gases are in fact a necessary part of the Earth's atmosphere; however, their levels are increasing, which scientists believe is contributing to climate change.

Carbon dioxide is emitted when we consume energy produced from non-renewable sources such as coal. It is also one of the gases emitted from cars and trucks. To reduce greenhouse gases, it is important to consider those from stationary sources, such as electricity generation, and non-stationary sources, such as transport.

If you are responsible for developing green initiatives in your workplace, consider developing procedures in regard to both stationary and non-stationary energy.

Stationary energy

Here are some ideas for initiatives in regard to stationary energy.

Use green power

Switching to green power will reduce emissions, as it is generated from renewable sources such as wind and solar energy. Your energy provider will be able to assist you.

Use cold water

Use cold water, not hot. Take shorter showers, and use eco settings on washing machines and dishwashers.

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Activate power-save options

Activate power-save options for office equipment like photocopiers, faxes and printers. Make sure the power-save options are set so they switch to more efficient energy usage at a pre-set time.

Turn equipment off

Don't use remotes to turn off equipment; turn it off at the wall or at the unit. Even standby and power-save modes still use energy. Ensure that equipment is fully switched off at the end of the day.

Switch lights off

It is a myth that it is cheaper to leave fluorescent lights on. If you are not going to use a room for more than five minutes, it is more efficient to turn lights off.

Change your thermostat

People adapt to changing temperatures in different seasons, so it is not necessary to maintain indoor temperatures at 22°C all year. Don't set air conditioning to less than 26°C in summer or heating above 20°C in winter. Encourage people to dress appropriately for the weather.

Use blinds to manage the temperature

Keeping blinds closed against direct sunlight helps keep a building cool. Keeping blinds closed in winter helps keep heating in, reducing the energy required to maintain temperature.

Buy efficient appliances

When purchasing or replacing lights or equipment, consider energy and water efficiency as key criteria. It may mean purchasing a slightly more expensive appliance, but will generally save money in the long run.

Maintain appliances regularly

Regular maintenance of office equipment will help ensure that it is operating at its most efficient. It is more environmentally sensitive to repair equipment than replace it wherever possible.

Non-stationary energy

Here are some ideas for initiatives in regard to non-stationary energy.

Monitor deliveries

Consolidate transport by monitoring deliveries regularly to ensure that goods destined for a similar area travel together. Establish guidelines for customers so that they order according to planned delivery schedules where possible.

Review delivery routes

As customers and roads change, the most efficient delivery routes may vary. Review routes regularly. This will not only reduce emissions, but can also save money and time.

Encourage car pooling

Wherever possible, encourage people to share transport. This may require meeting at a common point, leaving one vehicle and sharing for the remainder of the journey.

Encourage public transport use

Public transport uses far less energy than driving a car. Encourage people to use public transport whenever possible.

Use pedal power

Encourage people to ride a bike when travelling short distances, rather than drive a car. Some organisations have a pool bike that staff can use to take local trips.

Review courier use

Always ask yourself whether a courier is required or whether an item can be delivered through other means.

Investigate green fleet programs

Some fleet-management companies offer a carbon-offset program for vehicles on their fleets.

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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.

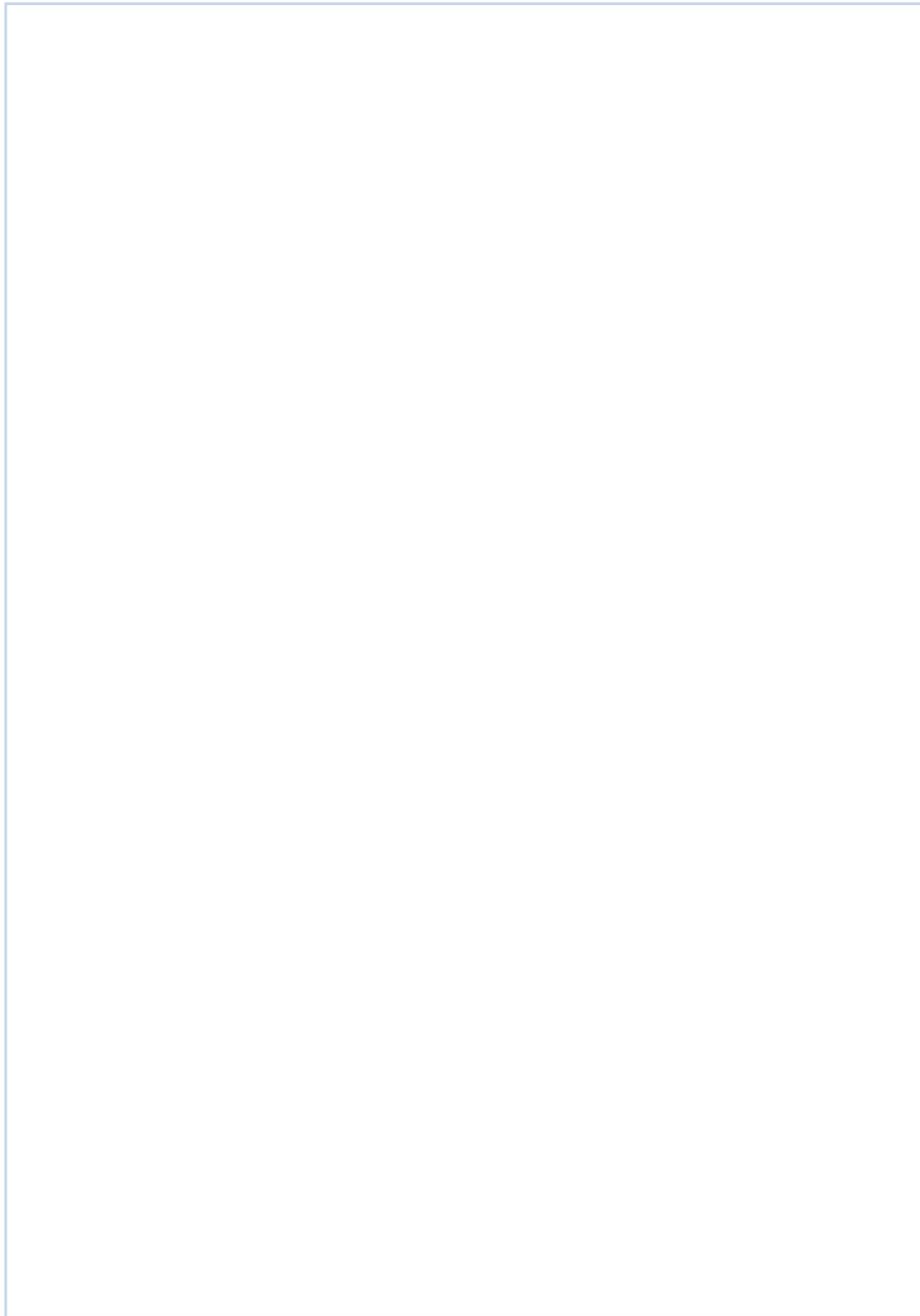


Practice task 14

Different agencies produce guidelines for reducing energy usage in the workplace. Use the internet to research an energy reduction program that is appropriate for your organisation or school, or an organisation you are familiar with.

Prepare a summary of the program, including the following information:

- Where you found the program
- What the key suggestions of the program are
- Three ideas you could implement in your chosen organisation, with a brief action plan explaining how you would implement these ideas
- An estimate of how much energy would be saved by implementing these ideas



3D

Support team members to identify areas for improvement



You may have procedures or instructions for managing your own work area. You may be responsible for conveying workplace environmental procedures or instructions to your work team. Make sure you convey the information clearly and accurately, whether you do it verbally, such as in a meeting, in conversation or on the telephone; or in writing, such as via email, memos, procedure manuals or signs.

Communicate instructions to your work team

The types of procedures and instructions could be quite varied.

Examples of communicating environmental procedures

- Reminding team members about specific energy-saving procedures
- Encouraging your team to adopt a new environmental work practice
- Circulating instructions about a changed procedure
- Warning staff about hazardous materials
- Providing information about contingency plans or emergency procedures

Example: communication between the staff about environmental procedures

Janelle works in administration at a hospital. Trudy, a temp, is working with Janelle for a week. Normally a new employee would be given training about special procedures such as safety and environmental procedures, but since Trudy is only there for a few days, Janelle is responsible for conveying essential information to Trudy. She shows her how to handle medical waste safely and make sure small spills, such as blood on paper forms, get covered with tape. She also shows her where to recycle paper.



Encourage team members

Your job may involve more than simply giving someone basic instructions. You need to think about effective ways to enforce the environmental practices in place in your work area. The most effective way to get people to change their behaviour is through encouragement.

