

BSBSUS501

Develop workplace policy and procedures for sustainability

Learners Guide



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About BSBSUS501 Develop workplace policy and procedures for sustainability

Application

This unit describes the skills and knowledge required to develop and implement a workplace sustainability policy and to modify the policy to suit changed circumstances.

It applies to individuals with managerial responsibilities who undertake work developing approaches to create, monitor and improve strategies and policies within workplaces and engage with a range of relevant stakeholders and specialists.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Unit Sector

Industry Capability – Sustainability

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Develop workplace sustainability policy	1.1 Define scope of sustainability policy 1.2 Gather information from a range of sources to plan and develop policy 1.3 Identify and consult stakeholders as a key component of the policy development process 1.4 Include appropriate strategies in policy at all stages of work for minimising resource use, reducing toxic material and hazardous chemical use and employing life cycle management approaches 1.5 Make recommendations for policy options based on likely effectiveness, timeframes and cost 1.6 Develop policy that reflects the organisation's commitment to sustainability as an integral part of business planning and as a business opportunity 1.7 Agree to appropriate methods of implementation, outcomes and performance indicators
2. Communicate workplace sustainability policy	2.1 Promote workplace sustainability policy, including its expected outcome, to key stakeholders 2.2 Inform those involved in implementing the policy about expected outcomes, activities to be undertaken and assigned responsibilities
3. Implement workplace sustainability policy	3.1 Develop and communicate procedures to help implement workplace sustainability policy 3.2 Implement strategies for continuous improvement in resource efficiency 3.3 Establish and assign responsibility for recording systems to track continuous improvements in sustainability approaches

4. Review workplace sustainability policy implementation	<p>4.1 Document outcomes and provide feedback to key personnel and stakeholders</p> <p>4.2 Investigate successes or otherwise of policy</p> <p>4.3 Monitor records to identify trends that may require remedial action and use to promote continuous improvement of performance</p> <p>4.4 Modify policy and or procedures as required to ensure improvements are made</p>
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Foundation Skills

This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.

Skill	Performance Criteria	Description
Reading	1.1, 1.2, 4.2, 4.3	<ul style="list-style-type: none"> Identifies, analyses and evaluates complex textual information to determine legislative and regulatory requirements, trends and outcomes
Writing	1.2-1.7, 2.1, 2.2, 3.1, 3.3, 4.1, 4.3, 4.4	<ul style="list-style-type: none"> Researches, plans and prepares documentation using format and language appropriate to context, organisational requirements and audience
Oral Communication	1.2, 1.3, 2.1, 2.2, 3.1, 4.1	<ul style="list-style-type: none"> Presents information and seeks advice using language appropriate to audience Participates in discussions using listening and questioning to elicit the views of others and to clarify or confirm understanding
Numeracy	1.5, 4.3	<ul style="list-style-type: none"> Interprets and uses mathematical equations to calculate numerical information relating to time durations and costs
Navigate the world of work	1.1-1.6, 3.1, 4.4	<ul style="list-style-type: none"> Develops, monitors and modifies organisational policies and procedures in accordance with legislative requirements and organisation goals
Interact with others	1.2, 1.3, 2.1, 2.2, 3.1, 3.3, 4.1, 4.3	<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 Plays a lead role in consulting and negotiating positive outcomes with a range of stakeholders

Get the work done	1.2, 1.4-1.7, 2.3, 2.4, 3.1, 3.2, 3.3, 3.5, 3.6, 4.1, 4.3, 4.4	<ul style="list-style-type: none"> Plans, organises and implements work activities of self and others that ensure compliance with organisational policies and procedures, and legislative requirements Sequences and schedules complex activities, monitors implementation, and manages relevant communication Uses systematic, analytical processes in relatively complex, situations, setting goals, gathering relevant information, and identifying and evaluating options against agreed criteria Evaluates outcomes of decisions to identify opportunities for improvement
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Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
BSBSUS501 Develop workplace policy and procedures for sustainability	BSBSUS501A Develop workplace policy and procedures for sustainability	Updated to meet Standards for Training Packages Minor edits to clarify performance criteria	Equivalent unit

Assessment requirements

Performance Evidence

Evidence of the ability to:

- scope and develop organisational policies and procedures that comply with legislative requirements and support the organisation's sustainability goals covering at a minimum:
 - minimising resource use
 - resource efficiency
 - reducing toxic material and hazardous chemical use
 - employing life cycle management approaches
 - continuous improvement
- plan and implement sustainability policy and procedures including:
 - agreed outcomes
 - performance indicators
 - activities to be undertaken
 - assigned responsibilities
 - record keeping, review and improvement processes
- consult and communicate with relevant stakeholders to generate engagement with sustainability policy development, implementation and continuous improvement
- review and improve sustainability policies.

Note: If a specific volume or frequency is not stated, then evidence must be provided at least once.

Knowledge Evidence

To complete the unit requirements safely and effectively, the individual must:

- outline the environmental or sustainability legislation, regulations and codes of practice applicable to the organisation identify internal and external sources of information and explain how they can be used to plan and develop the organisation's sustainability policy
- explain policy development processes and practices
- outline organisational systems and procedures that relate to sustainability
- outline typical barriers to implementing policies and procedures in an organisation and possible strategies to address them.

Workplace Sustainability Policies and Procedures

Developing workplace sustainability policy

Define scope of sustainability policy¹

When a workplace is following 'best practice' policies, they often need to be developed to include monitoring, evaluation and entrench continuous improvement. Every larger organisation needs to have an environmental policy, to help ensure they are being held accountable to the required legislative and regulatory guidelines.

The environmental policy is a key document in the life of an organisation, but is usually just one page in length. This policy sets out in broad terms what the organisation will do in relation to environmental issues, complying with environmental law and protecting the environment. It should be signed off by the CEO or Chairman of the Board of Directors to demonstrate commitment from the top of the organisation. Most corporate policies are available on the company's website and are commonly repeated in the annual report.

In general, when writing a policy, you should keep in mind the size and specific needs of the organisation. Policies should be clear and concise - don't include lengthy processes or procedures that will be difficult to maintain or comply with.

The structure for policy documents will vary from organisation to organisation, but some common elements include the following:

- Purpose statement - the context of the policy, why it is required
- Scope - the application of the policy (particular location, workgroup, etc.)
- Procedure - how the policy is implemented
- Roles and responsibilities - who is responsible for the implementation of the policy
- Legislation - reference any legislation that the policy specifically complies with

A sustainability policy should:

- Have a commitment to continuous environmental improvement
- Ensure the company complies with relevant environmental laws
- Indicate that the company's environmental objectives and targets are reviewed on a regular basis
- Provide adequate communication to staff and the public
- Come from the highest level in organisation
- Be available to the public
- Comply with relevant legislation
- Have a commitment to:
 - Continual improvement
 - Review of environmental objectives and targets
 - Communication

¹ Source: BSBSUS501A Develop workplace policy and procedures for sustainability - Study Guide, South West Institute of TAFE, 2009 and Sustainable Manufacturing as at http://toolboxes.flexiblelearning.net.au/demosites/series13/13_04/content_sections/msaenv672a/672a1_devel_op_policy/672a1_develop_policy_02.htm, as at 21st October, 2012..

Existing quality and OHS policies also need to be reviewed or re-written to be integrated with environmental policies to ensure they capture sustainability objectives.

An organisation that has made a decision to develop an environmental sustainability policy (ESP) must start by identifying which parts of the organisation the policy will apply to. Is it intended for the whole organisation, one work area or project, or a combination of these?

Next, it must be determined whether the organisation will take an integrated approach to sustainability or focus on one particular aspect. An integrated approach may include social, environmental and corporate governance aspects. This Study Guide focuses on environmental aspects only.

The other issue to consider is *how* sustainability initiatives will be addressed. There are numerous approaches to implementing sustainability initiatives in the workplace.

The approach illustrated throughout this Study Guide uses ISO 14001 principles as the relevant Standard to develop and implement an environmental sustainability policy (ESP).

Gather information from a range of sources to plan and develop policy

The knowledge gained from conducting various types of research will help formulate appropriate policies and procedures; therefore, it is important to gather information from a range of sources prior to developing an ESP.

ISO 14001:2004 and ISO 14004:2004



As a starting point, the Australian and New Zealand Standard ISO 14001:2004 and ISO 14004:2004 provide guidelines for developing and implementing an environmental management system. If you haven't already obtained copies of these Standards, now is the time to do so.

Two centuries of industrial development have made life better for many people in ways that have sometimes been unimaginable². Increasing industrial activity also brings, however, increasing damage to the physical environmental systems and social fabric on which our wellbeing depends. As a leader of the future, you need to be able to lead a different kind of development, one which meets people's needs without compromising our future. You need to take full account of the social, economic and environmental impacts of your decisions

² Text and figure adapted from the NSW Department of Environment, Climate Change and Water, 'Standards for Sustainability: Manufacturing Knowledge and Skills for Sustainability Resource Manual'. Used with permission.

over the long term. Including sustainability in your business case can provide both opportunities and strategic direction in this important area.

A key role of sustainability champions is the development of company policy. Overseeing the implementation, review and evaluation of that policy is also essential. The whole process may be termed 'strategic planning'.

The first step in the strategic planning process for sustainability or environmental improvement is the development of policy. Your sustainability policy may be an over-riding statement dealing with all aspects of environmental sustainability: waste reduction, water and energy conservation and related greenhouse gas reduction, working with your suppliers and customers in more sustainable ways. On the other hand, it may deal with just one of these aspects to begin with. The scope of the policy will be determined by criteria such as costs, time, business constraints and opportunities, all of which should be weighed up by key stakeholders.

Your policy may also take into account the 'social' aspects of the triple bottom line through the inclusion of corporate responsibility aims. Look at the '**Fact sheet: Corporate social responsibility**'. A business policy should include the economic aspect of the triple bottom line.

The diagram illustrates how the different aspects of the triple bottom line intersect.

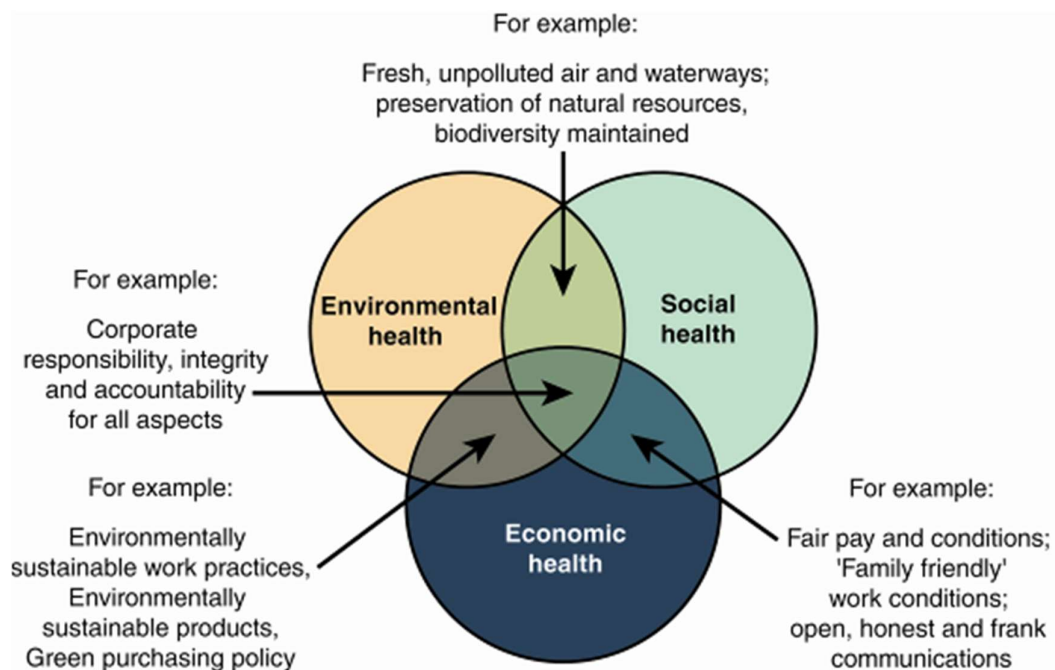


Figure 1: Different aspects of the triple bottom line

There are several reasons why a company benefits from the adoption of a formal, written sustainability policy:

- It establishes an overall sense of direction, enhancing your chances of success.
- It allows you to judge the performance of its strategy against an agreed set of targets.
- Sustainability matters are more likely to be understood and accepted throughout a company if they have the support of senior management through policy processes. Formal policy ensures adequate resources are allocated to implementing sustainability.
- It documents the responsibilities and accountabilities for implementing sustainable practice throughout the company.

- It ensures sustainability measures are continued within the business regardless of whether sustainability 'champions' are involved or not.
- It provides a marketing tool to demonstrate your company's commitment to sustainable development.

A policy can be made up of three main parts.

1. The policy statement.
2. The implementation plan.
3. Various sub-plans and standard operating procedures.

These parts may be interpreted in the following way:



Policy statement

The type of business we want to be: the values we strive for.

Key objectives

Implementation plan: how we will achieve our policy goals.

Actions

Action plan: activities that will lead to the accomplishment of key objectives.

Standard operating procedures

The expected way of doing things: actions integrated into the culture and routines of the workplace.

Laws and regulations

Organisations have to comply with various environmental laws, regulations, treaties and policies. The laws that apply to your organisation will be determined by identifying the environmental aspects and environmental impacts of its activities.

A good way to take account of any laws that may apply is to prepare a 'Legal aspects register' for your organisation.

Environmental law

Australian laws that address environmental issues are issued at a Commonwealth, State and local level.

The following are examples of Commonwealth legislation to protect the environment:

- Antarctic Treaty (Environment Protection) Act 1980
- Environment Protection and Biodiversity Conservation Act 1999
- Environment Protection (Sea Dumping) Act 1981
- Environmental Protection (Nuclear Codes) Act 1978
- Great Barrier Reef Marine Park Act 1975
- Hazardous Waste (Regulation of Exports and Imports Act) 1989
- Protection of the Sea (Prevention of Pollution from Ships) Act 1983
- Road Transport Reform (Dangerous Goods) Act 1995
- Wildlife Protection (Regulation of Exports and Imports) Act 1982.

Commonwealth laws apply throughout all Australian states and territories.

Victorian State legislation that applies to business includes:

- The Environment Protection Act 1970
- Planning and Environment Act 1987
- Health Act 1958
- National Environment Protection Council (Victoria) Act 1995.

Local laws may vary in every area. You will need to check with the relevant Council in your area.

Subordinate legislation

Subordinate legislation is law made by a body that has been delegated the power to create law by an Act of Parliament. It is used to implement the policies outlined in the primary legislation (or Act) and its powers cannot exceed those provided in the primary Act.

Subordinate legislation under the *Environment Protection Act 1970* includes:

- State environment protection policies (SEPPs):

- Air SEPPs
- Land and Groundwater SEPPs
- Noise SEPPs
- Waste SEPPs
- Water SEPPs

Waste management policies (WMPs):

- IWMP (Movement of Controlled Waste between States and Territories)
- IWMP (National Pollutant Inventory)
- IWMP (Prescribed Industrial Waste)
- IWMP (Protection of the Ozone Layer)
- IWMP (Waste Acid Sulfate Soils)

Regulations:

- Environment Protection (Distribution of Landfill Levy) Regulations 2002
- Environment Protection (Fees) Regulations 2001
- Environment Protection (Prescribed Wastes) Regulations 1998
- Environment Protection (Residential Noise) Regulations 1997
- Environment Protection (Scheduled Premises and Exemptions) Regulations 1996
- Environment Protection (Vehicle Emissions) Regulations 2003
- Pollution of Water by Oil and Noxious Substances Regulations 2002.

A generic environmental policy

A general environmental policy requires the company to:

- Comply with environmental law
- Commit to continuous improvement
- Develop an environmental management system
- Resource the environmental management system adequately
- Minimise pollution
- Ensure efficient production
- Facilitate communication

The first step in the planning process is the development of your policy. Your sustainability policy may be an over-arching statement that deal with all aspects of environmental sustainability including:

- Waste reduction
- Water conservation
- Energy conservation
- Greenhouse gas reduction
- Working with suppliers and customers in more sustainable ways

Or it may just deal with one aspect. Initially the choice would be yours.

The scope of the policy will be determined by things such as:

- Cost
- Time
- Business constraints
- Opportunities

All of which should be weighed up by the key stakeholders in your organisation. Your policy may also take into account the 'social' aspects of the triple bottom line through the inclusion of corporate responsibility aims. A business policy should include the economic aspect of the triple bottom line.

How does a company benefit from an environmental policy?

- There are several reasons why a company benefits from the adoption of a formal, written sustainability policy:
 - It allows you to determine the performance of its strategy against an agreed set of objectives
 - It ensures sustainability measures are ongoing in the business regardless of whether sustainability 'champions' are involved or not
 - It establishes a sense of direction
 - It highlights the responsibilities and accountabilities for implementing sustainable practice throughout the company
 - It provides a marketing tool to show your company's commitment to sustainable development
 - Sustainability matters are more likely to be understood and accepted throughout a company if they have the support of senior management through policy processes

Writing the scope

The purpose of the Policy Scope Statement is to guide the development of a policy, provide a summary of a proposed policy, and ensure that those who might be affected by a policy are identified, considered, and consulted.

Scope – to who or what does the policy apply? For example: This policy applies to staff, students, contractors and visitors at EYF Training, sites and teaching, development and work areas where the business has operational control and movement to, from and between them.

This policy covers actions and activities that may impact on biodiversity, built environment, energy, carbon, environmental risk, purchasing, recycling and waste, transport and water.

Gathering information from a range of sources to plan and develop policy

Perhaps the first place to start in a management review to develop and implement sustainable policies is to review the vision and mission statements of the business. Sustainability policies typically encompass the triple bottom line of financial, social and environmental objectives. If there are existing quality and Workplace Health and Safety policies, then sustainability policies should be developed that allow integration of quality, safety and environmental policies.

Purchasing policies have significant influences on sustainability, determining what raw materials and resources are utilised in a business. Other significant policies will include:

- Waste management (also known as 'resource recovery')
- Integrated marketing communication policies (internal and external) that capture and communicate a business's sustainability objectives
- Human resource management policies that link appraisals, remuneration and rewards to sustainability objectives

Identifying best practice models and initiatives

The best sustainability models for the business sector are industry specific systems that are promoted and supported by industry associations such as the Sustainable Green Print (SGP), the Australian printing industry's own recognisable certification program designed to help printing companies meet their environmental responsibilities and go above and beyond compliance.

SGP is based on an ISO14001 international standard. SGP is tailored to meet a printer's business requirements, the demands of their customers and the changing trends in dealing with managing environmental responsibility. This multi-level system provides a choice of four linked achievement levels including ISO 14001 (Level 3 SGP) allowing printers to choose their participation and progress levels.³

Generic sustainability models are supported by government agencies such as the EcoBiz program in Queensland.⁴

The Queensland Government provides a business sustainability roadmap. This is a strategy map which provides a contextual framework for businesses that are serious about taking up the challenges and opportunities of sustainable development.⁵

Most state and territory governments provide the same type of support for businesses and industries in their state or territory, but some use different names to support the same initiatives.

Internal audit

An internal audit is an important consideration in the information gathering stage.

An internal audit involves an evaluation of where your organisation is currently at in respect to its environmental performance. This is important because it sets a starting point from which the journey to improvement may begin. The current status of the organisation may be considered in relation to industry benchmarks or standards in order to understand where significant room for environmental improvement is required. The broad areas you need to consider are:

- the behaviour of staff and management in relation to sustainability – a useful tool is a simple survey of staff to determine their understanding of environmental issues, in particular those issues related to their activities in the workplace
- the amount of waste currently being produced by the organisation
- the products consumed by the organisation
- what is driving your organisation to improve its practices (i.e. why does your organisation need to improve?)
- what steps you are already taking to address sustainability
- what you would like to achieve 12 months, 2 years and 5 years from now
- who the main point of contact is in your business (i.e. who is driving the sustainability policy).

Sustainability Victoria has developed a set of guidelines and instructions for calculating resource usage in the workplace. Go to:

<http://www.sustainability.vic.gov.au>

Conducting an internal audit

Types of questions that could be asked when auditing current environmental

³ Source: http://www.printnet.com.au/pages/our_industry/environment_sub_pages/sgp_lead_page.html>

⁴ Source: http://www.derm.qld.gov.au/environmental_management/sustainability/ecoblz_queensland/Index.html>

⁵ Source: http://www.derm.qld.gov.au/services_resources/item_details.php?item_id=203298>

impacts:

Are there any spilt liquids, dripping taps, untidy chemical storage areas, leaking containers, noticeable spills, inappropriate recycling of materials (that is, contamination of recyclables with general waste) or other environment issues not being dealt with correctly?

When was the last integrity test on underground storage tanks? Are the test results OK? Are there any signs of leakage? Note the location and purpose of any underground storage tanks.

Are all bulk liquids stored outdoors within bounded areas so that materials cannot escape into the drainage system or waterways?

Are there any visible discharges to storm water?

What are the main products used in each department or section (such as paper, ink, paint, timber, chemicals [list the chemicals], electricity, plastic, computers or water)?

What waste materials are generated (types, quantities and costs)?

What materials are recycled (types, quantities and costs)?

Further procedures

Ensure that whoever is undertaking the assessment has access to all areas of the organisation that fall within the scope of the policy. Obtain permission if areas that need to be assessed are normally beyond the assessor's area of responsibility. Obey any occupational health and safety requirements during the assessment.

In addition to the above, the internal review should also include a thorough assessment of your organisation's readiness to develop an environmental sustainability plan. Therefore, the following also need to be assessed:

- corporate policies
- business plans
- corporate strategies
- corporate action plans
- purchasing practices
- tendering practices
- training programs
- operating procedures
- existing management systems, such as systems for quality assurance, OHS and risk management
- existing licences, works approvals, permits (including those associated with water and waste water or pollution control)
- industry standards
- evidence of legal compliance.

The assessor of these documents and systems needs to keep a close look-out for any possible linkages that will complement the proposed policy and any existing commitments, policies, systems or procedures that may already be in place that will benefit your ESP.

Following the internal audit, you will need to prepare a table that lists all environmental aspects and impacts of the organisation – these are sometimes referred to as 'Environmental aspects and impacts registers'. Remember to list the *beneficial* impacts as well as the *adverse* impacts.

Table 1.1 shows an example of an environmental aspects and impacts register.

TABLE 1.1: Environmental aspects and impacts register

Activity	Resulting environmental aspects	Potential environmental impacts
Furniture manufacture	Use of electricity	Greenhouse gas emissions Use of finite resource
	Use of water	Use of finite resource
	Use of vehicles	Greenhouse gas emissions Water pollution Land contamination Use of finite resources

Activity	Resulting environmental aspects	Potential environmental impacts
	Chemical storage and disposal	Water pollution Land contamination Landfill Leachate Air pollution
	Use of plantation pine timber (beneficial)	Reduces pressure on native forests (beneficial) Preserves habitat (beneficial)
	Garbage disposal	Landfill Land contamination Leachate Air pollution
	Recycling – timber, glass and paper (beneficial)	Reduces landfill (beneficial) Reduces use of finite resources (beneficial)

Research other systems

Further information can be gained by investigating what others are doing.

Researching other organisations' environmental sustainability policies will help you gain an understanding of what is involved and what the outcomes might be. There is plenty of information available on the internet. A search using key words such as 'environmental sustainability policies – Australia' should deliver many results.

Environmental risk assessment

You will also need to conduct research to determine your organisation's environmental risks.

Managing environmental risks is no different to other types of business risks. The risks must be identified, analysed, evaluated, managed, monitored and reviewed. If your organisation has a process in place for risk management, ensure that environmental risks are part of this process because they sometimes get overlooked when organisations assess their risks.

When you have completed an environmental risk assessment, the most significant environmental risks for your organisation will have been identified. These are the risks for which you must develop environmental objectives and targets. You can also develop objectives and targets for other areas, but it is important that you address all activities that pose significant risks to the organisation.

Sample risk assessment procedure

Your environmental aspects and impact register will form the basis for environmental risk assessment.

Environmental risks shall be reassessed following changes in activities as notified by management representatives and the annual review of the environmental management system.

Risk assessment is based on the following methodology. Frequency, severity and sensitivity of impacts are to be applied to determine the level of risk.

Frequency rating

- Will never happen
- Is unlikely to occur
- Is likely to occur
- Will happen often
- Will always happen

Severity rating

- Insignificant: Not worth worrying about
- Minor: Consequences can be absorbed readily but management effort is still required to minimise its impact
- Severe: Significant event which can be managed under normal procedures
- Major: Critical event which, with proper management, will be endured
- Catastrophic: Disaster with potential to lead to collapse

Sensitivity rating

- Extremely little public concern
- Local concern
- Immediate broad concern; media event

Significance (risk rating) is to be calculated in the following manner:

Risk exposure = Frequency x (Severity + Sensitivity).

Risk scale

The risk scale varies between 2 and 50:

- Activities with a risk assessment of 40 or above are deemed to be high risk.
- Activities with a risk assessment of between 20 and 39 are deemed to be medium risk.
- Activities with a risk assessment of 0 and 19 are deemed to be low risk.

Case study

A Victorian organisation that received numerous warnings from the Environment Protection Authority and had been fined for breaching an EPA licence and causing pollution eventually took action to address its environmental risks. The process involved the environment officer working with the risk management consultant to ensure that environmental risks were firstly identified in the risk management process. A risk assessment was then undertaken to measure each environmental risk against criteria such as likelihood, consequence, level of risk, impact in dollar terms and impact on people.

The communication of these risks to relevant staff and the development of processes to manage the risks resulted in improved management of factors that could lead to environmental incidents. Staff were encouraged to not only identify the risks, but to better manage their work-related activities to minimise the possibility of incidents occurring. Procedures were put in place and the most severe risks were controlled. The result was that the EPA was satisfied that action was being taken to ensure that no further incidents of pollution occurred.

Develop workplace sustainability policy**Introduction to sustainability champions****Mei**

Mei, here. You are now going to meet five managers; I prefer to call them sustainability champions. They work in a number of different manufacturing industries and locations. I'll let them do the introductions.

Michael

My name is Michael Gabadou, I'm the Operations Director here at InterfaceFLOR in Picton close to Sydney. We're part of a global company which is based in the US but has factories around the US and Europe, Asia and Australia as well as a presence in South America. Our product is actually manufacturing carpet tiles which is carpet with a backing cut into 50 x 50 centimetre squares which allows you to have the flexibility of design etc. That's the product that is mainly used in corporate offices, a lot in schools as well, libraries, and now more and more into healthcare and aged care, and right through the commercial market basically.

I'm in charge of Operations. So that goes from taking orders, the customer service part of the business, planning and purchasing all the materials, planning the production, making the product, all the warehousing side of the business, and delivery back to the customers as well so it's the overall loop as well as other services like quality, technical product development, etc.

Trish

Trish Keran. I'm the Sustainability Manager at Australian Vinyls Corporation. It is Australia's only PVC manufacturing facility, located in Laverton North in Victoria. As sustainability manager, I head up a department that is focused on not only the health safety and environment, but also the product quality, management systems for the entire business – so

it's taking a very broad view of sustainability for it to not just be environment, sustainability in our business is not only about environment, it's about the whole triple bottom line aspect of it, so that includes community engagement as well.

Mitchell

My name is Mitchell Grout. I work at Australian Vinyls. I'm the Training Manager here.

This plant has been here for just over 30 years and makes PVC resin, which is the base resin in PVC plastic. We are taking a raw material, vinyl chloride monomer, which is derived 50% from oil and 50% from chlorine from salt, and that vinyl chloride monomer is converted by us into this PVC resin.

Peter

My name is Peter Sylvester, I am the OHSE Risk Manager at OI Sydney.

Explanation of OH and C is Occupational Health Safety Environment and I'm also responsible for risk management, loss prevention, workers' comp and the site energy champion. We are a manufacturer of glass containers. We tend to sell to third parties not into the marketplace and our major customers are the major breweries and suppliers of glassware like Lion Nathan, South African Brewing, Heineken, Heinz and any other people who use glassware.

We are the biggest glass manufacturer in the world and responsible for 54% of the world's glass production. So have a look at the bottle, if you see OI, it's us.

I sit on the management team here, senior management team, reporting to the plant manager. I also have dotted line reports to corporate in Melbourne for safety in the environment, sustainability and accountability overseas also.

Tania

My name is Tania Bevan. I work for a company called Thales Australia.

We manufacture Australian Defence Forces small arms. Four main different types of rifles. At the moment it's mainly only through life support, which is refurbishment of all of the Australian Defence Forces rifles. We make everything that belongs on those rifles except for the plastic components.

At work I'm the Health Safety Environment Manager, so I'm responsible for all the staff health, all the safety systems, and all the environmental management systems on site.

Case study: *Develop workplace sustainability policy*

Mei

Hi again. Now we're going to hear from a diverse group of sustainability champions who are taking their factories through the sustainability process. Trish is very much on the front foot by making things happen.

Trish

One of the things we recognised a long time ago was that sustainability was an important part of our business. That was recognised at the highest leadership level of our business. We are a member of the Plastics and Chemicals Industry Association and they also recognise that sustainability was important. So they started to draw together a group of people to try and develop their sustainability framework that they wanted to roll out as an industry association.