People don't always follow instructions and procedures. There could be a number of reasons for this; for example, because of old habits, because they don't have the motivation, because they don't see the reason for following the new practice or because they don't understand the importance of environmental practices.

Ways to encourage team members to adopt environmental practices

- The green team might hold a special meeting or seminar on the reasons why environmental practices are important and how all staff can participate.
- You might send email updates and reminders about environmental procedures.
- Your environmental team might develop a competition on the organisation's intranet that is linked to an environmental practice.
- You might design notices to put near the photocopier to remind people how they can save energy.

Respond to changes in workplace practices

Whatever the reason for the change in environmental workplace practices, you should respond positively and promptly to help ensure that the change is made successfully, so that workplace operations can continue to run smoothly.

Examples of reasons for changes

- People recognise that the impact of the workplace can be harmful to the environment.
- New government regulations or incentives might mean a change to environmental practices.
- An organisation might adopt better environmental workplace practices in response to consumer demand.
- Suggestions from employees might encourage an organisation to change its purchasing policy.
- A business might change workplace practices in response to an incident or concern about an environmental hazard.

Example: impact of changes in environmental practices on work duties

Maria works for a large organisation that has recently merged with another business. To boost the organisation's new image, the organisation has established a green office program and publicly pledged to cut greenhouse gas emissions by using energy more wisely.

Staff in the building in which Maria works have set a goal to reduce their overall electricity use by 15 per cent over the next year. At a staff meeting, the green office team outlines a new strategy that involves various changes to existing work practices.

Some of the changes affect Maria's lock-up procedure at the end of each day. While the lock-up procedure already involves turning off the lights, it is amended to include making sure that all computers, photocopiers, printers and hot water urns are turned off as well. The green office team has identified that a significant amount of energy is being wasted by these being on all night.

The other change that affects Maria is a new procedure to monitor light usage. The green office team recommends that lighting levels be monitored at various points in the office to determine whether energy is being wasted by over-lighting. They suggest that the monitoring should take place throughout the year to compare lighting requirements during different seasons and at different times of day. Maria is asked to carry out the monitoring program in her work area.

Maria needs to adjust her work schedule to fit in the light monitoring tasks. She also has to learn how to use a light meter and set up a procedure for recording the results efficiently.



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.

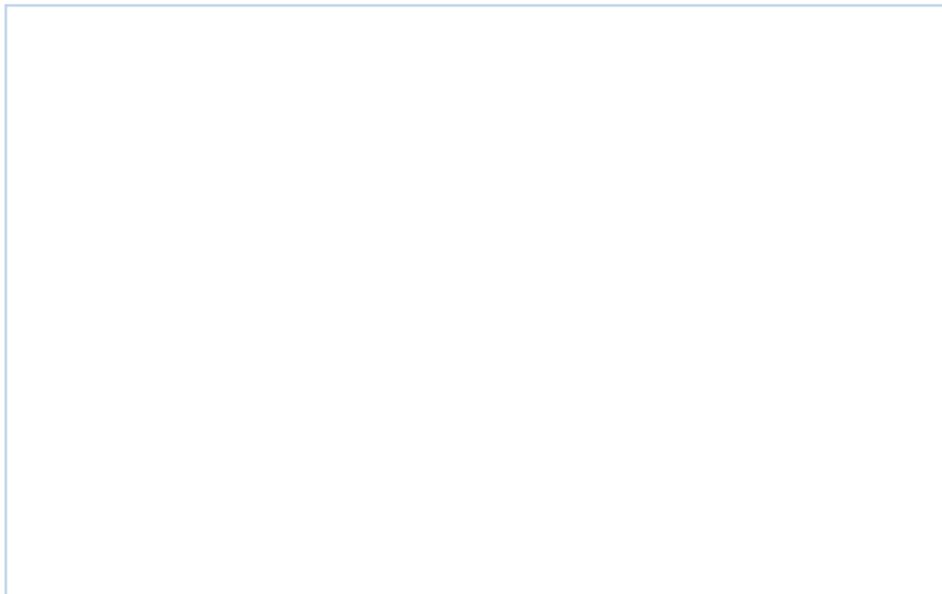
When you are responding to a change in work procedures, take into account the time lines associated with implementing the change. For example, a new procedure may need to be in place by a certain date (the organisation may have promised shareholders that an environmentally damaging practice will be phased 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



3E

Seek ideas on resource efficiency from others

External and internal stakeholders are useful sources of information for green workplace procedures and resource efficiency.

Consulting with stakeholders is an important part of launching an initiative. Key stakeholders are helpful in developing a robust implementation plan. Make sure you are adequately prepared for these consultations. For example, your supervisor may be able to provide suggestions on how to maximise opportunities for people to participate in the initiative. Reviewing your action plan with key internal stakeholders may help identify potential risks with obtaining resources from other areas. Having people support the initiative at different levels in the organisation will help build support as you launch the procedure.

Questions to ask before meeting with stakeholders

- Have you learned as much as you can about the initiative from public information; for example, the internet, policies and procedures?
- Have you considered the questions the stakeholder may have for you?
- Have you considered possible objections the stakeholder may have and prepared appropriate responses?
- Have you developed a draft action plan to review with stakeholders?
- Have you prepared a thorough list of questions and areas to discuss?

Maximise opportunities

The waste management hierarchy encourages avoiding waste, then reducing it before reusing, recycling and reclaiming materials. Reclaiming materials means to use materials that have been previously used in a building or project. They may be altered, resized, refinished or adapted, but they are not reprocessed. They remain in their original form.

Here are some examples of ways to reuse, recycle and reclaim materials.

Reuse

- Provide reusable crockery, cutlery and cups in common kitchen facilities rather than disposable ones. Provide filtered water for staff to refill water containers.
- Work with suppliers to make deliveries using recyclable packaging, such as pallets, rather than cardboard.
- Find community groups that may be able to use some of your waste materials. For example, children's centres may be able to use some of the packaging materials.
- Create green notebooks from paper that has been printed on one side. Alternatively, if you do not have a printer with duplex abilities, put this paper into a printer designated for draft copies or internal printing.
- Wash food in a container, rather than a sink, and then reuse the water on the plants or garden areas.
- Provide boxes or reusable bags to retail customers to discourage plastic bag use.

Recycle

- Community groups, charities or schools may be able to use the office equipment you are replacing. Environmental organisations also provide information on groups that may purchase this equipment from you.
- Biodegradable recycling programs for food waste reduce methane from landfill and produce compost that can be used in garden areas. This could be used within the organisation or provided to other groups.
- Commingled recycling schemes allow organisations to recycle more than just paper. Your waste contractor can provide information.

Reclaim

- Use reclaimed materials for landscaping in your organisation. Builders' yards or eBay may sources of this material.

Example: an energy reduction initiative

Zara works at Fast Cars, a big car dealership. The sales manager is keen to save energy and has put notices up asking people to remember to turn lights off and not use standby mode. Zara thinks this is a good idea. However, she notices that whenever she goes into the storeroom, the light is already on, even though people do not use the room very often. She thinks this means it is often on for hours at a time.

The storeroom only needs to be lit when someone is in there. Zara thinks that sensor lighting could be the answer, as it will turn off within minutes of the person leaving, without having to remind them. She decides to investigate the cost of replacing the current light with sensor lighting and suggests it to her manager.

In this example, Zara noticed a regular occurrence of non-compliance with a procedure because people were not turning the lights off in the storeroom. Her idea of installing a sensor light means that the dealership is no longer relying on someone remembering to turn the light off. The initial cost of automating this procedure is likely to be offset by the energy savings.



Offset environmental impacts

No matter how successfully an organisation adopts the principles of reducing resource use or follows the waste-management hierarchy, there will still be some environmental impacts. These environmental impacts can be offset by using carbon offsets, eliminating hazardous materials and changing purchasing policies.

Carbon offsets

Being carbon neutral follows the waste-management hierarchy; after an organisation has done as much as possible to minimise its carbon emissions, it can participate in an accredited carbon-offset scheme to totally remove its environmental impact. For example, planting trees is a common form of carbon offset. Trees use carbon dioxide, a greenhouse emission, and produce the oxygen we breathe. Therefore, planting more trees offsets the amount of carbon produced. Organisations may seek to work with an organisation to offset all their travel or to use a green fleet for their company cars.

Carbon credits are measured in tonnes of carbon dioxide and can be purchased at market value. If you are purchasing carbon credits for yourself or your organisation, you must ensure that they are authentic, scientifically based and complying with a regulatory body. Your state or territory environment department may be able to provide you with a list of reputable carbon traders.

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 ...