The way that we worked on looking at the sustainability policies for the business was the General Manager of Health Safety Environment and HR and I, along with the Environment Manager, worked together, looking at that framework and seeing how we could actually embed it in our business – in particular to make sure that we didn't draft or adopt a framework that wasn't add-on, because we recognised that if we go back to the business and give them an add-on, we're not actually going to get the business to embrace it, because it's something else that they need to do.

So we looked at how we can actually embed it into a business model within the business. So the business has a business model that we work to, and we've looked at all the aspects of that business model, and then mapped them across to the sustainability aspect, so that we can just pick up the little things that we need to do, here or there, to really fully embed, what would be a truly sustainable model into the business.

Carlo

Michael, at InterfaceFLOR works for one of the most progressive businesses in the world.

Michael

The sustainability policy, as I mentioned, came very much from the top – that 'spear in the chest' from our founder and that's what basically since 1995 has been driving our policy right through the group. So we all live by the same policy. It has been turned into what we call Mission Zero which is basically having an objective that by 2020 we'll have no impact on the environment.

I remind you that when we started in 1995 we were a company that was basically taking 100% of its material out of the oilwell and basically the objective was that within 25 years to turn into an organisation that has no impact on the environment. So we're well underway on that journey.

The principles that we use basically are articulated around what we call The Seven Fronts – so seven approaches that we need to take to make sure that we achieve our objective. So it's not just about how greenhouse gas affects the environment, it's about looking at our materials, our emissions, renewable energy, closing the loop, which means what do we do with waste after we've used it, transportation – how do we optimise our transportation. Also

other issues like dealing with all the stakeholders – internals like shareholders, employees, etc – and externals like our suppliers, our customers as well as other companies in the market. The last front, which for us is a very important one as well, is called Redesign Commerce, which is about spreading the word about what we do and trying to influence other companies, either in our industry or in other industries, to go on that journey of sustainability as well.

Tania

The scope of the policy is Australia-wide for all of Thales. The way that we work is that I report to a National Health Environment Safety officer – they developed and drafted up a policy that then is distributed down to all of the sites, and my responsibility then to make sure that it covers all of our site, and that it's applicable and relevant to what we do on our site as well.

Mei

Peter's glass manufacturing plant in Penrith, NSW, is also a multi-national business trying to do the right thing environmentally. Peter has been involved with this process in a very hands-on way.

Peter

Traditionally we used to talk about safety, environment and loss prevention, separately, and sustainability was something else. A number of years ago I was able to convince the business that we needed to develop a risk department and embrace sustainability. What we basically did then was my equivalents and senior people in Melbourne sat down and wrote a sustainability policy that covered from lifecycle assessments of glass, through to energy, through to emissions, through to lean manufacturing – all the basic tenets that go to running a sustainable enterprise. Additionally we also identified the need for us to be best in class and to be world leaders in this area. It is a very competitive market, but more importantly there is an expectation within the marketplace that we will achieve this.

It also takes into account ISO 14001 and AS 4801, IS 9001 all those tenets. IS 14001 is environmental management systems, AS 4801 is safety management systems, IS 9001 is quality management systems.

Mei

So, you've decided you want a business to be greener – how do these environmental policies get formulated? As a manager – who do you consult? Michael, like Trish, works in management at Australian Vinyls – the PVC plant.

Mitchell

For some years now at Australian Vinyls, we have been conscientiously working towards more sustainable manufacture, and certainly over the last ten years, we've involved all the people in our business at different times, in generating ideas for how we can do better in terms of our energy use, gas use, our water use, and also any waste that we have in our processes. So in that time, we have probably every three years used a process to bring people together from across the operation to have a look at what our current usage is of

electricity, gas, water and materials, and to come up with some ideas for how we can do better in each of those areas. So we use a process of brainstorming, where we ask people just to come up with suggestions for how we might improve, for example, our water use. We would list up on a whiteboard all the ideas that the group has, and then as a group we look at each of the ideas and weigh up whether we think any of them are viable propositions to put forward to the business as a potential project for improvement. Over the years, some of these ideas have got up and some of them it's been decided are not cost justified, or aren't going to be workable solutions.

Mei

At Thales – a small arms manufacturer in Lithgow – Tania uses the Health Safety and Environment committee to consult people. I'll give her permission to call them stakeholders.

Tania

We consulted both internal and external stakeholders – all employees on site were consulted, we have an HSE committee which meets once a month on the site and that has a representative from each of our designated work areas. Those people took the policy and then took it to the people in their work areas, for comment, which was then fed back to me for me to then feed that to our national HSE group.

HSE stands for Health Safety and Environment.

The external stakeholders we consulted were local government, our local council, because we have quite a lot to do with them from trade waste and development processes.

We also consulted National Parks as well, because we've got an endangered species, the Bathurst Copperwing Butterfly on our site. So as part of our environmental management system and our sustainability policy, we need to consider that we have got to look after that species as well.

Mei

Peter at OI Glass, knows that consultation is key to the whole sustainability thing working.

Peter

The process initially was my equivalent and corporate, but then the policies were brought back to each plant, reviewed by management to the shop floor, through the environment committees, through the various committees that operate within the site, seeking feedback. Getting the words right, so that the words are understood and clear, that was then submitted to the president and then signed off on, buy in at all levels, and at the same time we introduced an environmental awareness program on the site which introduced everybody on this site to the term 'sustainability', a handbook was issued to everybody, and attendance by all staff and shop floor. Very well received, very positive feedback and some very good recommendations from the shop floor for projects moving forward.

Mei

And after consultation – how do you go about choosing between the various options for improving sustainability?

Mitchell

We have a process at Australian Vinyls for weighing up the ideas for improving our business. We do factor in and put a value on safety, health and environment returns. In the end you're making financial decisions on a lot of these ideas. There's a cost in making the change, and so you need to look at the payback. Generally if you're not getting payback within two or three years, that idea has to be shelved for the time being. Sometimes you find that as technology improves, that idea if it comes back again, may well have a different payback assessment, but even with something like the water recycling plant, the payback there was not very good just from a business perspective, and that project would only get up, because there was government grant money helping the business make that decision to go ahead with the recycling plant. In the end the business will only be here tomorrow and next year, if we're making the decisions based on some fairly hard realities. If you don't make more money than it costs to run your business, you're not going to stay in business very long.

Tania

Thales Australia is guided by our overall French company – we are owned by a French company – so coming down from France, we've got several different strategies that we absolutely have to deliver on site – so taking those strategies, we then put minor project plans into place to support those strategies, so Thales France expects us to have a 10% reduction in waste, water and energy use over three years – so our strategies have to support these international goals.

Then strategies and ideas are shared across the HSE network across Australia, we get together once a month and have a chat about what everyone is doing on each site, and then discuss those ideas and then put together whatever is relevant for our site as well. Our 14001 environmental management system also guides what strategies are considered.

Mei

All these very different businesses have to look at how much their sustainability policies are going to cost and how long they are going to take.

Trish

What we tried to look at with the water recycling plant, was one of the things that was very important to us, is we didn't want to create, build a water recycling plant, that was actually going to emit an enormous amount more carbon, which was actually going to use an enormous amount more water, at the power station to generate the power – so we spent a lot of time looking at what sort of energy use we would need for the particular plant that we were building, and some of our material selections and equipment selections were also made based on exactly what the energy efficiency was of certain items. So that process took a lot of years to actually get up as a project, because it was a very expensive project to do – it didn't have the financial payback associated with it that would have been

acceptable to a business – but working through that process, we were actually able to secure some funding from the state government of Victoria, and they contributed \$1.8 million to the project. The project cost in the end \$5.5 million – so our overall cost to that project, put its payback at somewhere around the five years.

Mitchell

It started in 1995, basically has a target goal of 2020 to achieve its Mission Zero level. I'm not sure we can talk about costs – it's not something we said to implement this policy we need to put a certain amount aside. The contrary actually was found, as we looked more and more into sustainability we found that we could remove a lot of waste out of the business, improve substantially the energy use, the material used, etc, and actually going onto the sustainability path gave us a lot of cost benefits, cost reduction. You hear a lot about going to sustainability is going to cost but actually so often we've found that going through and changing from one material to another material which was better in regards to its impact on the environment actually brought us cost benefit, or looking at how we use a material and the amount of material we use has given us a potential benefit.

Mei

To offset any perceived negatives to do with cost – you have to prove that your policy is good for business. Trish calls it 'triple bottom line'. Sounds good to me.

Trish

Triple bottom line is basically looking at a project or an activity within a business and taking into account not only its environmental impact, but also its economic impact and any societal benefits that we can actually get out of it as well. So in terms of looking at triple bottom line for what we do, some of our societal benefits we see – for example are looking at working with programs within the local high school offering work experience to students from the local high school, and recently we had the students come in to actually do a rainwater study on our site, to look at rainwater tanks, how much water we would capture, those sorts of things – so they learned about doing those sorts of calculations in the real world, and we also got some benefit of seeing the plan that they were able to develop for us.

Mei

All manufacturers have to be profitable, otherwise they just won't function. So environmental policies have to be sustainable – financially. InterfaceFLOR goes to great lengths to make monetary and environmental elements co-exist within their business.

Michael

It gave us a lot of cost benefit, as mentioned, in regards to energy and material reduction and efficiencies etc. At the same time we went on to lean. So the two are very much in parallel. We even developed the concept we call SMILE – Sustainability Mission in a Lean Environment – where basically the two concepts of lean and sustainability work together because they look at the same process, the same methodology for the same objective – doing things better with continuous improvement.

At the other end where we also got benefits was that we were able to get better engagement from our employees. It's always very hard to convince employees to go down the road of efficiency improvement and labour productivity etc when potentially there could be redundancies etc – when you talk to them about reducing waste and doing things better for the environment, that rings a bell in their mind, they know that this is the right thing as well, so you get much better engagement on those projects as well.

Mei

At Thales, Tania also talked the whole thing through with staff.

Tania

By pointing out to employees that it had a positive benefit, both to them and to the organisation and on the environment and also on the community that surrounds us, because our factory is set within a residential area, we've got schools nearby, got community nearby and a lot of people who live nearby work at the factory and don't want environmental pollution in their backyard kind of thing – so we gave it a positive spin and tried to talk to employees about what the benefits were of this policy going into place.

Mei

Peter at OI Glass, used a variety of methods to get the message to staff – but he wanted this message to be clear.

Peter

Selling it internally, the challenge was to get credibility with it. It just wasn't going to be a bunch of words. To do that we had to have the targets in place, but we needed to show our people that it was working, and what we were achieving out of it. Our noticeboards, our intranet and internet site have the data posted there in terms of our performance.

With OI, any time you go to inflict anything on the business you will fail. The aim by engaging stakeholders at all levels was that there was an expectation at the end of the day that there would be a program in place that everybody could be involved in. Then opening the committees up at all levels for shop floor participation, no hidden agendas; both positive and negative feedback; implementing simple things, as environmental employee of the month – recognising our performance.

Mei

So there you go peoples – you have to let your staff know about these policies and understand them. You want them to be on side when you implement them. It's common sense really.

Identify and consult stakeholders as a key component of the policy development process

Stakeholder engagement and/or participatory practice is increasingly becoming a part of mainstream business practice and central to public policy decision-making and delivery.

It is being used as a means to improve communications, obtain wider community support or buy-in for projects, gather useful data and ideas, enhance public sector or corporate reputation, and provide for more sustainable decision-making.

Stakeholder engagement should be central to any “sustainable development” agenda. Without consultation with stakeholders, there can be no ownership or support for a particular project. A project is more likely to succeed, if it takes into consideration the environment in which it operates and attempts to meet the needs of the stakeholders or groups affected by it.

“Stakeholder engagement could be viewed as a form of risk management. Many projects, but not necessarily all, will need to engage with a wide range of stakeholder groups, each with their own concerns, needs, conflicts of interest and levels of influence. In order for the pieces of the project plan to be effective, planners and project managers need to understand who the stakeholder groups are, what their issues are, and what motivates them”.

“Stakeholders may be existing or potential customers or end-users of the product, employees, suppliers, shareholders, or those that define policies or have financial leverage. Those responsible for undertaking public participation often categorise stakeholders into ‘groups’ based on a number of factors including geographic boundaries or location, recognised bodies or institutions, income groups, land ownership or occupation, legal requirements, and real or perceived views of the issue under dispute. The nature of this classification means that these stakeholder groups are usually not homogenous entities. It is more likely in fact, that an identified “stakeholder group” will comprise a diverse mix of individuals, who may – or may not – identify themselves with the particular “stakeholder group” into which they have been categorised. This is an important issue to take into consideration when identifying who your stakeholders are. Stakeholder identification is a critical component of the initial scoping phase and should occur before the engagement plan is formulated and consultations begin”.

Levels of Participation

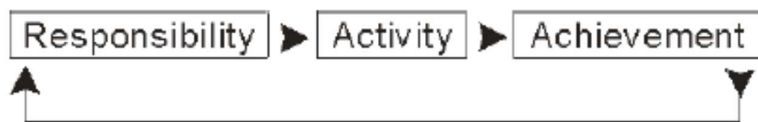
Before any expensive and lengthy engagement process is begun, it is important to have a good understanding, and indeed consider what level of participation is actually being sought. Public participation can be broadly categorised into the following:

LEVELS OF PUBLIC PARTICIPATION GOALS	
Inform	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions.
Consult	To obtain public feedback for decision-makers on analysis, alternatives and/or decisions.
Involve	To work directly with the public throughout the process to ensure that public concerns and aspirations are consistently understood and considered in decision making processes.
Collaborate	To partner with the public in each aspect of the decision including the development of

	alternatives and the identification of the preferred solution.
Empower	To place final decision-making in the hands of the public.

A full stakeholder engagement process, would at a minimum, seek "involvement" from the public/stakeholder groups in which it operates, and depending on the agreed purpose of the project, may seek to transfer full 'empowerment' to the public in terms of final decision-making responsibilities. ⁶

Many barriers to change are people issues rather than technical ones. Good, workable ESPs are achieved through consultation with the people who will be responsible for delivering them. Not only will these people have ownership of the ESP if they have been actively involved in its development, they are more likely to try to achieve the ESP objectives because they set them in the first place.



A system imposed from the top is likely to encounter resistance from all areas of the organisation, whereas a system encouraged and supported from the top, but which actively seeks participation, will have a much greater chance of succeeding.

During the early stage of the development of an environmental sustainability policy all stakeholders should be identified. Stakeholders may include:

- customers
- employees at all levels of the organisation
- government and semi-government agencies
- investors
- local community
- regulators
- supplier's.

Gaining senior management support is particularly important, as this can ensure the appropriate time and resources are allocated to the ESP.