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Make a case for change

Think about what would motivate your colleagues to change their ways. You may need to adjust this message for different groups within the organisation.

Create ownership

Consulting with stakeholders and involving them in developing a new procedure can help create ownership. It is much easier to persuade someone to do something if they feel it was their idea in the first place.

Involve everyone

Don't leave anyone out of the communication process. Think about everyone who will be asked to follow the procedure or who may be affected by it. Make sure they understand what they are expected to do and why it will benefit them and the environment.

Plan for the unexpected

Having a detailed action plan is an important part of success. However, it is common for things to go wrong, so you need to be able to make adjustments along the way. During the planning phase, develop contingency plans to deal with the unexpected.

Prepare for resistance

Some people will not want to change their habits. Spend some time thinking about negative things people might say and prepare responses for them. Have frequently asked questions (FAQs) prepared for distribution.

Practice task 16

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

Case study

Francine is responsible for managing the company cars at On The Road Sales, a computer company. With all the driving its eight sales representatives do every day, On The Road Sales has a bigger environmental impact than lots of other companies.

Francine decides to investigate ways to reduce the impact of their vehicle emissions. She knows that carbon offsets can be purchased to make up for vehicle emissions, but she is concerned it might be expensive. She decides to talk to the fleet-management company for some suggestions before she writes a proposal for her manager.

The eight sales representatives all drive sedans or station wagons. Three vehicles have petrol V6 engines and the remaining five are LPG. They are all regularly maintained and on average, the sales representatives each cover about 30,000 kilometres per year.

Write a proposal for Francine to give to her manager. In your proposal, be sure to include:

- information on the amount of emissions
- suggestions to minimise emissions before offsetting them
- information on the estimated cost of offsetting the emissions
- the advantages of participating in a carbon-offset scheme for On The Road Sales.

3F**Implement costing strategies to fully utilise environmental assets**

Environmental assets come from the environment. They may include raw materials or particular holdings such as estates, bush land, gardens and lakes.

Some assets are quite straightforward to value. For example, a real estate agent can estimate how much your home will sell for based on their knowledge of the local market, and shares can be valued based on the current share price. However, environmental assets are more difficult to value.

Consider how a mining company might value the gold in a mine. First, it needs to estimate how much is there, which a technical specialist can do. It could multiply this by the current price of gold.

However, some environmental assets have a value that is separate from their market value. An old-growth forest could be valued at the amount the wood could sell for. However, conservationists would fiercely disagree with this approach. They would point to the value of the forest to the wider community, in terms of both the environmental benefit of the oxygen it produces and the pleasure in being able to visit such an area.



Link business with good environmental performance

Consumers are becoming increasingly environmentally aware and are making purchase decisions at least partly based on the environmental impact of products. Savvy organisations are responding by promoting the environmental benefits of their products. Building an image of environmental and social responsibility provides a reason, other than price advantage, to choose products or services. As consumers have adjusted their purchase criteria to include environmental considerations, companies have changed their products and services to meet this demand.

Stakeholders are increasingly valuing environmental and social responsibility. Many companies realise the importance of acting responsibly for the continuing financial health of their business.

Example: company's success from promoting environmentally friendly campaign



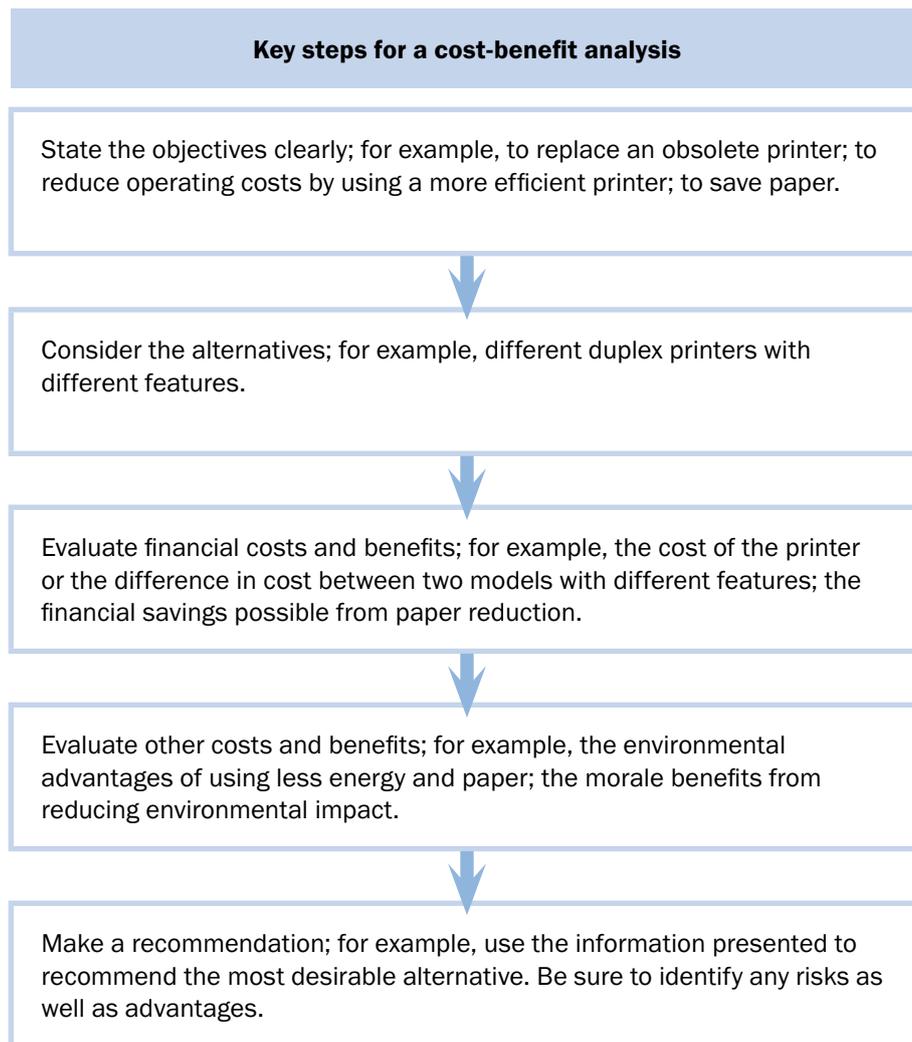
The Better Body organisation, a globally successful cosmetics chain, is founded on strong principles of environmental responsibility as well as other ethical principles. Some of their initiatives include:

- All stores use a percentage of green power.
- All products are subject to a life cycle assessment test for social and environmental impact.
- Raw ingredients from recyclable sources are used whenever possible.
- Staff complete volunteer work in community projects during work hours.

Since its launch, these principles have contributed to the Better Body's organisational success. Customers feel good about their purchases, and also about the message it sends to others if they are seen using these products. The Better Body organisation estimates that recycling and reusing containers diverts more than 75 tonnes of material from landfill and generates annual savings of \$250,000. So it makes good business sense, too.

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.



Example: cost-benefit analysis of purchasing an energy-efficient printer

A simple example of cost-benefit analysis would be to estimate the cost of purchasing an energy-efficient printer with the ability to print on both sides, versus the estimated reduction in energy and paper costs. If a printer costs \$1,000 and the company currently spends \$100 per month on paper but expects to reduce paper usage by 40 per cent by introducing duplex printing, then they can expect to save \$40 per month on paper. The energy saved by the power-save function and the procedure to switch off power overnight is estimated to save \$10 per month. The total saving is therefore \$50 per month and the printer will have paid for itself in 20 months. If the company is looking to buy a new printer anyway, your cost-benefit analysis would only need to assess the difference between the energy-efficient printer and another common model. If the other model costs \$600, the additional cost of the energy-efficient printer is only \$400, and it will have paid for itself in only eight months.



Triple bottom line reporting and valuing environmental assets

Triple bottom line reporting is a way of assessing company performance based on three criteria – profit, people and planet – rather than the traditional measure of profit alone. Businesses that effectively balance all three are sustainable businesses.

Valuing environmental assets is part of triple bottom line reporting. Traditional financial accounting adjusts the value of assets over time. In general, machinery decreases or depreciates in value over time, whereas some other assets, such as property, may increase or appreciate. If environmental assets are not valued to fully reflect their financial, social and environmental value, then the effect of certain business decisions may be wrongly represented.

Triple bottom line reporting is often used to assess a company's overall performance. However, it is also possible to apply this principle to individual actions.

Your organisation may be considering replacing some office equipment. Choosing an energy-efficient alternative may require more initial outlay, but the extra cost compared to choosing a cheaper machine that uses more electricity could be offset by the electricity savings. This could be calculated using cost-benefit analysis and could be presented using accepted accounting standards.

Example: application of triple bottom line reporting

A company may own a body of water, into which it dumps waste materials. Over time, as the water becomes polluted, the value to the community and the environment will decrease. However, if these values were not recognised in the first place, then the cost of losing them will be ignored. In traditional accounting, dumping the waste in the water seems the cheapest method because there is no obvious cost to dispose of the waste. However, triple bottom line reporting reveals the cost at a social and environmental level and environmental legislation would likely prevent or restrict the dumping of waste in water.



Practice task 17

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

Case study

Cindy is a purchasing officer at Holiday Hotels. They are setting up two new hotels in the next three months and she is currently deciding which washing machines and dishwashers to choose. They are already over budget for refitting the hotels, so she has been asked to keep the costs as low as possible.

Cindy has identified two models each of washing machines and dishwashers. The only models within her budget are the least efficient for both water and energy use. Cindy knows her manager is concerned about their current budget, but she is concerned that saving money at this stage may be false economy. She decides to complete a cost-benefit analysis, using this information.

	Washing machine 1	Washing machine 2	Dishwasher 1	Dishwasher 2
Price	\$1,000	\$1,400	\$800	\$1,200
Monthly operating costs	\$110	\$80	\$120	\$70
Water use	100 L/load	70 L/load	25 L/load	15 L/load
Warranty	12 months	24 months	12 months	12 months
Purchase budget	\$1,000		\$800	

continued ...

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Use the information in the table to help Cindy complete a cost-benefit analysis and decide which machines to recommend.

How could Cindy extend this cost-benefit analysis to cover the triple bottom line for Holiday Hotels?



Summary

1. Input should be sought from a variety of stakeholders.
2. It is important to access external sources of information when necessary.
3. Alternative solutions should be analysed thoroughly before implementation.
4. Always consider expected outcomes when setting efficiency targets.

Learning checkpoint 3

Implement performance improvement strategies

This learning checkpoint allows you to review your skills and knowledge in implementing improvement strategies.

Think about your workplace, school or an organisation with which you are familiar. Imagine you have been asked to launch a waste-recycling scheme in this organisation. If it is a large organisation, you may choose to modify your plan for implementing it in just one area or department. The waste-recycling scheme could be paper recycling, introducing a commingled recycling program, recycling biodegradable kitchen waste or any program relevant to the organisation.

Answer the questions that follow:

1. What steps would you take to research this kind of recycling scheme? List the resources you would use.

2. What kinds of targets would you set for this project?

3. What sort of information might you include in an action plan for implementation?

4. Would you expect to incur costs? How would you justify these costs?

5. How would you report on the success of the initiative to management and colleagues? Would these reports be the same?

6. How might you apply the continuous improvement philosophy to this initiative?

Topic 4

Monitor performance improvement strategies

Effective communication is important for successfully implementing an environmental strategy. Communicating motivational and operational information is an important part of this, as it ensures all participants and stakeholders are aware of targets and objectives. It is important to make sure everyone is aware of the progress towards the target level.

Evaluation is an important part of the continuous improvement process. This provides the necessary information to design improvements, identify further opportunities and learn from challenges presented during implementation. Evaluation also provides an opportunity to thank and reward participants, and to promote the success to stakeholders.

In this topic you will learn how to:

- 4A Develop evaluation and monitoring tools
- 4B Communicate targets to personnel and key stakeholders
- 4C Evaluate strategies
- 4D Set new targets and apply new strategies
- 4E Promote successful strategies and reward participants

4A

Develop evaluation and monitoring tools



The main ways in which administration in a workplace impacts on the environment are through paper usage, energy usage, waste disposal and purchasing products that harm the environment. Organisations whose business involves other activities may also impact on the environment in other ways.

The assessment of an organisation's environmental performance focuses on how well the organisation manages its impact on the environment by developing procedures and systems to prevent unnecessary environmental destruction. Environmental performance may be determined by measuring:

- its use of resources
- how much it contributes to environmental pollution of any kind
- how it handles waste
- the basis of its purchasing decisions.

Monitor an organisation's environmental performance

An organisation or a team within an organisation may want to improve its environmental performance for a variety of reasons, not always primarily to save the environment; for example to improve its image, to save money, or in response to consumer or shareholder demands.

By improving systems and procedures to eliminate unnecessary environmental impact, your organisation can shrink its environmental footprint. However, to do this it must monitor its impact on the environment, and then develop ways to reduce that impact.

Your organisation needs to monitor its environmental performance to:

- make sure it complies with government regulations
- manage its impact on the environment
- continuously improve workplace procedures and systems
- measure progress towards a goal or target.

Monitor the environmental performance of your work area

You may not be involved in monitoring or improving the environmental performance of your whole organisation. However, improving the environmental performance of your work area will contribute to the environmental performance of the organisation.

How to monitor environmental performance

- Monitor paper use
- Monitor waste disposal
- Monitor energy use
- Monitor purchasing

Monitor paper use

Paper includes notebooks, envelopes, manila folders, boxes, toilet and cleaning paper, newspapers, magazines and other paper-based products. You should keep written or electronic records of all the paper that comes into the workplace and how it is used and disposed of.

You may need to undertake research to determine your environmental performance; for example, to find out how different brands of office paper impact on the environment. You can work out how much paper use could be reduced without preventing you from carrying out your business activities. By monitoring how your team disposes of paper, you might discover that 50 per cent is disposed of with only one side used. Of course, you can't always use both sides of the page (for example, you might send a one-page letter to clients), so the actual unnecessary paper use might be lower than 50 per cent.

To monitor paper use, you may keep records of:

- how much paper you use; for example, the amount of paper purchased for your work area
- the sort of paper you use; for example, the brand, non-recycled or recycled, made from native forest timber or sustainably managed plantation timber
- how you dispose of used paper; for example, whether it is recycled or sent to landfill
- whether you use both sides of the paper; for example, double-sided printing, green notebooks.

Monitor resource use

There are many tools and technologies available to monitor your work area's environmental performance. For example, you might keep electronic records, such as spreadsheets with graphical information. Below are some methods you can use to monitor resource use.

Waste disposal

To monitor waste disposal, you may keep records of:

- how much waste you produce
- what type of waste you produce
- how the waste is disposed of; for example, how much is recycled, how much goes to landfill
- how much goes to landfill that could be reused, recycled or composted.

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.



Practice task 18

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

Case study

Naoko's work team wants to get an idea of the amount of waste they produce, so they decide to do a waste assessment. Naoko decides the waste assessment is a great opportunity for team building, so she arranges the assessment for Friday afternoon and gets permission to put on drinks and nibbles after it is finished.

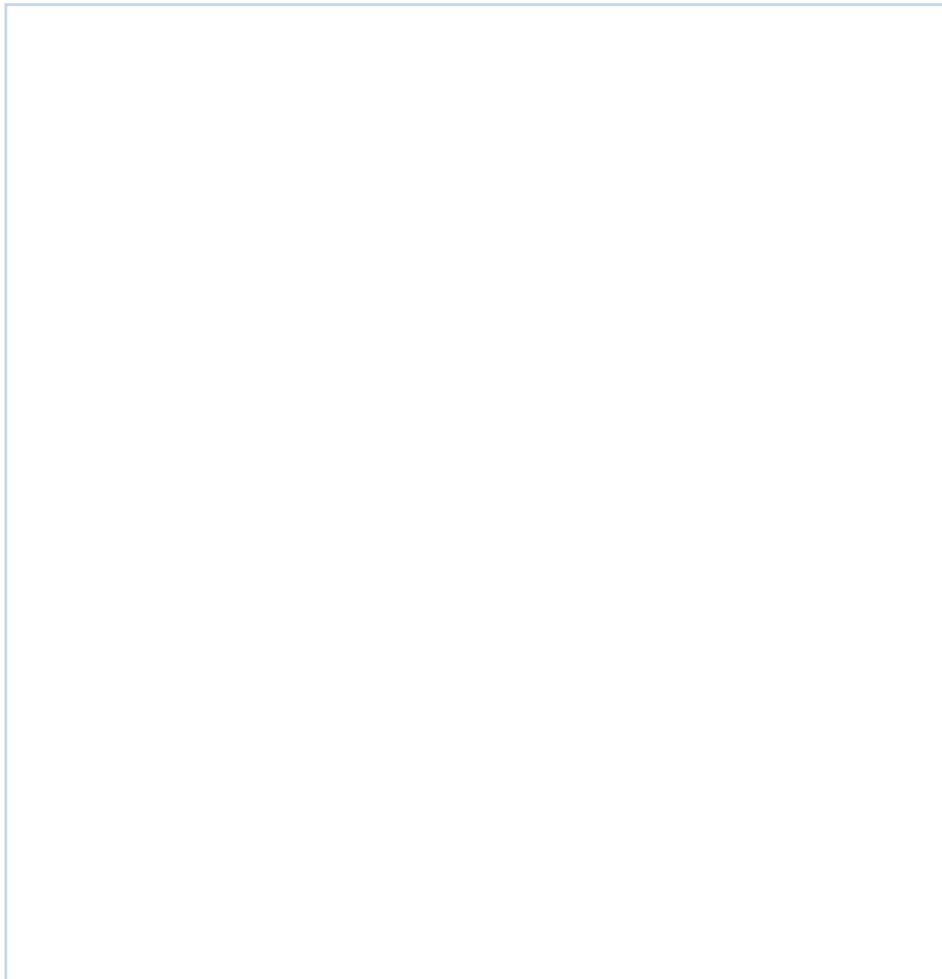
The team gathers all the rubbish and recycle bins and tips the week's rubbish onto a big plastic sheet. Everyone puts on gloves and begins sorting the rubbish into separate piles – one each for paper, glass and aluminium; food waste; and other waste like packaging and used pens.