Including appropriate strategies in policy at all stages of work for minimising resource use, reducing toxic material and hazardous chemical use, and employing life cycle management approaches

WASTE ASSESSMENT

If it's your business, it's your waste and it's your money!

One way of assessing your current environmental performance is to conduct a waste assessment. A waste assessment will help you to better understand where your efforts will gain most value.

⁶ Source: http://www.revit-nweurope.org/selfguidingtrail/27_Stakeholder_engagement_a_toolkit-2.pdf

What is the purpose of a waste assessment?

The main aims of a waste assessment are to:

- Identify each waste stream on or leaving the site
- Quantify and characterise each waste stream to establish benchmark data
- Establish how and why each waste stream is generated
- Calculate costs incurred with treatment, storage, handling and disposal of wastes, including quantifying associated labour, energy, water and lost raw material costs where possible
- Determine liabilities associated with waste generation
- Identify options for more efficient and effective waste management (for example identify reduction/diversion opportunities)

What's involved?

The following are the key tasks involved in a waste assessment:

- Select waste assessment team — this should include at least one company employee
- Determine audit scope — this depends on size of assessment required and parameters set
- Collect available data
- Identify and characterise waste streams
- Evaluate data
- Identify and prioritise options
- Prepare a report and plan of action

What happens?

There are three main stages involved in a waste assessment. These are:

1. Preliminary assessment – aims to identify major environmental issues, major opportunities for improvement and major economic issues
2. Detailed study and improvement plan – aims to find the best options for minimisation in the site
3. Monitoring and review – aims to monitor and confirm the indicators and targets previously established

Waste involves the manufacture and discharge or disposal of things that cannot be sold at a profit. The cost of waste management and disposal is almost always much less than the value entrained in the waste. By finding the lost dollars, you will identify the waste reduction and profit increasing opportunities.

IMPROVE PURCHASING

By improving your purchasing, your resource use and waste output will be reduced. Buying recycled materials can reduce the amount of waste sent to landfill. Improve purchasing to...

- Reduce waste production:
 - Do not over order raw materials. This can be avoided by matching package sizes to batch quantities
 - Explore the amount of waste generated by alternative raw materials

- Set environmental standards for your suppliers, their products and services, and request substantiation of their claims - There should be no premium for this
 - Check for damaged or tainted goods upon receiving
 - Implement exchange programs with suppliers e.g. Empty drums for full ones
- Reward waste minimisation:
 - Purchase recycled materials where viable
 - Choose “long life” products where possible. Reusable or recyclable goods or those with minimal packaging may be a preferable option
 - Consider service contracts. Which are the most “environmentally friendly?”
 - Ask your supplier to help you reduce chemical usage, and share the savings
 - Produce efficiency benchmarks for the use of raw materials with the help of your suppliers
 - Avoid buying new products or services, which will increase the risk to your business
 - Make recommendations for policy options based on likely effectiveness, timeframes and cost

IMPROVING STORAGE

Improvements can be made to:

- Storage
 - Minimise storage where possible. Reduced stockholdings save money
 - Keep all storage clean, well labelled and uncluttered
 - Ensure stored materials are kept away from contamination and water damage
 - Ensure storage tanks do not leak
 - Store all materials and wastes in separate clearly designated areas
 - Store hazardous materials undercover and on a sealed surface
 - Keep storage areas well ventilated
 - Ensure chemicals are kept separately so they cannot react with one another
 - Ensure that your store always operates on a 'first in, first out' basis, so that old materials and packages do not accumulate in your store
 - Check expiry dates for materials
 - Use drum pumps and/or filters to completely drain drums, and thoroughly rinse them before their return to the supplier
 - Avoid keeping unnecessary empty containers
- Housekeeping
 - Establish housekeeping procedures and make sure they are maintained
 - Promote activities that improve time efficiency
- Minimise waste
 - Only stockpile wastes if this enables more cost effective recycling
 - Avoid accumulation of unnecessary items
 - Monitor waste production of all employees, so they are accountable for their own area
 - Make sure your staff are aware of how to dispose of waste appropriately
 - Compare your procedures with other organisations in the same industry
- Spill response
 - Keep spill kits readily accessible in your chemicals storage area
 - Ensure spills are cleaned immediately with a spill kit, and recycled or disposed of correctly

- Workplace safety and efficiency can be improved through proper store management

CONSERVING ENERGY

Reducing energy consumption can save money and reduce greenhouse gases caused by burning fossil fuels. Improvements can be made in the workplace by:

- Turning off lights and equipment not being used
 - Using energy efficient office equipment and power saving functions
 - Use energy saving lighting products where possible e.g. fluorescent tubes, (this will in turn reduce air conditioning loads)
 - Skylights will reduce the need for artificial lighting during daylight hours
 - Minimise expenditure on space heating. A 1 °C increase above 20 °C, can increase cost by as much as 20%
 - Minimise energy waste by using insulation
 - Use self-closing doors where possible to limit internal temperature changes
 - Use hot water only when necessary
- In the process
 - Improve insulation of all hot process items and steam lines to minimise simple heat loss
 - Improve insulation on refrigerant cooling lines
 - Avoid steam leaks. A 1 kg/min steam leak costs about \$1/hour and \$2/hour in an air-conditioned space
 - Require suppliers to quote the energy consumption and costs of a new piece of equipment
 - When choosing energy sources
 - Investigate alternative energy sources such as solar hot water, waste, bio-ethanol and wind energy
 - Use a clean fuel such as LPG or methanol
 - Use fuels with the least greenhouse impact

CONSERVING WATER

"Don't spend money like water, spend water like money. The way you use it or waste it, water is in your hands. To save water you need to:

- Reduce
 - Determine the minimum volume of water you need - Compare your performance to others and make improvements where possible
 - Ensure taps and pipes are not dripping or leaking
 - Install water saving accessories around your business, contact your local water authority for ideas
 - Compare water usage on volume per unit production, not per unit time (for example, use litres/bottle of soda, not litres/minute)
 - Avoid using water wherever possible — use a dry technique such as a broom, vacuum cleaner or compressed air jet
 - Use a dry method as a materials conveyor instead of water
 - Use counter flow rinsing with as many rinse stages as possible, as most contaminants are removed in the first rinse
 - Minimise contaminant 'drag out' to additional rinse stages by optimising your counter flow rinse system

- Reuse
 - Determine the cheapest way to treat wastewater - It may be more profitable to treat the water for reuse rather than disposal
 - Investigate the possibility of rainwater harvesting for use as boiler feed or cooling tower makeup. This can be a cost effective way of reducing water related costs such as reducing the size of drainage systems in new structures
 - Account for all losses involved in the disposal of water. Heat, chemicals, labour and plant capacity may also be thrown away
 - Consider using wastewater for lower grade uses where water quality does not have to be so high (check, however, that it does not compromise product quality)"

REDUCING WASTE

Segregated waste can often be recycled and may be a valuable product for another business remember the 3 R's:

- Reduce
 - Measure the amount of waste you produce - Waste is the difference between the materials you pay for and the materials your customer pays for
 - Account for the difference between the tonnage of raw materials and the tonnage of products you produce
 - This will allow you to identify reduction opportunities
 - Determine which processing steps produce the most wastes and devise measures for waste prevention or reduction
 - Calculate the theoretical minimum waste production from your processes. You should aim to keep within 10 per cent of this figure
 - Devise ways of reducing your waste with your employees and suppliers, and possibly provide incentives for waste reduction
 - Remember, your waste management contractor is a key supplier for assisting with waste minimisation. Ask contractors how they may assist in streamlining your waste management process
 - Quantify changes in waste production so improvements are measurable - Make sure you include internal wastes such as rework and recycle streams
- Reuse
 - Reuse drums and containers and other recyclable items where possible – employ exchange systems where possible
 - Identify ways of reusing materials in the process at different stages, for example recirculating cooling water
 - Identify possible ways of selling your waste to other organisations for their production processes - This information can be found through the sustainability organisation relevant to your state (e.g. Sustainability Victoria)
- Recycle
 - Separate waste products where possible — this assists the recycling process and provides an indication of why waste is forming
 - Investigate alternative uses for organic waste that cannot be reduced or reused, for example compost or convert the waste to energy
 - Identify recyclers or waste disposal contractors and organise regular collections
 - Join with neighbouring businesses to get common wastes recycled cost effectively and talk to your waste contractor about cost off-sets by efficient serving of the area

Less waste = less pollution = less effort = less cost

The principle objectives of your ESP may be to minimise environmental impacts, reduce toxic material and hazardous chemical use and employ life cycle management approaches.

When developing strategies to achieve these objectives, there are several approaches an organisation can take. Two of these are:

- **Negative screening.** Negative screening refers to an approach that avoids the use of certain products and services, which are known to be harmful to the environment. Negative screening may also include adjusting existing processes and/or procedures in an attempt to reduce natural resource consumption.

Negative screening is a passive approach to sustainability, which can be relatively cost effective to implement because there are no significant outlays required.

- **Positive screening.** Positive screening represents an active approach to sustainability, where organisations seek out suppliers, partners, products and services that demonstrate best practice in environmental performance. Positive screening may also include the purchase of new equipment to reduce an organisation's environmental impacts e.g. installing grey water treatment systems, rainwater tanks, energy efficient light bulbs, and solar panels. Positive screening approaches are generally more visible, but may involve significant outlays.

Case study

Positive and negative screening Hidden Valley Cabins - Queensland

When diesel prices began to escalate and the business owners became aware of the impact of carbon emissions on climate change, they asked themselves two questions: Can we afford to use diesel, and what effect are we having on our environment?

Both answers were very negative, so they decided that it was best for the business and the environment to look at other alternatives to diesel and the use of generators throughout the property.

They started by investigating where they were using energy including lighting, refrigeration and made small changes like switching off appliances and lights overnight around the property, changing light bulbs and changing their food menus.

They then followed this up with an in-depth look at how much energy they were using in the resort and what emissions they were contributing into the environment. The first step was to record their energy use. This was undertaken for four months to ensure there was good base information to cover all the different scenarios of the business.

Choosing the right solar power system was also important, so time was spent researching the options and assessing available government rebates. After 18 months of researching and decision making as to which solar power system to purchase, construction was completed in just 10 days.

Other activities considered to support the environment were:

- vegetation and plants lost due to construction have been replaced and areas re-vegetated
- minimising waste by composting food and paper products for use in the garden
- educating guests and the public on the importance of protecting wildlife
- building low impact walking tracks
- recycling all aluminum cans

- continuing to plant native trees and vegetation
- building with local timber.

Outcomes

Hidden Valley Cabins is now saving 78 tonnes of CO₂ emissions per year along with an estimated \$45,000 per year in diesel fuel. Calculating this over a 20 year period and a minimum 5% increase per year in the price of diesel, this equates to \$1.2 million in savings. The choice to go 'green' has also helped to offset a lot of their other business expenses.

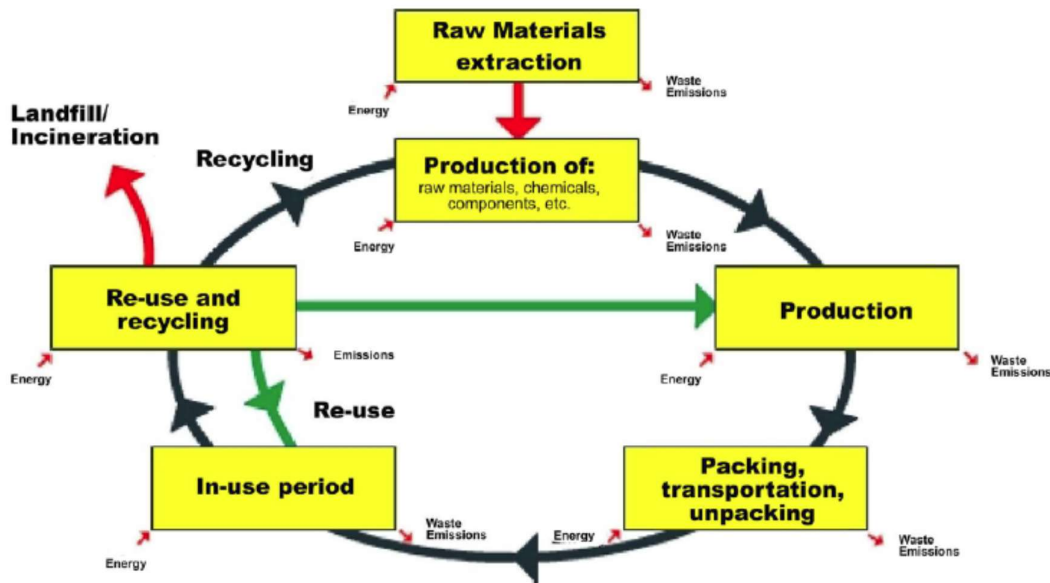
The success with the implementation of solar power has encouraged them to continue making improvements. After commissioning a formal audit they identified and purchased enough carbon credits for the property to be recognised as carbon neutral.

They followed this with a comprehensive review by Ecotourism Australia. Hidden Valley Cabins were awarded Advanced Ecotourism certification.

(Source: Tourism Queensland, September 2009)

Life cycle management

Life cycle management uses a process called life cycle assessment (LCA) to assess the environmental impacts associated with a product, process or service throughout its life cycle, from the extraction of raw materials through to processing, transport, use, reuse, recycling or disposal. For each of these stages, the impact is measured in terms of resources used and environmental impacts caused. Life cycle assessment is a cradle-to-grave analysis of a product or service. LCA can help a business identify the most effective improvement that can be made in terms of environmental impacts and use of resources.



Life cycle assessment is one of five emerging international standards within the ISO 14000 series. LCA is used by government and industry decision-makers for benchmarking the environmental performance of products and processes.

The benefits of life cycle assessment include:

- identification of the most efficient and cost-effective options
- improvement to overall environmental performance
- elimination of wasted resources and pollution
- creation of environmentally sound products
- assessment of an organisation's operations and production processes to identify opportunities for improvement

- assessment of economic costs of production of products and services.

A comprehensive LCA is unlikely to be relevant or indeed possible for smaller organisations. However, it is still possible to reap the benefits by adopting a 'life cycle' approach. The LCA process can be streamlined, with a company examining only those parts or operations that have the most impact or potential for improvement. This can maximise the benefits and minimise the cost of LCA.

Make recommendations for policy options based on likely effectiveness, timeframes and cost **Likely effectiveness**

The success of an ESP largely depends on the people and resources available, so identifying resources is a critical step in making policy recommendations. Therefore, you will need to consider:

- who and what is already available
- the people, materials, equipment and resources needed to implement policies
- any materials and skills that are missing from the resources available.

If there are any resource gaps, you will need to decide if external expertise needs to be brought in or train existing staff (there are many courses available to assist in providing staff with the required skills; the organisation may also have people who can provide in-house training).

Timeframes

The success of your ESP will be fundamentally affected by the time needed versus the time available. Two useful project management tools are the Gantt chart and the PERT diagram. Free templates are available from Microsoft Office online, which may be adapted to suit your purposes:

<http://office.microsoft.com>

Costs

When developing policy options, you will also need to have a thorough understanding of how much any actions you are proposing will cost. Some environmental initiatives will require financing, therefore, a budget will need to be associated with the ESP. Budget items to consider will include staff, joining fees, meters (such as electricity or water meters) for data collection, laboratory analysis or tests, audit fees, training fees, marketing and promoting, and perhaps computer software to manage information.

Calculating the 'payback' of the initial investment is another way to investigate costs. Many organisations only budget for a 12-month period and you should demonstrate that spending money will achieve worthwhile results and potentially result in long-term savings.

Baseline budgets should be established early in the process to ensure accurate figures for future savings. This provides for a baseline to determine the difference between actual costs and the budget. It is important to first identify savings and payback periods then prioritise potential projects. The environmental savings should be translated into monetary savings.

How to calculate payback

If recommending that an organisation replaces incandescent light globes with energy efficient globes, you need to calculate the savings in all areas.

The following examples show basic calculations that haven't taken into account all savings.

Cost

Purchase and installation of two skylights \$1200

Annual savings

Electricity saved per annum \$200

Payback period = 6 years

All costs ÷ annual savings = payback period

Cost

Purchase and installation of water saving devices \$250

Annual savings

Less water and electricity to heat water 70

Payback period 3.57 years

Information you need to perform an accurate payback calculation:

- Purchase price
- Installation costs
- Maintenance costs – difference between old and new option
- Training costs
- Current cost of energy/fuel/water/paper/disposal
- Savings anticipated by the new equipment or work procedure, that is, reduced landfill charges, reduced costs for chemicals and reduced staff time
- Costs incurred – increased staff time, increased maintenance, training and increased operating costs

Developing policy that reflects the organisation's commitment to sustainability as an integral part of business planning and as a business opportunity

Once you have consulted stakeholders, developed a plan, and gained acceptance you can begin to develop the policy that will guide any further actions in the business. If recycling is your main focus you can write up the policy and procedures for your team. The steps below may help you:

Step 1: Identify Target Materials

Spend some time to look around your facility to evaluate what thrown away and unused materials are being generated, and in what quantities. Materials generated in the highest volumes are your target materials. Your waste reduction and recycling program should be built around these materials.

Not only is it important to determine where waste materials are generated in a business, but also how they are generated (this helps to create waste reduction activities). Having a copy of the floor plan may be helpful to note your discoveries. This information will be used for Step 2: Designing the Program.

This activity need not be a technical or complex task. Listed below are commonly found target materials for different categories of organisations such as:

Business Office:

- Paper
- Cardboard
- Drink containers
- Food waste
- Coffee grounds
- Food wrappings

Kitchen area:

- Food scraps
- Food wrap
- Chemicals
- Gloves
- Linen

Step 2: Designing the Program

Effective recycling and waste reduction may include; collection, storage, service, education, company policies, purchasing and reduction.

Once the target materials have been identified, it's then possible to locate the proper type of recycling collection bins and where collected materials should be stored. This information will also assist with the selection of an appropriate selection of provider or service method.

Depending upon the size of the operation or business and the relative quantity of waste generated the method of waste disposal, and the frequency with which it is performed may vary. Larger organisations may opt to employ a recycling process working in conjunction with their contractor, whilst smaller companies might organise to dispose of their recyclable goods by carting them directly to a drop-off station. The frequency of collection or drop-off will be determined by the quantity of waste generated.

Education:

The success of any waste reduction and recycling program, will be largely affected by communicating with your employees. Some ways to educate employees include:

- A recycling bulletin board
- New employee orientation
- Monthly e-mail updates

Company Policy:

Establish a policy regarding the organisations commitment to waste reduction and recycling. Doing so will set waste reduction and recycling goals and help to obtain top management support.

Purchasing:

Make a practice of purchasing recycled content products where possible.

Reduction:

Reducing the overall quantity of generated waste is the best way to decrease your

contribution to landfill. Double-sided printing, printing draft documents on used one-sided paper, reusable cups for meeting, using electronic communication tools instead of print materials and redesigning business and production processes to eliminate the volume of waste, are methods which can be employed to minimise landfill.

An organisation may have a range of complementary management tools to integrate with its ESP, such as:

- risk management programs
- asset management programs
- occupational health and safety
- process mapping
- service charters
- human resource systems and processes
- performance indicators
- business plans
- strategic plans
- contract management
- quality assurance.

An ESP can, and should be, incorporated into existing management tools to ensure a holistic approach is developed and delivered. Integration also reduces:

- the time required for staff to complete documentation
- the time required for internal and external auditing
- frustration and wasted time during the development, delivery and review of processes and systems
- duplication
- the likelihood of important aspects being overlooked
- the cost of developing and delivering the systems.

Many existing systems will incorporate components relating to environmental impact. Take, for instance, the area of human resources. When position descriptions and induction programs are prepared, it is important to ensure they take account of environmental responsibilities associated with the tasks the person is required to deliver. During induction programs, new staff should be introduced to the corporate philosophy of environmental care and responsibility and the ESP should be explained. Occupational health and safety must be directly linked with the ESP because many OHS issues can have environmental impacts. One of the most obvious is the handling, storage and disposal of chemicals. Incorrect handling of chemicals is likely to cause potential impacts on humans and the environment and breach both OHS legislation and environmental legislation.

If the environmental sustainability system is not integrated throughout the organisation, it will not be effective.

Agree to appropriate methods of implementation

The development of an ESP needs to be followed by consideration of the most appropriate methods of implementation, to ensure that the strategies are delivered.

These methods are sometimes referred to as action plans. A template for developing an action plan is available on the Management Resource Centre CD-ROM. You may also download this template from the following location:
<http://tool.ncsustainability.com.au>

An 'Environmental action plan' sets out how the strategies are going to be delivered.

The programs must set down the personnel responsible for delivering the targets, timeframes and any resources required to deliver the objectives.

Other issues that should be covered include design, planning, construction, purchasing, decommissioning and disposal options.

The plan should include:

- proposed actions
- cost/benefit and budget calculations
- objectives, milestones and dates
- individual responsibilities - do not name the person, but the position, because individuals may leave the organisation or move to other positions within the organisation
- any additional resources required
- communication / training requirements for clients and/or staff
- the evaluation process.

Delegating responsibilities

An important point to keep in mind is that it is essential that all the responsibility for implementation does not sit with one person or senior management. The person responsible for overseeing the ESP has a management role, but should not be responsible for all the actions necessary to develop and implement the system. For example, it is everyone's responsibility to cut down on paper use, energy use and water use; the ESP manager cannot be everywhere to monitor the behaviour of individuals throughout the organisation. Executive management has responsibility for ensuring that the system is developed appropriately and implemented efficiently, however, the staff who report to them should be delegated specific responsibilities.

The 'Environmental action plan' should be integrated into other management tools, such as business plans and work programs.

Action plans must be reviewed regularly, normally when objectives and targets are being reviewed, to ensure a consistent and holistic approach.

Ensure teams are resourced to allow them to achieve their objectives

Resource allocation is a key component of the ESP. If teams are part of the process they must be given sufficient resources to allow them to achieve their objectives.

Resources requirements will depend on the tasks involved. Some tasks may require significant additional physical and/or human capital to be achieved, and others may require existing resources to be restructured or reallocated.

Representatives from teams should be part of any decisions about resource allocation, because they can provide a valuable perspective on the exact requirements of carrying out a particular task.

Agreeing to appropriate methods of implementation

In managing for sustainability, many businesses begin the journey in earnest when sustainability is documented in policy. Next a sustainability matrix is a requirement of all capital works programs. A sustainability coordinator is appointed to work within the company to coordinate sustainability initiatives and report to senior management.

The sustainability coordinator may hold other responsibilities. It makes sense to appoint the person/s responsible for safety and/or quality to also have responsibility for sustainability.

Standard phases and milestones

Phase 2 is a desktop review and a site inspection to ensure what is documented is being conducted on site. By phase 2 a business is expected to have a higher level of documentation and undertake the KPIs to a higher level than for phase 1. The site inspection limited to the major control measures.

Phase 1 is a desktop review. An auditor (usually the sustainability coordinator or a third party consultant) might go to the site and go through the sites' documentation and undertake a quick evaluation (no more than 20 mins) to see if there are major non-conformances. A brief report will be prepared and submitted to management of the business. A successful phase 1 audit is marked as having:

- No major non-conformances are identified
- Only a few minor non-conformances are identified, subject to the auditor's assessment

An auditor will go to the site and go through the sites' documentation and undertake a quick review (approximately 1 hour) to see if there are major and minor non-conformances. A brief report will be prepared and submitted to management. A successful phase 2 audit is marked as having:

- No major non-conformances are identified
- Only a few minor non-conformances are identified, subject to the auditor's assessment

Phase 3 auditing is similar in scope to a partial ISO 14001 audit and initially comprises of:

- An overview of the documentation to ensure all KPIs are addressed
- A detailed assessment of a random 25% of the KPIs with a focus initially on control measures, their implementation, training and documentation

The site inspection will focus on:

- Control measures and the implementation of procedures for the 25% of randomly selected control measures
- Non-conformances associated with the other 75% of KPI not subject to detailed assessment

The following year's audits will comprise of another 25% of the KPIs also including the documentation KPIs.

Barriers to changing policy

The main barriers of the introduction of changes to policy are the implications on capital expenditure. Many of the changes required have cost implications including, but not limited to:

- Changes to electronic and/or hard copy documentation
- Additional document control procedures to ensure compliance
- Additional staff or reallocation of existing staff to new duties
- Training staff on the new policies
- Purchasing policies calling for different raw materials
- Implications on replacement or upgrades to plant and equipment
- Third party auditors and/or consultant's fees

Costs for changes

While many sustainability policy changes have a return on investment, ordinarily, there are upfront costs to a business, as mentioned above. Costs can be a range of things, depending heavily on your industry and the changes that have had to be made to the organisational policy documents. Some of these may include:

- Printing and marketing costs to notify staff and clients of the change
- Costs for new equipment
- Cost for new or transferred staff
- Professional development for staff

Apportioning the implementation of responsibilities

Typically, a business will appoint a sustainability coordinator responsible for writing and administering sustainability policy. The sustainability coordinator will report directly to senior management and generally works with (or as) the quality and/or Occupational Health and Safety personnel.

An overarching company policy should be signed by the Managing director or the Chief Executive Officer. This document should be displayed in the foyer of the company office, on the company website and in staff rooms as applicable.

Employees that are affected by the policy are informed by management of the impact and who they answer to through programs such as staff inductions, ongoing professional development and staff training days.

Communicating workplace sustainability policy

Promoting workplace sustainability policy, including its expected outcome to key stakeholders

How are policies communicated within the organisation? In order for plans to become effective, information must be properly communicated to employees and clear in their explanation. Successful implementation of your sustainability policy is possible if it's well communicated. Notice boards, flyers, emails and meetings are ways of promoting your sustainability policies.

It is beneficial to bring stakeholders on board and genuinely listen to their ideas. Their feedback can provide valuable information in formulating a successful sustainability policy. Take into consideration that they will be implementing your strategies and also be directly affected by them. If they feel you haven't consulted them, then your policy has no chance of reaching its full potential. Now that you have developed workplace sustainability policy it is time to consider:

- How are policies to be communicated and promoted to key stakeholders including expected outcomes?
- What are the most appropriate methods of implementation?
- What are the activities that will be implemented?
- What are the expected outcomes of the policy?

In order for a policy to work, you need to create a widespread awareness within the organisation, including employees, customers and other key stakeholders. Some ways of communicating your policy might include:

- Publicly advertise your policy, e.g. website
- Make it available to the public on request, in a hard copy format
- Utilise staff meetings to present and discuss your policies
- Hang the policy in places where it will be seen:
 - Your front office or reception
 - In the staff room
 - Notice board
 - On posters
- Include the policy in workplace communications, staff/contractor induction packages.
- Providing ongoing training related to policy implementation and expected outcomes

When communicating your policy and convincing people to change, you need to consider how your target audience might react. Will they embrace it openly or resist it? Any form of change is often met with scepticism or resistance.

Plan for this and work out strategies that will convince your stakeholders that it is a good idea. Work out beforehand 'what it means for them and what benefits they might get out of it'. If you can work out the benefits for your key stakeholders, you can present a win/win situation where the change is in the interest of both parties. This makes acceptance of the change much easier.

An organisational culture that embraces sustainability cannot be established overnight. It takes commitment, patience and persistence. Organisations that decide to make their businesses more sustainable should plan to introduce the changes over a period of time and allow input from staff at all levels.

If you are charged with the responsibility of selling a change, your actions should be consistent and constant.

When promoting the ESP to key stakeholders, reinforce the benefits of the policy, including:

- the opportunity to extend the demographics and size of the organisation's customer base by appealing to their social conscience
- shows clients that you are moving with the times and keeping pace with industry trends
- delivery of commitments will set a positive and proactive example to customers, suppliers, government agencies and the general community
- identification of corporate risks and actions to minimise these risks
- potential for reduction in insurance premiums and licensing fees from government agencies
- greater focus and control (improved operations and management)
- real potential for savings – for instance, energy, water and fuel
- opportunity for continuous improvement in environmental sustainability.

Many of these benefits can be related to securing a competitive advantage. This type of information will be of particular interest to senior management, owners and the Board (if applicable).

Implementation plan

An implementation plan is a strategic plan. It explains how to implement policy throughout the different levels of the business so the business can achieve its policy objectives. When creating an implementation plan you need to provide details of:

- start date and monitoring periods
- monitoring and measurement methods
- interpretation of data
- evaluation strategies
- key performance indicators
- roles and responsibilities
- continuous improvement strategies
- environmental committee roles, meeting schedules
- timelines and review periods
- communication plans, induction etc
- participant reward and recognition programs.

Step-by-step process to an implementation plan

Implementation plans need to be completed in a methodological way. Nothing should be left out. Consider using the following steps.

1. Research

First decide what your businesses sustainability policy should include. Think about conducting research:

- on the internet
- in trade and business magazines
- with people within your business
- on similar businesses.

2. Develop policy options to put to stakeholders

When you develop a policy for sustainability it can cover many issues. These issues need to be clearly stated so all stakeholders can understand the scope of your policy. The many issues could include:

- energy reduction
- water conservation
- reuse and recycling.

When you develop your policy options you need to think about existing standard operating procedures in the business. Consider whether they clash with the sustainability policies you are developing.

Do some projects need to be implemented to achieve objectives? For example, if one of the policy objectives is to save water, does a water recycling system need to be developed?