Once the sorting is finished, the team measures the weight and volume of each pile. Then they work out the proportion of each group to the total rubbish.

They also check how much of the discarded paper is put into recycling bins and how much is blank on one side.

Naoko uses a computer graph and chart program to record the results of the waste assessment and saves these files to the company's intranet.

Why is it important to record the results of the waste assessment?



4B Communicate targets to personnel and key stakeholders

Targets are easier to achieve when all participants are aware of them and are working to achieve them. Once a target has been set, it is important to ensure that everyone responsible for its achievement clearly understands what is required of them. It is also important that management and other stakeholders are aware of the target so that they can also support its achievement.



Cascade targets

Cascading targets involve breaking down an overall target to a work group or individual level.

Cascading targets helps individuals to take ownership of their target. Measuring performance against targets at lower levels helps to identify areas of strength and weakness, and helps to develop an improvement strategy when required.

You should only cascade targets to the lowest level you can measure; for example, there is no point setting individual targets for electricity usage if data is not available at that level. However, you may be able to monitor paper usage at this level.

Build in review processes



Cascaded targets and routine measurement will only motivate people if they are regularly receiving feedback on their performance. You should seek supervisor or manager approval of your target to ensure it is consistent with organisational goals. It is also important that you seek approval to cascade targets and indicate how you propose to provide feedback.



Regular forums

Regular meetings allow sharing of feedback on performance. Make sure that the meeting is appropriate to the target; for example, if it is a work group target, a team meeting might be an appropriate forum to present regular feedback.

Sometimes individual performance may be discussed in staff meetings. However, if there are particular concerns with an individual's performance, it might be better to review these in private. Recognising personal successes in a group environment may motivate the individual and the rest of the team.

Ways to communicate feedback on performance include:

- bulletin boards for communicating simple measures to a large group
- 'thermometers' for communicating long-term targets to a large group by showing the target at the top and drawing a line to show current levels
- emails for providing summary information to a large group
- management reports for providing feedback to senior levels as part of their general review of business performance
- newsletters for providing information about specific achievements
- visual displays, such as posters around the area where an activity takes place thanking people for their contribution.

Management support

Management support for a target can help to achieve the goal. Encouraging managers to follow a procedure can set a positive example to the rest of the team.

Regularly informing managers and supervisors of performance versus target gives them the opportunity to encourage improvement and reward success. This may be part of a discussion in a team meeting, an announcement in one of their regular communications to the work group or an individual discussion.

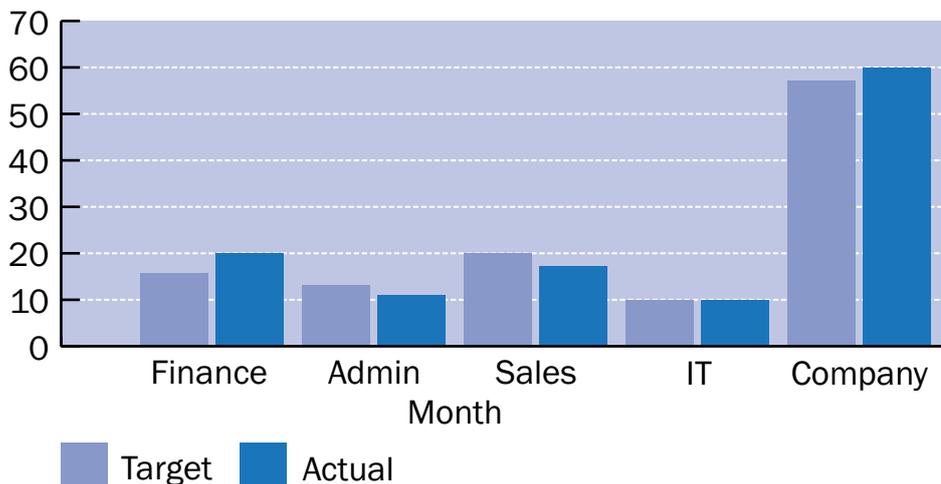
Even small acknowledgments from management can make a big difference to morale, so make sure your manager is aware of progress. You may ask them for support if performance is declining to encourage greater focus and participation.

Visual reporting

It is important to report performance in a way that it is easily understood. If possible, summarise the key performance aspects in one page or less, perhaps attaching supporting detail. Clear, simple presentation of data makes it much more likely that people will read it and take appropriate action.

Traffic light indicators are a useful tool, particularly for annual targets. This means defining three levels of performance: red, yellow and green. The green light means things are on track, yellow means things are not on target but are within reach, and red means things are off target and a concern.

This chart shows an example of visual reporting. It depicts each department's target progress by comparing the target with the actual progress.



Raise awareness

Raising awareness is an important part of implementing environmental initiatives. It is important to adjust your message and method of communication to the audience. An internal communication may contain abbreviations and language that might not be understood by an external stakeholder. You might use more formal language in a management meeting than in your own work group. Visual communications like posters and bulletins will probably use fewer words and more graphics than an email or newsletter.

How to raise awareness will vary depending on who you are addressing. Be sure to review any external communication with your supervisor and whoever is responsible for public relations in your organisation to ensure it is consistent with other public messages.

Raise awareness with employees

You may choose to use bulletins, posters, emails or newsletters to communicate with large groups of employees. Individual meetings may be more appropriate for managers and supervisors. Team meetings can be a good way of communicating more directly at a work group level.

Raise awareness with suppliers

You may wish to increase awareness outside the organisation. Raising awareness with suppliers can encourage them to adapt their own procedures and help reduce environmental impact for your organisation and their other customers. Smaller meetings may be a good forum for these discussions.

Raise awareness with investors

Investors may be interested in an organisation's environmental performance. For publicly listed companies, sustainability reports, press releases or websites allow effective communication about the environmental initiatives in your organisation.

Raise awareness with customers and the local community

As more people are making purchasing decisions based on environmental concerns, it is important to raise awareness with customers and the local community. Advertising, local press, labelling on product packaging or website information allow effective communication with these groups.

Promote an environmentally responsible culture

It is important to promote a culture of environmental responsibility. This involves making the transition from something that is a good thing to do, to something that is required and part of everyday responsibilities. Achieving this sense of responsibility may require formal documentation.

It is not enough to just produce documents. Creating a consistent culture in any organisation requires support at all levels. Senior management support for environmental policies is critical, including providing sufficient funding, providing resources to carry out necessary tasks and leading by example when it comes to following procedures.

Formal documentation may include:

- publishing an environmental policy statement on the intranet or website
- developing and publishing an environmental improvement plan
- ensuring objectives and targets are widely communicated and part of a performance-management process where appropriate
- providing regular feedback on environmental targets and objectives
- documenting environmental procedures so they are part of the formal workplace policy and procedure manual
- including environmental policies and procedures as part of induction to the organisation
- formally documenting any reporting requirements for compliance with legislation, regulations or accreditation programs such as ISO 14001
- ensuring external reporting requirements are clearly assigned to appropriate staff and followed up
- regularly communicating at all levels to maintain awareness.

Practice task 19

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

Case study

Marcia is responsible for implementing a commingled recycling scheme at Busy Kids, a childcare facility for children up to five years old. There are three rooms for the children: a babies' room, toddler room and pre-school children's room. There are 10 carers in the centre, two kitchen staff and three office staff. As part of implementing the recycling scheme, Marcia needs to develop a communication plan.

Help Marcia develop her communication plan using this table.

Remember, there may be more than one key message for each group and that each message may be communicated in more than one way; for example, a briefing to kitchen staff about how to separate waste may be supported by a handout and posters displayed in the kitchen.

Commingled recycling communication plan for Busy Kids					
Group	Key message	Method	Assigned to	Due by	Status
Kitchen staff					
Carers					
Office staff					

4C

Evaluate strategies

As part of the continuous improvement cycle, you should define, measure, analyse, improve and control your process or procedure on an ongoing basis. Analysis helps you evaluate the reason for a particular result and identify appropriate enhancements. Evaluation also helps determine whether or not a strategy, procedure or initiative is effective. The best time to define what you will be evaluating is at the commencement of an initiative. By having a clear understanding of what it is you want to achieve, you will be able to determine what it is you are evaluating.

When a target is achieved, it is easy to conclude the procedure was a success. However, there is still an opportunity to enhance the process and achieve even better results or the same results in less time and with fewer resources. Be sure to document the process and any revisions. Most workplace policies and procedures have a mechanism for regular updates. Providing a brief explanation for the update will help your successor or people in other areas to understand the reason for the change.

Things to consider when evaluating an environmental strategy

- Keep it objective. Try to keep the review about the process, rather than individual or work group performance. People will be less defensive when discussing the process. Address specific performance concerns separately from the process evaluation.
- Involve all levels. Involving staff in developing improvements or making suggestions helps encourage ownership and engage staff. Suggestion schemes, group meetings and informal discussion are all ways of gathering suggestions.
- Provide feedback. If you have asked for help from other staff members, make sure you inform them how their information will be used. If appropriate, recognise individuals or teams for particular suggestions.
- Create a 'lessons learned' database. Mistakes happen. The important thing is to acknowledge them, understand them and implement changes to prevent recurrence. A 'lessons learned' database need not be highly technical. It should be a summary of the concern, the cause and the steps to rectify it. It should be located in a central location.
- Use what you have learned to plan for the future. Evaluating procedures teaches you about process design and implementation. Next time you are planning a new procedure, you will be able to do so more quickly and effectively.

Example: know what to evaluate



Oliver was directed to implement a green office initiative and present the management team with a plan of action. He knew the most effective way to achieve any initiative was to first plan how he would monitor and evaluate the strategies implemented. He accessed a useful evaluation step-by-step guide from the Department of Human Services website to assist him with the steps. He listed the information he would need to collect and how he would collect it. He identified relevant people who needed to be involved for the success of the initiative. Oliver wanted to be able to note any learning from the process to ensure he could address issues in the future. With the evaluation and monitoring plan in place, Oliver felt he had a clear direction for the next step of developing an implementation plan for the initiative.

Evaluation methods

When developing a time line for launching an environmental initiative, policy or strategy, it is helpful to set a date for a formal evaluation. Be sure to provide enough time for participants to understand the process and develop new habits, as well as enough time to gather some initial measurements. During the launch phase, you may well be evaluating more frequently until the process is established.

Below are some common evaluation methods and suggested uses.

Informal discussion

- Use in the launch phase for early feedback. May be used at any time with participants in the process.
- Suggestions: Encourage participants to provide constructive feedback at any point during the continuous improvement cycle.

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Interviews

- Use during formal process evaluation. Useful for gathering detailed information when time permits.
- Suggestions: Schedule time with participants. Seek supervisor permission if required. Clearly explain the purpose of the interview. Plan structured questions and allow plenty of time. Keep to time lines.

Questionnaires

- Use after training sessions during formal process evaluation. Useful for quickly gathering information from large groups of people.
- Suggestions: Ensure questions are clearly expressed and not subject to misinterpretation. Consider how you will summarise and report results when planning questions.

Checklists

- Use during formal process evaluation. Useful if observing a physical process and verifying process. Can also be used to check outcomes of a process.
- Suggestions: Structure checklists so that they are objective. Test them by having two people observe the same process and ensure they complete the checklist in the same way.

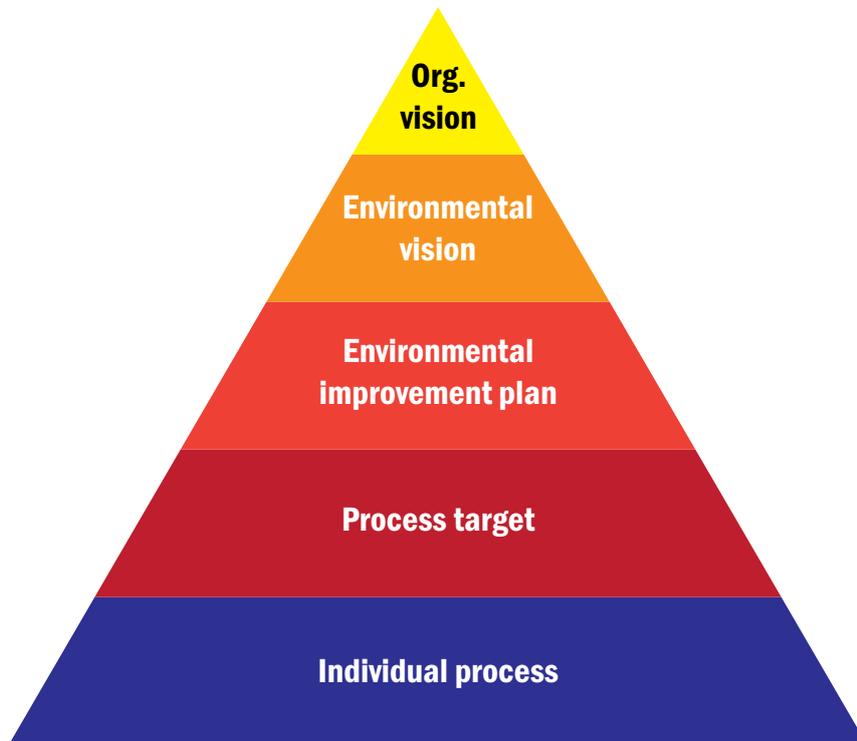
Audits

- Use during formal process evaluation. Useful if observing a physical process and verifying process. Can also be used to check outcomes of a process. Usually involve more verification than a checklist.
- Suggestions: External accreditation processes usually require audits to be performed by their representative. These may also involve interviews with staff to assess their understanding of processes.

Evaluation frameworks and objectives

Formal evaluation should consider not just the individual process, but how it fits into an overall framework. Much of the detail of the evaluation should focus on the individual process and whether it meets its process target. However, it is also important to consider how the process contributes to the achievement of broader objectives; for example, the environmental improvement plan, the organisation's environmental vision, and the organisation's overall vision and objectives.

The framework shown here is merely a suggestion. In your workplace, school or organisation, there may be a more appropriate framework. When deciding what framework to adopt for your evaluation, be sure to consider what the building blocks are in your organisation. Try to step from the lowest level of detail through to the highest appropriate level.