What process needs to be followed so that the policy becomes a reality? For example, does a business case for a water recycling plant need to be developed before a policy to save x% of water can be considered?

Do existing practices within the business need to stop or be changed to successfully implement the policy? For example, do existing contractual arrangements with suppliers need to be examined to see if there is scope to change the purchasing of raw materials? It is important to think about these issues so that all the information and implications of the policy are considered, costed and evaluated. Otherwise decisions are being made with insufficient information. This leads to sub-optimal outcomes.

- #### 3. Which stakeholders do you need to involve in the process of consultation? What level of consultation would they want? When your business implements a policy many different employees and other people will want to know how the policy is going to affect them. By thinking about the stakeholders and listing them you can make sure

that you do not leave any out. It might also get you thinking about some of their concerns and viewpoints.

4. Organise policy development stakeholder workshop. Think about involving stakeholders in a policy development workshop. This will have two benefits. First, a lot of great ideas and other policy options that you have not thought about may come out in the workshop. Also a policy is more likely to be successful if the people who will have to implement it in the business have been consulted about it from the outset.
5. Develop a meeting agenda and run a stakeholder meeting
Consider developing an agenda for a meeting to present the research and the policy options you are considering. At this meeting you can think about setting up some of the institutions that may make the policy work in the business. For example, the environmental committee. It can also be an opportunity to get input from stakeholders on how to make the policy more effective.
6. Develop and implement promotional strategy
After the stakeholder meeting you will need to develop a strategy for how you will promote the policy. You can have the best policy, but if no one knows about it, it will not be effective. You may want to think about targets and avenues for promotion.

Examples of key performance indicators that can be included in a sustainable manufacturing policy development

When you develop a sustainability policy it is important to have key performance indicators. These will be measured against the results of your policy. These could include:

- quantities of raw materials or energy used per production unit
- levels of emissions of gases such as carbon dioxide
- number and nature of environmental incidents and accidents
- percentage of waste re-used or recycled
- percentage of recycled material used in packaging
- investment in environmental protection or land set aside for biodiversity
- number of criminal prosecutions for environmental non-compliance
- levels of specific pollutants.

Who develops the implementation plan?

Responsibility for developing the implementation plan and overseeing its unfolding will depend on the structure of the business. Sometimes this is undertaken at middle management level and sometimes at senior management level. Ideally, a committee will be formed to determine the scope of the policy and the best actions for the implementation. The sustainability committee should ensure feedback and input is received from every level of the business. Consultation is the key to a successful sustainability policy. This will ensure that the policy is not 'imposed' and will maximise far-reaching commitment to the aims of the policy.

Action plans and standard operating procedures

Action plans

Depending on the scope of the policy and associated implementation plan, you might need to develop further planning documents to assist the transition to sustainable practice. For example, you might have to create a communication plan.

Other sub-plans that you may wish to develop include:

- evaluation plan
- green purchasing plan
- monitoring and measuring plan.

Implementing workplace sustainability policy

Developing and communicating procedures to help implement workplace sustainability policy

Once a sustainability policy has been formulated, you need to determine the best approach to implementation. Are there to be radical changes made in a short timeframe, or will policies be implemented more gradually using a staged approach? You also need to consider the issues and constraints that affect your business, for example:

- How much change can your business accept?
- Do you have the necessary resources available? (People, equipment, money)?
- Will you need to engage outside contractors to assist you with information and training sessions?
- Are there any time constraints within which you must work e.g. don't make substantial changes during busy periods?
- Are there any environmental constraints (seasonal variations) within which you must work?

"Planning a staged approach to implementation allows you to:

- Break the implementation down into 'bite size chunks' or stages. For each stage:
 - Itemise the resources required (people, equipment, tools, training, machinery, expertise, modifications to equipment etc.)
 - Cost each item
 - Confirm resource availability or when the resource will be available (lead time)
 - Identify potential benefits. Where possible, provide a potential cost saving for the benefit (e.g. avoided costs, increased production/profit)
 - Determine the tasks to be completed, who will complete the task, duration of each task and any dependencies between tasks
 - Prepare an implementation plan based on the above to determine the overall duration of the stage
- Assess the costs and benefits of each stage and determine which ones will give you the 'most bang for your buck'
- Implement the stages in a logical sequence so that you are gradually building your skills and capabilities
- Monitor progress and decide whether the program is working and fine tune along the way."⁷

Developing procedures to help implement your ESP is a real challenge and may involve some hard work and serious commitment.

Everyone in the organisation will need to have a clear understanding of what is being worked towards, why and how. Policies, procedures and practices all need to be adjusted and committed to.

Develop procedures

The following information provides you with some example of the types of procedures that have been shown to be effective when implementing an ESP:

- Appoint sustainability representatives – staff who volunteer to promote and champion sustainability initiatives and work among their colleagues to promote and implement it.

⁷ Source: <http://www.regionalskillstraining.com/sites/default/files/content/WIP%204%20AHCWRK511A.pdf>

- Use prompts - a prompt is a reminder to act. A note attached above light switches that reads 'Please turn off the light when not in use' is a prompt. A bar graph on a water bill showing energy use is a prompt.
- Host an annual sustainability event.
- Incorporate sustainability into building renovations.
- Choose an appropriate energy supplier.
- Develop a 'preferred suppliers' list.
- Train and educate staff and other stakeholders.
- Develop an environmentally sustainable purchasing policy.

Environmentally sustainable purchasing policy

Aim: to continuously reduce demand for materials and resources

Actions:

Evaluate existing inputs using a life cycle management approach Procure goods and services from environmentally sustainable suppliers (e.g. goods and services that are reusable, recyclable and use renewable forms of energy during production, transport, delivery and use)

Communicate procedures

A range of means can be used to communicate implementation procedures, such as information sessions or discussions during meetings. Training should be held for those stakeholders who will be responsible for delivering the environmental outcomes. These stakeholders will usually be team leaders, executives and staff.

The communication methods, whether formal or informal, aim to provide a clear message about implementing sustainability initiatives. Developing a communication plan that reflects the nature of the organisation, particularly factors such as size, structure and culture, will be important. Consider matters such as:

- what you aim to achieve from the communication
- general principles (matters the organisation regards as important with respect to communication, including ethics and values)
- the most appropriate communication channels.

The type of information you communicate may include:

- what is required of people in relation to implementing sustainability initiatives
- the roles of individuals within the organisation with respect to sustainability policy
- procedures and practices for how sustainability initiatives can be implemented
- organisational culture and organisational values.

Implementing strategies for continuous improvement in resource efficiency

Now let's assume that you have implemented your sustainability program. What now?

Can you take the approach of 'set and forget'?

To some extent, sustainability programs are in a constant state of implementation. Practices need to be constantly monitored and reviewed to ensure that the program is meeting your objectives.

Remember too that new ideas and technologies are constantly emerging that may be of benefit to your centre.

This is a cycle of continuous improvement. Monitoring is the regular gathering and analysis of information needed for your day-to-day management, to ensure a system is being implemented and expected outcomes/objectives are being achieved.

Without good record keeping and monitoring, it is difficult for a business to accurately determine if system requirements are being met. This is especially important when there are multiple participants/staff. Monitoring needs to be based on a realistic but effective system suited to your business needs. Firstly you must be clear about:

- What it is you are monitoring
- The decisions you want to be able to make using the monitoring results
- The information you need to collect to make these decisions

Then you need a system that enables you to:

- Collect the information easily that you need
- Use it to make decisions

You must also decide if:

- You will manage all of this yourself, include staff, or use a consultant

Over the years there has been criticism levelled at environmental sustainability systems. Critics have pointed out that the systems do not ensure an organisation improves its performance. This may be the case for certain types of environmental sustainability systems, but not all. An environmental sustainability system that does not incorporate continuous improvement will not be effective.

ISO 14001 requires an organisation to engage in continuous improvement.

Throughout the Standard there are repeated references to the need for regular updating, reviewing, monitoring and checking of the system.

Implementing continuous improvement

One of the most practicable methods of achieving continuous environmental improvement is the setting of targets. The targets should be worded in a manner that ensures improvement. If the target does not require improvement, it is unlikely to be an effective or worthwhile target. The delivery of targets should occur within a given timeframe; responsibility should be allocated to ensure that the target is delivered and the targets should be reviewed at least annually to ensure they are being met. If necessary, targets should be re-set to achieve a higher level of environmental performance. This is the essence of continual improvement that can be found in nearly all environmental sustainability systems. If the targets are weak (that is, not designed well enough to achieve improvement), little improvement will occur.

Establishing and assigning responsibility to use recording systems for tracking continuous improvements in sustainability approaches

You will not know the results of your sustainability policy and procedures without being able to track the actual results of those changes. You've already established a baseline for how effective your business's sustainability was before implementation of sustainability policies and procedures. Now you want to know the results of those policies and procedures. That can only be accomplished by comparing your ongoing activities with the baseline.

It is critically important that your methods of recording are accurate and consistent. A change of personnel recording the data can throw off your results, as people don't all record things in the same way or to the same level of accuracy. Therefore, it is important that specific personnel be assigned the task of recording sustainability data.

If possible, arrange for the data on your measurements to be computerised. This can either be computerised in the method of gathering or in the method of reporting. Some things, like the amount of money your company pays for copier paper or electricity bills, are best accomplished by checking the results of accounting's records. Others, like the amount of recyclables collected in the lunch room, will have to be manually recorded. Even so, by having that data online, you simplify the process of getting that data from the person who gathers it to your desktop.

What you are looking for in this data is continuous improvement, not a quick jump in statistics. That quick jump would probably indicate an error, more than an improvement. On the other hand, a steady continuous improvement would indicate that company personnel are accepting and implementing the sustainability policy and procedures.

Be open to the idea of changing your procedures mid-stream. While having a plan is important and it is also important to follow that plan; it is also important to be able to recognise when it is time to leave that plan behind and go on to better things.

It is quite possible that through the course of implementing your sustainability plan and procedures that you will encounter ways that you can improve on the plan. Don't be surprised by this, and certainly don't dismiss those ideas out of hand. The trick is more in determining when would be the appropriate time to implement those additional changes. Some can be implemented immediately, especially simple changes. Others will require testing and preparation before making another change.⁸

Systems for tracking environmental information are necessary because they help ensure that continuous improvement is achieved. This information can then be used for reporting to managers and other stakeholders. For example, tracking energy consumption by recording energy use information from an energy account will provide a picture of energy use patterns. A tracking system can be very simple, using organisation-wide data and basic formulas, and then entering this information into a spreadsheet. A variety of charts can be embedded into spreadsheets to provide a visual tracking mechanism.

Your tracking system can also be more detailed, with separate spreadsheets for different departments within the organisation.

Sustainability Victoria have developed an 'Energy and greenhouse management toolkit' that is free to download and use. This toolkit contains software to assist organisations to track and monitor energy consumption, greenhouse gases and minimise energy costs. The software is called 'Energy Smart Tracker' and is available at the following web site:
<http://www.sustainability.vic.gov.au>

Your ESP should stipulate who will be responsible for using recording systems to track continuous improvements in sustainability approaches, and this responsibility must be clearly communicated to the relevant person/s, to ensure they are fully aware of what is required, and any reporting timelines.

⁸ Source: http://tae.fortresslearning.com.au/?page_id=5122

Case study: Implement policy

Mei

Once things are underway, how do you go about getting feedback? Peter at OI Glass says it's easy.

Peter

The simple answer to that is that the door was always open to guys. It didn't mean necessarily the office, it meant, stop talk to me, feed it back through whichever way you want. No idea is too silly or too left field. Let's talk about your thoughts. All we ask of the people was 'give it some thought, don't come with a problem, come with an opportunity' – the difference between the two is one says you've given it some thought of how we can address the issue, second one and probably more important, the fact you're raising it says to me that you want to be involved in the process.

Mei

Tania, at Thales, a small arms manufacturer in Lithgow, also encouraged people to talk.

Tania

We encouraged feedback by trying to put a positive spin on sustainability and what it meant to people and how important it was to consider the environment. It's very hard when you're working with a factory that has people who have worked there 20, 30 plus years, and that are used to doing things the same way and they don't understand why they should need to change, so you really need to put the positive spin on what the benefits are to them and to the organisation and to the environment, but especially to them as employees, because they need to see the need to be able to change, why they should change.

Mei

Trish, at a PVC manufacturer in Melbourne, wanted people living nearby to have a voice in policy.

Trish

The way we tried to encourage feedback, was basically by providing the information to the community group in particular and then by providing the information to the SHE committee and asking for their feedback and comments, prior to actually publishing the documents. Sometimes we received feedback on various different aspects, sometimes we didn't. Sometimes we don't get a lot of interest in some of these areas. One of the things we did to try and understand exactly where people were about a year ago now, was to actually ask the business to complete a survey on sustainability – and that focused on what people thought sustainability was, what particular items were worrying them going forward – either where they were living, where they were working, in society in general – what their level of understanding was.

Mei

While Mitchell tried to get feedback on a personal level.

Mitchell

A lot of communication was done. Part of that communication was getting feedback and questions – how is it going to affect me, what are we going to do, how is it going to change my job – a lot of questions on that came up and had to be answered. We continue that process – part of sustainability is having a very open culture, so every quarter we have a formal feedback session to our employees and we also take questions back from them, making sure they have a way to express what they think, whether we're doing enough or not enough in some aspects of our business. That works very well with staff.

On the shop floor we do it more through a toolbox type meeting, more or less every week where we communicate what we're doing with sustainability, get feedback and suggestions from them because we feel that on the shop floor it's easier to have a shorter cycle – people respond better if they have an idea they can express that idea almost immediately rather than thinking about it for the future.

So yes, that two-way engagement is very, very important – measuring engagement of our employees as well is part of the process.

Mei

You also should make records of any improvements.

Peter

Continuous improvement by using Lean 6 Sigma tools for cost reduction, optimisation of resources, those sorts of things and linking them with reduction of waste under the lean process.

The tool is basically used to save costs, simple as that, optimise your costs. The lean side of it is about waste. That can be processed waste, physical waste, it can be time, any of those elements. When you combine both of them, you have the best of both worlds. You look at the process, look at the waste you can remove, that normally will have an advantage. Whilst you're looking at the Lean 6 Sigma tools side of it, you're also looking to improve the process and streamline it at the same time.

This site is committed to \$3.4 million in savings this year from Lean 6 Sigma tools and we'll achieve them.

Mei

Trish, also documents improvements.

Trish

There's one section within the sustainability plan, and it's actually the final of the eleven priority areas from the PACIA sustainability leadership framework – and it is the accountability section. So it's all about making sure that we report information, we

constantly set targets, and that those targets improve, and we constantly then report on the new targets going forward, and we report that information publicly through our sustainability reports, and we also commit to providing feedback to PACIA as well about how we're doing. So that element in itself is really all about the continuous improvement aspects. It's all about being accountable to the community.

Mei

At Michael's workplace – they have a very clear system of charts that tell everyone about improvements.

Michael

When you go around our factories you see a lot of visual management around the place, how production is going and the next products coming onto the machine, whether the five S's has been conducted on that specific piece of equipment and been signed off by the operator. Feedback about how much material is used compared to what we should have used. All that is visual. Our safety record is very visual as well. We have what we call the safety cross which means that every month we try to get a cross made out of 30 or 31 squares and every day, if we have an accident-free day a green square goes in there, if we have an accident a red square goes in there. The objective of course for everybody, very visual again, is to finish the month with a green cross.

Mei

And health, safety and environment are all important parts of sustainability. You want to record all the improvements you make – even if they aren't improvements all the time. That way you can work out what is an improvement and what isn't. So make sure you record this information in a clearly readable form.

Peter

The safety, health, environment and property protection tool – a number of the questions are: 'What are the targets you have set?'; 'What is the mechanism you have in place to achieve it?'; 'How do we know that it's working?'; 'Where is it documented?'; 'Show me the results'.

Environment – we have an environmental management system database, where we track issues, opportunities, periodic actions, or agreed improvements that we're going to work through.

Tania

We use a variety of record systems on site, including corrective and preventative action forms, which are then put into a database, so that we can then analyse and track progress and performance.

We have several different types of reporting which are used to track continuous improvement, including annual management review meetings with our executive level management, we have monthly business group meetings and a quarterly national HSE national plan review.

We also use internal and external auditing to track continuous improvement.

Trish

We record a number of different measures within our business, and a lot of those measures are associated with the collection of some raw data, so things like the amount of water we use to make a tonne of PVC, the amount of greenhouse gas we generate to make a tonne of PVC, we track all of those different inputs into our business.

Mei

Michael has an interesting way of choosing who drives improvements on the factory floor.

Michael

Some were volunteers. People who are interested in it and take more initiative than others. But also we have some clear responsibility, some whose role is about continuous improvement. Like on the factory floor we have two people who are trained in lean technology, lean principles and lean tools and who support all those initiatives with the methodology and the tools. So all our managers are trained and well aware of the lean philosophy and the lean tools and continuous improvement – it's very much part of the way we operate on a daily basis.

Mei

It's also really important for staff to know what their responsibilities are with your policy. They have to know what you expect them to do.

Peter

Within peoples' job description, they have individual responsibility for their job, but they also have site responsibilities and corporate responsibilities – within those sustainability is one area, continuous improvement is another area, quality is another area, financial viability is another area – so everybody has them within their job description at certain levels. Quality is an example – everybody has that. The argument is 'how do I affect quality here?' – 'I don't produce bottles' – true statement, but if I put the culture right in place, the quality will improve. We'll have attendance there, we won't be repeating mistakes, we will have the waste right, we will have the process right.

Tania

We assigned responsibilities to the HSE representatives. It's important for them to be able to gain assistance in putting in those continuous improvement initiatives within those areas and to keep the momentum going.

We also invite assistance from anyone who might be interested, we hold toolbox talks once a week. I often go along to them and we use them as a conversational forum and invite people's feedback, and if people are particularly excited about a particular project, we invite them to come along.

So there's a mix of formal and informal support for continuous improvement on site.

Mei

So you see, if you treat your staff well, they'll really make your life a lot easier. Your policy will turn into real action on the factory floor. Are you a good manager of people?

Think about it.

Reviewing workplace sustainability policy implementation

Documenting outcomes and providing feedback to key personnel and stakeholders

The final stage when developing a sustainability is to monitor its effectiveness. This may be achieved through the collation of appropriate data, i.e. (results should be quantifiable) thus allowing for revision accordingly. "It is critical that a company monitors the changing developments that occur relating to their industry and the regulations. For example, it is of course better to know in advance that water reductions are required, then to find out by facing a significant bill. Keeping up to date on issues is essential to maintaining a usable policy".

There is as important interaction between policies and procedures. Feedback from procedures facilitates the policy developers in maintaining realistic expectations for sustainability within the company. Changes made within an organisation that inhibit the implementation of the policy, may require revisions in order to keep expectations realistic. When revisions, are made it is important that this information is passed on to staff and stakeholders regarding rationales and outcome expectations. For each revision it is important to consider the continued appropriateness of the scope and readdress the stages of policy development.

Any new undertaking or change within a business usually involves an element of risk. "Since sustainability policy is such a new area for companies to be focusing on, there may not be much data available for you to use in determining what results your sustainability policy should provide. Nevertheless, you still have your own data from your own centre's experience".



Gradual, continual improvement, is more desirable than a sudden jump. These results are best illustrated in the form of a graph. This provides more meaningful information to stakeholders than stand- alone statistical data.

"In the process of graphing your data, there are two important points which must be shown, in addition to the data showing your improvement. The first of these is the benchmark, so that everyone can see how far you have come from the start. The second of these is the goal, so

that they can see how much farther you have to go. Knowing how far you've come will motivate people to keep trying. The goal will give them a challenge to try and meet.

You want to be sure to make your documents and reports as positive as possible, especially since this is a new area to your company. Applaud every success that your company or some part of your company has. That will also help motivate people. If all you do is to talk about how much farther you have to go, without ever mentioning the victories that you've had, you won't motivate them; you'll surgically remove any motivation they have within them".⁹

ISO 14001 contains guidelines for reviewing an environmental management system. The material gathered during review of the ESP should be documented, and include information about:

- outcomes and results
- the extent to which objectives and targets have been met
- the continuing suitability of your ESP in relation to changing conditions and information
- details about the concerns of relevant interested parties.

An example of a review plan follows.

XYZ Pty Ltd Environmental sustainability policy review	
Date:	
Review team:	
Area to be reviewed:	Date reviewed:
1. Policy	
2. Planning	
3. Aspects and impacts	
4. Legal and other requirements	
5. Objectives and targets	
6. Environmental sustainability programs	
7. Structure and responsibility	
8. Training, awareness and competencies	
9. Communication	
10. Documentation	
11. Document control	
12. Operational procedures	
13. Emergency preparedness	
14. Monitoring and measurement	
15. Non-compliance and corrective action	
16. Records	
17. Management review	

Reviews of an environmental sustainability system require audits of the documentation and site visits to check the accuracy of information contained in documentation. During the review process staff should be asked a range of questions so the reviewer can accurately assess how the system is operating. The questions should focus on answering the following questions.

- Does the system meet the requirements of ISO 14001:2004 and other requirements set up by the organisation?

- Are the operations occurring in an effective and efficient manner in accordance with the documentation that has been developed?
- Are procedures in place and do staff understand the procedures?
- Are the objectives and targets appropriate for the activities being audited? Are the objectives and targets being met?
- Is corrective action taken when needed? Is the system reviewed following any incidents or emergencies?
- What evidence is there that the system is continually improving?

Provide feedback

Before giving feedback about the outcomes of your sustainability initiatives, you must identify a variety of audiences and tailor information to suit their needs.

Typically, an organisation will need to provide feedback to staff, and internal and external stakeholders.

TABLE 4.1: Example of internal reporting chart

(Adapted from 'Developing an energy management system', State Government of Victoria, pg.17)

To whom	Executive management	Staff
What to report	Detailed description of resource use Trend data Payback data Performance against targets	Summary of resource use Performance against targets
Purpose of report	Strategy planning Budgeting and resource allocation Generate feedback	Generate feedback Motivation
Means of communication	Presentation at management meeting	Discussion at department meetings Staff bulletin Email

Investigating successes or otherwise of policy

Once you've documented your progress, it's time to start analysing that progress. Have your sustainability efforts been successful to date? Are there areas where the company or some department within the company has outdone your expectations? Are there areas where your expectations haven't been met? What's going on?



Every success and failure needs to be investigated and analysed to determine why it was or wasn't a success. There has to be at least one reason, if not several, in each and every case. Look for the following:

- A particular person who has been the impetus behind the success
- People who are ignoring the new policies and procedures
- Equipment that is part of new processes, which either doesn't work properly or is broken
- Systems that are not running smoothly
- Systems and procedures that are creating extra work for people
- Changes in personnel, placing people in key positions who are not trained on your sustainability procedures
- Problems with vendors
- Outstanding vendors who have helped create a success

Don't just accept what people say about these things, look for yourself. Often, the answer you receive from someone reflects their ideas, plans and desires, more than reflecting the true information that you need. Be your own person and seek your own answers to those questions.

Your goal is to see what lessons you can learn from what has happened so far, in order to seek out ways that you can apply those lessons to other parts of your centre. If you have a success, and you can find a way to copy whatever has created that success, you may turn another area, which hasn't been doing all that good, into a success. At the same time, looking for what has prevented something from succeeding is the first step in being able to correct the problem and turn a failure into a success.

Never be closed minded to what works. Many people are so wedded to their own ideas or ideology that they are unable to accept something that is outside of those limits. You need to be focused on what works, not what you think will work. Results are the only measurement that matters.

As I mentioned earlier, there are times when the best thing to do is change plans. You may have had a great plan, but if it isn't working, it's time to look for another answer. Likewise, when something you didn't expect would work, works, you need to be quick to embrace that thing, even if it goes against your ideas.¹⁰

The degree of success or otherwise of your ESP will be determined by the information you collect following audit of the ESP. This is why it is important to establishing measurable targets; without them, there would be no way to gauge your success.

¹⁰ Source: http://tae.fortresslearning.com.au/?page_id=5128

Where variations between actual performance and the required standard are discovered, managers have three possible courses of action:

- do nothing
- identify and correct the cause of the variation
- revise the policy.

Where performance measures indicate that targets are being met or identify a variation from a target that is within acceptable limits, it is appropriate to do nothing.

Where a variation exists and the target is deemed to be acceptable, it will be necessary to identify the cause of the variation and correct the performance.

If a variation is identified and the target is thought to be unacceptable, it will be necessary to revise the target.

This process, illustrated in Figure 4.1, is a continuous flow with new measurements needed over time.

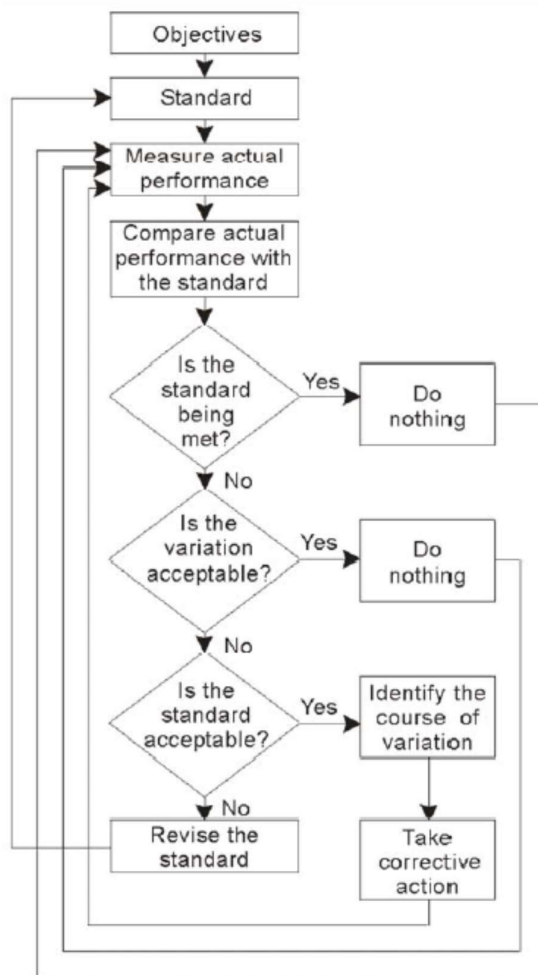


FIGURE 4.1: Comparing targets with actual performance

If you have studied **BSBMGT608B Manage innovation and continuous improvement** you may recall the importance of accepting failures and embedding successes into any sort of

workplace innovation. The same applies to an ESP – rather than covering up failures, staff should be positively encouraged to report failures and what was learned from them.

Monitoring records to identify trends that may require remedial action and using to promote continuous improvement of performance

It is critical to continually monitor and revise the processes involved and compare results to expected outcomes. Reporting based on data collected should adhere to the construct of TRACE reporting. TRACE reporting incorporates the principles of:

- Transparency: organised documentation that facilitates interpretation of data
- Relevance: reporting serves the needs of the organisation and aids decision making
- Accuracy
- Consistency: consistent measures and procedures must be implemented in order to make comparisons over time
- Entirety: boundaries must be clearly defined and all relevant sources must be included

Procedures need to be monitored and revised in relation to outcome expectations, in order to keep the sustainability policy focused and directed. Changes may need to be made if goals are not being met. Evaluating whether a procedure is effective will help further new initiatives, promote communications, and motivate staff towards continued excellence in sustainability commitment.

There is always room for improvement. A common goal within the business is to have the best possible sustainability policies and procedures in place. This will probably require repeated changes in procedures, seeking out "bugs" in your systems and developing strategies to combat them.

Ideally, areas in the business requiring improvement will be identifiable by looking at trends, instead of waiting until they fail. It may be that a change made previously showed significant initial improvement, but then the improvement slowed down as time went on. Upon investigation, you find that the initial improvement was due to the efforts of one individual, who is highly concerned with sustainability, but the rest of the centre hasn't adopted the sustainability procedure, because it makes their jobs harder to accomplish.

"In this sort of case, you definitely need to revise the sustainability procedure you have put into place. Any procedure that sacrifices worker efficiency, in order to gain some other desired result is likely to fail. Most workers aren't willing to put in the extra work necessary to make a more difficult procedure function well, especially when they know an easier way to get the job done."¹¹

Modifying policy and or procedures as required to ensure improvements are made

Demanding that workers abide by the new policy in cases like this is no guarantee that they will obey the new policy. People can be very inventive, when seeking ways to get around a policy they don't like. Instead, what you would need to do in a case like this is to find a way of making your sustainability procedure at least as easy as the other one, if not easier.

Sustainability policies and procedures are processes which are continually changing and evolving. As the environment is not "static", policy and procedure change is necessary to address relevant issues accordingly.

¹¹ Source: http://tae.fortresslearning.com.au/?page_id=5131

Because the practice of sustainability is relatively recent, new techniques, technologies and theories are constantly being presented. This may in turn trigger new ideas and ways to improve your company's sustainability policy and procedures. While there is no "one size fits all" approach which suits every organization, there are some which are commonly shared.

When employing new strategies and techniques to improve sustainability, it is important to update documentation accordingly. This ensure that your documentation is actually relevant to what you are doing. There is no point in making positive changes whilst the accompanying documentation remains out of date.