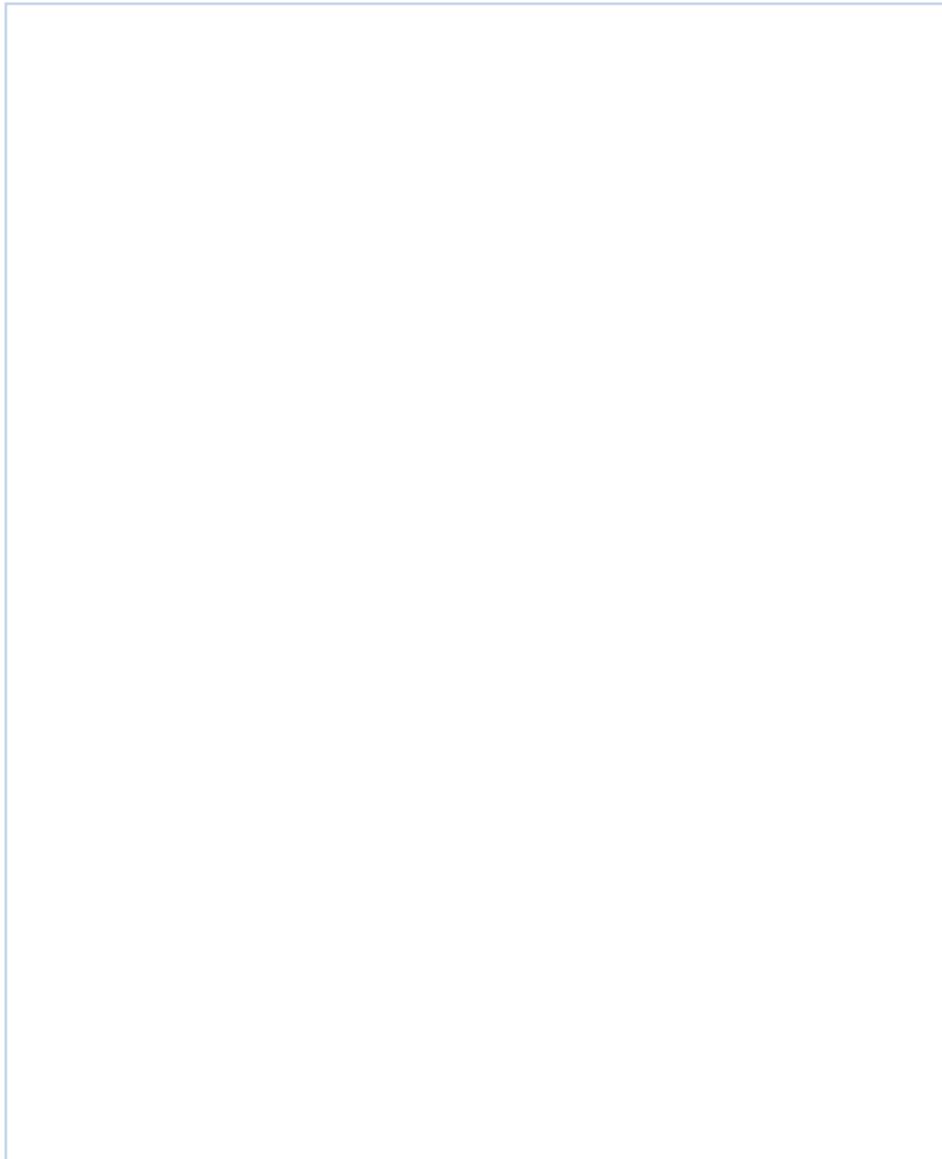
Practice task 20

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

Case study

Debbie has recently launched a paper recycling scheme in the administrative offices of Northern Hospital. This involves educating staff on how to use the new recycling bins, what should go into mixed rubbish bins and how to reduce paper usage by changing printer and copier settings. It also involves encouraging recycling of packaging materials and providing guidance on recycling confidential patient information. Debbie is preparing to evaluate this process.

Develop a checklist for Debbie to evaluate how effectively paper is being recycled in the hospital's administrative offices. Ensure that the measures used are objective and not subject to misinterpretation if different people collect the data.



4D Set new targets and apply new strategies

Effective and objective evaluation is an important part of setting new targets. Information gathered during the evaluation process is critical to determining whether a target should increase or decrease, or if it requires redefinition to better match the process and the objective.

Setting a formal process evaluation as part of the launch time line will give participants confidence that their concerns will be heard. Allow people to adjust to the new processes. Responding too quickly to reactions to changes is not productive. Extra time also allows feedback from the response without generating new problems.



Long-term and short-term objectives

There are two points to consider when deciding whether to adjust a target.

Is the target realistic? When developing targets initially, it is easy to be optimistic that funding and resources will be available as planned. However, delays can occur and unforeseen problems can arise. In light of these changes, the initial target may no longer be realistic. As soon as a target becomes unrealistic, participants will stop striving to achieve it and may stop participating in the process. Adjusting the target and recognising legitimate concerns may help maintain participation and achievement.

Is the target still challenging? It may be appropriate to revise targets upwards. The initial target may have been set too low. If the lower target has already been communicated and committed to for that period, then you can choose to set a stretch target. Stretch targets encourage striving for a higher level of achievement. In general, the earlier target is considered the minimum performance level and additional rewards may be available for achieving the stretch targets. Alternatively, you can wait for the next period to set the higher target.

Long-term and short-term objectives: adjustments of targets

Adjustments of targets in the short term do not need to change the long-term objective. An adjustment downwards to recognise a particular set of circumstances may be compensated for by adjusting the target for the next period upwards. It is important to communicate to all stakeholders how and if ongoing short-term changes will impact the long-term goal.



Setting new targets, modifying the strategy or adjusting the execution are all parts of the continuous improvement process. Once these changes have been introduced, it is important to control the process; that is, to give participants an opportunity to adjust to the changes and incorporate them into their routine. These changes should then be reviewed and any new objectives defined and measured, which returns to the start of the cycle.

Look at new possibilities

Successful implementation of an initiative in one area may suggest possibilities for similar applications elsewhere. Pilot programs can be helpful. People are more likely to participate in a process if they know it has been successful elsewhere. Having concrete examples within an organisation is a powerful way to persuade people to participate.

Example: look at new possibilities



Pryia was responsible for successfully implementing a recycling program in the administration department. In addition to setting targets for ongoing improvement for the administration department, Pryia decided it would be worthwhile to consider how the same procedures could be adapted and applied in another area. Information gathered from the evaluation process proved useful for deciding how to adapt the processes and implement the program elsewhere.

Practice task 21

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

Case study

Eleanor has just launched a paper-saving program in the customer service department for mobile phone plans. Two key elements of the program are to adjust the default settings on network computers so they automatically print on both sides of the page, and to train staff in using the duplex function of the photocopier.

So far, there have been a couple of teething problems. A few people have complained that they can't print one-sided when they need to for specific documents. Eleanor addresses this promptly by holding training sessions on how to change the settings when required, and emails notes on the process to the whole department.

Her bigger challenge is the duplex photocopying. She has developed posters explaining how to use this function on the machine, since it can't be set to default. She has also demonstrated the process to anyone who has requested it and individually trained the administration assistants who use the function regularly. However, even when the procedure is followed, the photocopier regularly jams when using the duplex function. People are getting really frustrated and most have returned to photocopying one-sided.

Eleanor is concerned about meeting her target. She is aiming to reduce paper usage by 40 per cent by the end of the year, based on reducing printing requirements by 25 per cent and copying requirements by 15 per cent. Eleanor needs to prepare a status report for her supervisor with the next steps she recommends.

1. What would you recommend in this situation?

2. How would you adjust the short-term objectives while still trying to achieve the long-term goal?

4E

Promote successful strategies and reward participants

When an initiative has been successfully launched and the results are known, it is important to communicate this successful outcome to all stakeholders.

You may choose to inform some stakeholders of the result even if they were not involved in the consultation or design of the process. For example, you may inform customers about changes to using recycled material in packaging by printing messages on the pack and providing information on the website, even if you did not consult with customers or restricted research to a small focus group.



Communicate with stakeholders

Below are some effective communication methods appropriate for different types of stakeholders.

Participating staff
<p>Communication method: Team meetings, bulletins, notices, information in newsletters, emails, recognition from managers</p> <p>Possible benefits: Recognises achievement, helps motivation to continue, provides feedback on benefit of program</p>
Supervisors and managers
<p>Communication method: Team meetings, reports on performance versus target, presentations on program status</p> <p>Possible benefits: Provides feedback on benefit of program, recognises efforts of participating staff</p>

continued ...

... continued

Technical specialists

Communication method: Briefings on program status via company newsletters, emails

Possible benefits: Recognises their help and input to the program, may encourage other areas to participate or to start new projects

Other departments

Communication method: Briefings via newsletters, emails

Possible benefits: May encourage non-participating areas to initiate similar programs

Suppliers

Communication method: Regular supplier meetings, specific program briefings

Possible benefits: Recognises any help and input to the program, may encourage other initiatives with suppliers

Local council and government

Communication method: Specific briefings or meetings, press releases, website information

Possible benefits: May satisfy some compliance requirements, may generate goodwill

Customers

Communication method: Information via press releases, information with product, direct mail, website information, advertising

Possible benefits: Generates goodwill, may increase sales if environmental criteria are part of purchase decision

General public

Communication method: Information via press releases, website information, advertising

Possible benefits: Generates goodwill, may attract new customers if environmental criteria are part of purchase decision

Build resources

Environmental strategies may face difficulties and challenges during implementation. It can be helpful to review other people's strategies and implementation methods. This may help prompt an idea about an initiative for a different work group or help address an issue in another area.

A database of successful strategies and implementation methods can be a useful tool for others in the organisation.

Developing a standard report that is completed at the end of each implementation period can be a useful way to provide this information in a brief, condensed form. This kind of report could provide a summary for managers or senior staff.

Reports could be held electronically in a common network drive or in hard copy in a central location.

Summary reports may include:

- a program background, which is a brief outline of the background to the program
- a program objective, which is a brief summary of the objectives of the program and the key targets that were measured as part of this objective
- an action plan, which describes the key steps in the implementation, including who was responsible and where more detailed information can be found
- a communication plan, which lists who was responsible and links to more detailed information if required
- results of the program, which summarises key measures of performance versus target
- revisions and future plans
- key contacts.

Reward participants

Participants in environmental initiatives appreciate acknowledgement of their efforts. Recognition does not need to be a major, expensive effort. It may be as simple as you, a manager or senior manager acknowledging the efforts made. For example, including information about a successful initiative in a newsletter can help participating staff feel proud of their input.

Motivating participants and stakeholders is not just limited to the launch and implementation phases. You also need a strategy to motivate people to maintain their levels of participation throughout the continuous improvement process. Some suggestions are outlined here.

1st place	2nd place	3rd place	4th place
<p>Public recognition: 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>Team events: 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>Providing rewards: 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>Development rewards: 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.

Summary

1. Use clear, concise and audience-appropriate communication strategies.
2. Evaluate your strategies to ensure they will be successful.
3. Review, revise and continually improve your strategies.
4. Encourage stakeholders by endorsing their participation.

Learning checkpoint 4

Monitor performance improvement strategies

This learning checkpoint allows you to review your skills and knowledge in monitoring performance improvement strategies.

Read the case study, then complete the tasks that follow.

Case study

Thuy works at the head office of Holiday Homes, a chain of small boutique hotels. Over the last three months, she has been implementing a water-saving program at one of their recently acquired hotels in a country town that is currently experiencing difficult drought conditions. As part of the program, she has implemented the following initiatives:

- installation of dual-flush toilets
- a maintenance review to check for leaks (several leaks were identified in the laundry plumbing and some guest rooms)
- staff encouraged to use eco settings in the hotel laundry to reduce water usage
- staff encouraged to reuse grey water for maintaining trees and shrubs in the hotel gardens.

As part of the program, Thuy has been receiving regular reports from their water provider, and their water usage is steadily decreasing compared to the same months in previous years. In the first month, they were 15 per cent down on the previous year, 25 per cent in the second month and 17 per cent in the third month. The water savings have already offset around 40 per cent of the cost of the new toilets, but the old ones needed to be updated anyway.

Despite the water savings, Thuy is a little disappointed. Her initial target was that they would save up to 40 per cent of their water usage. She decides to conduct a review of the program, including monitoring activities in the laundry to confirm they are using the eco settings and grey water.

After discussions with the laundry and gardening staff, Thuy makes an interesting discovery. The laundry staff are using the eco settings for lightly soiled loads, such as the daily wash of hotel sheets and towels, but are finding it insufficient for heavily soiled loads, such as kitchen towels and tablecloths. However, the gardening team feels that there is too much soap residue in the water, so they are not using the grey water and are continuing to water the garden with mains water, but they are following local water restrictions.

Thuy returns to head office a little dispirited. After a chat with her supervisor, she realises that a 20 per cent reduction is a significant achievement in three months, even though she has not achieved her long-term target. Thuy agrees to produce a report for her supervisor, summarising progress in the water-reduction program and making some recommendations for improvements that will allow her to achieve a more realistic target in the next six months.

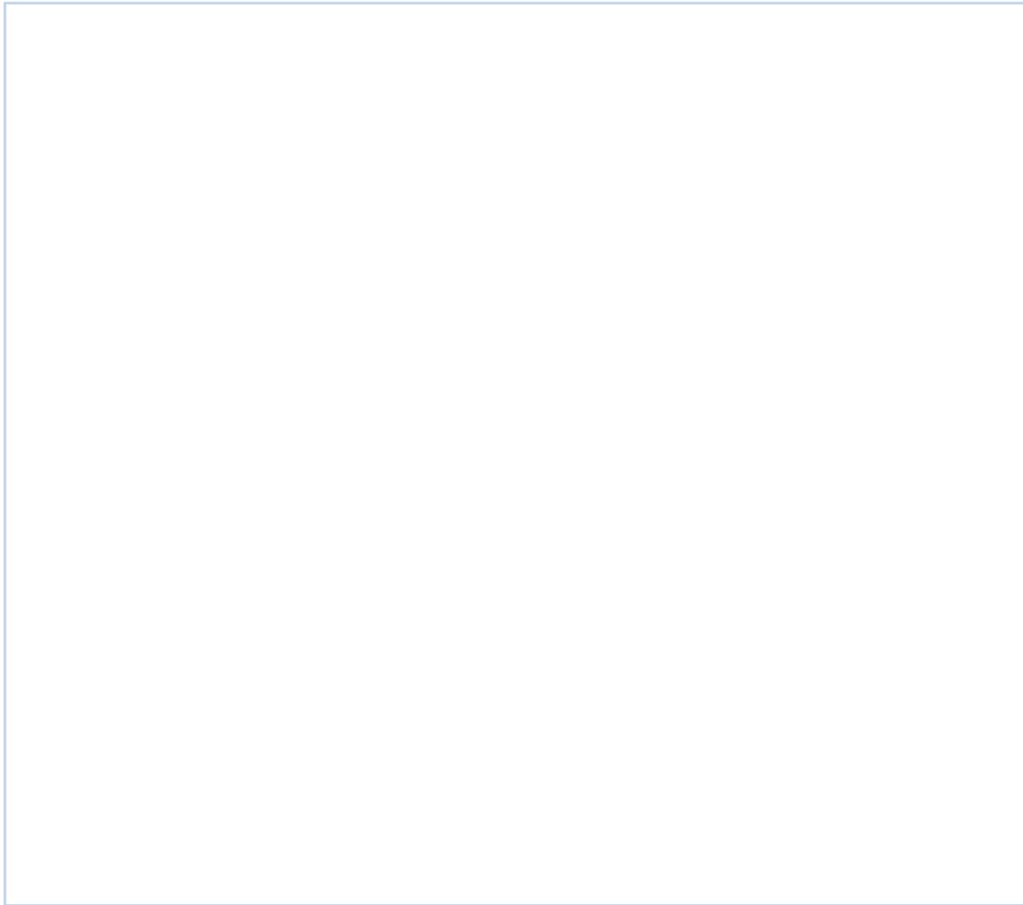
Help Thuy prepare the report for her supervisor. It should include the following:

1. A brief background to the program and summary of objectives

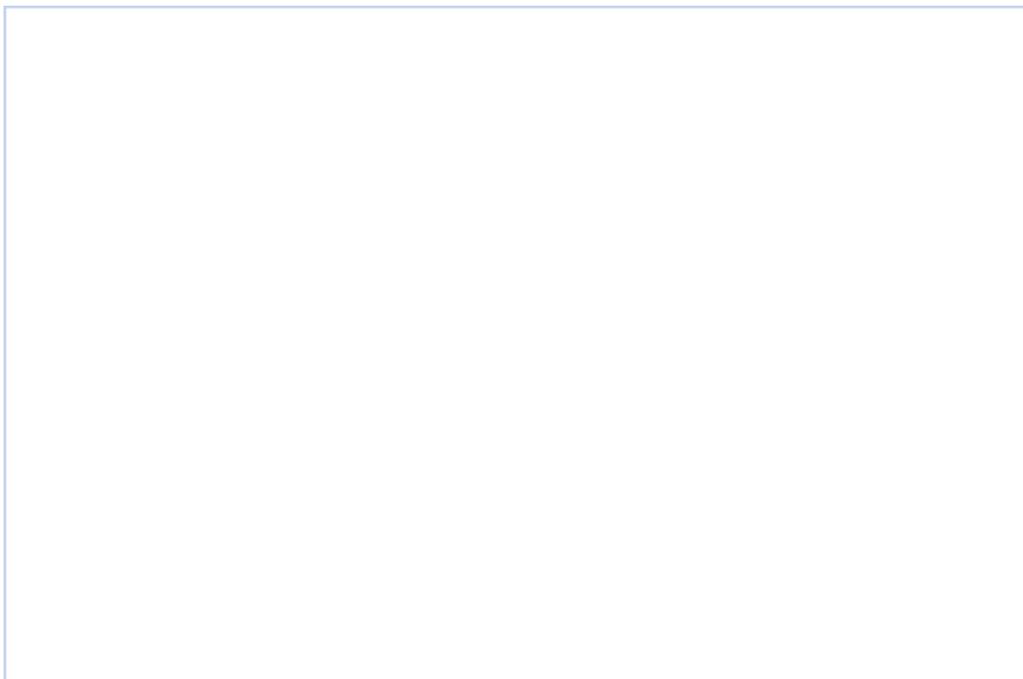
2. A summary of target results for the three months so far

3. A summary of achievements

4. Suggested improvements

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5. Revised targets and time line

A large, empty rectangular box with a thin blue border, intended for writing revised targets and time line.

6. A communication plan to internal and external stakeholders, including who the target of the communication is, what method will be used and a brief outline of the content

7. A summary of lessons learned from the program to date