"The authority to ensure that the change is implemented is the policy and procedures. While you may be able to talk somebody into implementing a change, without the documentation being complete, both you and they are wrong. Should something go wrong with the new procedure, there will be no defined way for things to be handled. However, if you change the procedures to match the actual change, the people doing the work will have something to fall back upon. Additionally, governmental regulations are constantly changing, becoming more stringent and requiring a constant re-evaluation of the way that we are doing things. What is considered acceptable levels of emissions today may be considered criminal tomorrow".¹²

A trend refers to the tendency for things or events to move in a particular direction.

In relation to sustainability, trend lines can be drawn to illustrate changes in variables such as resource use, expenditure, savings and energy consumption. Trends can be accurately plotted to show occurrences that may require remedial action, and can also be extended beyond the present as a way of promoting continuous improvement in performance. Past trends are easy to plot, as this simply requires the utilisation of existing data.

Modify policy and or procedures as required to ensure improvements are made

The next step in the cycle of continuous improvement of your ESP is to modify policy and/or procedures as required. This should be done in consultation with relevant stakeholders such as:

- the board of management
- heads of department
- the CEO
- team leaders
- others specialists, such as occupational health and safety experts and risk management consultants.

The types of modifications will depend on the outcomes of your evaluation, but may address the following factors:

- **currency** – what changes have taken place since the ESP was developed and implemented and are these changes likely to impact upon the ESP?
- **relevance, accuracy and completeness** - does the plan reflect the priorities of the organisation? Does it help to distinguish the sustainability initiatives likely to have the greatest impact on the organisation's environmental performance?
- **how much the policy is integrated into functional work area processes** – is there a flow-down effect of the ESP to the rest of the organisation? Do operational areas know that it exists and refer to it in their goal and objectives planning? Do these areas review sustainability initiatives in their regular meetings or planning and review sessions? Is there a reporting mechanism for reporting sustainability issues?

- **changes that have occurred in organisational goals, policies and priorities** - a review of the organisation's strategic planning should be accompanied by a corresponding review of the ESP, in terms of its identification of key sustainability issues.
- **areas that the ESP did not address, where sustainability has been an issue** - most dynamic organisations will, from time to time, find that sustainability issues arise that that were not previously identified.
- **areas or activities that have not met targets** - a review of the areas of underperformance may point to risks that the organisation should address; for example, constant underperformance in relation to legislative requirements may point to a potential law suit and should be investigated.

Assuming an evaluation of your ESP identifies a number of issues that need to be addressed in order to improve current sustainability processes, you might consider the following options:

- staff training to improve understanding of sustainability and how to implement the processes
- making changes to processes, procedures

Case study: Review policy

Mei

Congratulations everyone – you got here. Now let's listen to our sustainability champions and how they went about letting their stakeholders know about the outcomes of their sustainability policies.

Michael

Some of the measures are reported on boards around the factory; with staff through the feedback session every quarter where we give them a full feedback on how the business is travelling both in regards to sales and profitability as well as how we're travelling on improving sustainability. We do the same thing with the operator on the shop floor through toolbox meetings as well, they get the same information. So it's a very open culture in that respect. We also put a lot of information on our websites.

Tania

We communicated the outcomes of our policy to key stakeholders in a variety of ways. We have an annual report that discusses performance against our objectives, and those objectives then support the policy. Our significant sustainability achievements are also communicated on the internet externally to all our customers and suppliers, as well as internally on the intranet.

We've got HSE targets and objectives, they're documented in what we call our HSE plan which are reviewed monthly and these are then communicated also to executive management also to our customers and our suppliers as well.

Mei

It's all very well to have Key Performance Indicators and health and safety targets, but how do you prove the policy is actually achieving its objectives?

Trish

Basically by comparing back to the targets and metrics that we were focusing on – so if we were trying to get a water reduction to a certain point – then we looked back at whether we actually achieved that water reduction and if we did, explained how we did it. If we didn't, explained why we missed it, and if we got better, explain how we actually got better, so it's important to not only just state the numbers, but we also need to provide the context and narrative around them.

Michael

We are still not at our Mission Zero objective but we've done much better than where we were 10 or 15 years ago. The proof is there. It was not about going after a green agenda at the risk of becoming broke – there's no benefit of being green and broke, it doesn't benefit anyone. It was about remaining very profitable but by doing the right thing by the environment and this earth.

Mei

In your workplace you will have all sorts of data and software at your disposal. It can be confusing, and you have to use the right tools. Listen to the tools that our sustainability champions used to identify the results of their sustainability policies.

Trish

Basically just analysis of the data, and in that analysis, it's predominantly just using spreadsheets.

Peter

The first tool we use is compliance. Our monitoring and compliance matrix. Every scorecard that we produce, and database has a KPI, minimal KPI we have to achieve. Also feedback from the guys if something is not working, or not working as well as we want, sit down and review what it is we're trying to achieve. And I guess feedback from senior management in head office. A good test of that is 'Can you make that available to us to the rest of the world?'

Continuous improvement is not a statement it's a journey. One thing you can be sure of with us, we're always in a state of continuous improvement or change what ever you want to call it. The process is simple, it has to be. It's very visual.

We celebrate success, but we're not naïve enough not to recognise failure either.

Tania

The key tools which we used to identify trends requiring remedial actions are audits and workplace inspections, as well as our incident and hazard forms.

All staff report incidents and hazards to us centrally which are then recorded and we are able to analyse and track.

We also have a corrective and preventative action database that we use to measure and monitor those remedial actions to ensure that they're closed down in time. They're also reported to senior management so that it keeps that driven through our area to make sure they're closed off within a timely period.

Mei

Lastly, how often do they review a sustainability policy?

Trish

In terms of the sustainability plan I've mentioned that is a three year document. So we look at that every three years.

Michael

The policy itself is not really reviewed because it's been set basically in our DNA, if I can say. And this is Mission Zero by 2020 – that's your whole measurement, it's very simple, and very clear, and the objective doesn't change and will not change.

What is reviewed regularly is how we're progressing on that road and are we achieving the results and what we need to do between now and that 2020 date. That's where on a regular basis we review that. So we've got several work groups for instance around the world – there is a work group looking at what you call our top cloth, our yarn usage, we've got a group looking at our backing, we've got a group looking at our process, a group working on our energy use. So those work groups are focused on some of the areas and saying what is the plan that needs to be put in place between now and 2020 to be there by 2020.

So that's probably the way we review our process, by saying where are we at, how are we tracking, what do we need to do, what are the next step changes that we'll need to make to get to our objective, because there will, you know, still be step-changes required between now and then.

Tania

The policy is reviewed annually within the organisation, at several levels within the organisation. We also have six monthly audits, where we have an external independent auditor come in and audit our environmental management system and he goes over the policy every six months, so that we ensure that we have a continual review of that policy.

Mei

And as we reach the end of the unit – these people all feel they are part of a changing work culture.

Trish

I think it is and I think that actually one of the areas that was probably faster to change than a lot of places – the reason I say that, we have a lot of operators that live on small properties out in the countryside, and so they know how acute the water shortage is far more than anyone else living in the city. We turn on a tap and we get water coming out.

They don't have any water in some of these places that they're living in. So some of the operators are very engaged in particular around water – because they are actually seeing the impact of Melbourne's drought far more than people in the city are.

Peter

We're at a crossroads at this point in time, and we will continue to do this work. Where we need to probably go in the future will be, we need to look at the glass melting process. We cannot achieve the energy reduction targets that we need to achieve with the current method. There is some research and development going on at the moment, methods to melt glass, and I would think that is the future. Once we do that, they're definitely add on, but if you're talking 50% reduction in energy usage, this site here uses approximately \$20 million of energy a year, you're talking \$10 million.

Michael

It's not just about waiting for governments or political parties to make decisions, it's about the industry taking the lead. Because we've demonstrated, and a lot of other organisations have demonstrated, that going onto the sustainability road, can bring a lot of benefits as well. It can bring a lot benefits around cost savings in regards to your position in the market, competitive advantage in the market, growth, etc. And so more and more people will go down that path. They will also be pushed by external stakeholders – consumers, and customers and shareholders will not be wanting to invest their money into products that is jeopardising the environment or buying shares for a company that down the track might be in trouble because it hasn't been down that sustainability road.

So there will be a lot of pressure on some businesses which they will have to react. Some businesses will first do the minimum to try to comply with that, some will understand the message and see that 'it's a great opportunity for us'. I think more and more people, and that's why we're spending so much time in our business talking to people outside the business to spread the word, because that's how we can have an impact.

Mei

I hope you enjoyed the unit. It really feels like something is happening out there – don't you think? I'll say goodbye for Carlo too – I think we've all had enough of him. Please think about what you've learnt and I hope you can use it to make changes in your workplace.

I'm going too – bye.

Policy statement

A policy statement is often used for marketing the company's sustainability initiatives. It includes company background information and a declaration of commitment to the selected aspects of sustainability. The policy statement may also include a list of key principles and goals.

Policies come in various forms. Examples of manufacturing company policy texts include Thales's Health Safety and Environment Policy. Thales is a manufacturer of metal components for the Australian Defence Force.

Following is an extract of Australian Arrow's Environmental Policy. This company is a designer and manufacturer of electrical distribution systems and electronic products supplying the Australian car industry.

Australian Arrow Environmental Policy

'Environmental Management is an essential part of our business processes and we are committed to:

- Maintaining our ISO 14001:2004 certification and ensuring compliance to all relevant environmental legislation and business requirements.
- Minimize waste and pollution in all our operations.
- Continually improving our Environmental Management System and environmental targets, through regular reviews.
- Develop a corporate culture and awareness through continual training and communication that will lead to sustainable business processes.
- Provide environmental leadership for our local industry, community and associates.'

Anticipate the use of the policy statement

Before you write your own policy, think about how objectives and actions need to be drawn out and interpreted into actual on-the-ground and measurable activities. Bearing this in mind will help you develop a useful and workable policy.

Typically, strategies for implementation are more detailed than the policy statement. Review the examples below to get a brief understanding.

Example of an extract from a policy statement:

'We are committed to reducing our car use to reduce our contributions to greenhouse gases.'

Example of a corresponding extract from an implementation plan:

'We are committed to reducing our car use to reduce our contributions to greenhouse gases.

Actions to achieve this are:

1. car pool
2. use public transport
3. have bicycles available for staff use
4. use video conferencing
5. purchase alternative fuel cars for our fleet.'

Details of who will take responsibility for the actions, how they will be achieved and by when will also be found in the implementation strategy.

Adapted from the NSW Department of Environment, Climate Change and Water, 'Standards for Sustainability: Manufacturing Knowledge and Skills for Sustainability Resource Manual'. Used with permission.

Sample Policy



Thales Health Safety and Environment Policy

It is our policy to ensure a safe and sustainable working environment and practices. This applies to employees, contractors, customers, visitors and all others who may be affected by our company's activities, which include the design, manufacture and supply of specialised products and services to defence and civil customers nationally as well as internationally.

Our mission is to build superior HSE skills, systems and relationships which will engage all employees, along with the community and other stakeholders, to maintain a proactive HSE culture within Thales. This is reinforced by using HSE results as an important criterion in assessing both individual and company performance.

Thales is committed to:

- Conduct our business in a safe, responsible and sustainable manner
- Comply with all applicable legal and other requirements
- Prevent pollution, minimise waste and the use of energy and water
- Prevent major accidents at our Major Hazard Facilities
- Prevent work related illness and injury
- Identify and assess potential hazards which may present a risk to our personnel or the environment and will be controlled by the hierarchy of controls including process design
- Consult with our employees and key stakeholders on the issues in the workplace which affect their health, safety and the environment
- Provide relevant induction, information, instruction, training and supervision

Thales will achieve the HSE commitments made with a strong operational line management accountability starting from the Executive Leadership Team. At no time can HSE accountability be transferred even though Thales employs a network of HSE professionals who provide guidance. The clarity of this understanding is fundamental to HSE success.

Thales will also apply a continuous improvement philosophy including:

- Setting HSE objectives, plans and targets;
- Measuring and monitoring our performance;
- Reviewing our management systems, programs and controls

Senior management are responsible for and will be held accountable to lead by example; monitor and review the HSE management system, performance, and action plans; provide the necessary resources; and uphold HSE accountability.

Managers and supervisors are responsible for and will be held accountable for meeting the HSE objectives and targets set; the implementation and effectiveness of the HSE management systems and HSE plans within their areas of control; and for reporting all HSE

incidents and any instances of non compliance so that the necessary corrective and preventative actions can be developed and implemented.

Employees are responsible for and will be held accountable to participate in HSE programs and comply with HSE legislation and Thales requirements to protect their own safety and that of other employees, contractors, visitors, and minimise their impact on the environment.

Chris Jenkins

CEO

Thales Australia Limited

Date: 20 April 2010

Recommended Additional Resources

Printed Resources

Dallas, N. 2008, *Climate Change Basics*, McGraw-Hill, Australia.

Online Resources

BNET Business Dictionary–Triple Bottom Line

<<http://dictionary.bnet.com/definition/triple+bottom+line.htm>>

Australian Government–Department of the Environment, Water, Heritage and the Arts <<http://www.environment.gov.au/index.html>>

Brisbane City Council–Plans and projects

<http://www.brisbane.qld.gov.au/BCC:BASE::pc=PC_5612>

PrintNet–Sustainable Green Print

<http://www.printnet.com.au/pages/our_industry/environment_sub_pages/sgp_lead_page.html>

Queensland Government–ecoBiz Queensland

<http://www.derm.qld.gov.au/environmental_management/sustainability/ecobiz_queensland/index.html>

The Story of Stuff <<http://www.thestoryofstuff.com>>

Environment Essentials

<<http://www.enviroessentials.com.au/eeweb/Pages/home.php>>

Australian Government–Department of Climate Change–Your business and climate change <<http://www.climatechange.gov.au/en/businessclimate-change.aspx>>

Green pages <<http://www.thegreenpages.com.au>>

Queensland Government–Department of Mines and Energy–EnergyWise tips <http://www.dme.qld.gov.au/Energy/energywise_tips.cfm>

Baseline assessment–Summary of performance indicators

<<http://www.derm.qld.gov.au/register/p01295am.xls>>

ACF–Sustainable Cities

<http://www.acfonline.org.au/articles/news.asp?news_id=2544>

PWC–Sustainability and climate change tax

<<http://www.pwc.com/gx/en/tax/publications/sustainability.jhtml>>

Sustainable Venture Partners <<http://www.sustainableventures.com.au/>>

Environmental Management Systems

ISO–ISO 1400 essentials

<http://www.iso.org/iso/iso_catalogue/management_standards/iso_9000_iso_14000/iso_14000_essentials.htm>

Environment essentials

<<http://www.enviroessentials.com.au/eeweb/Pages/home.php>>

Waste-wise

Queensland Government–WasteWise publications
<http://www.derm.qld.gov.au/environmental_management/waste/waste_management/wastewise_publications/index.html>

Australian Water Association <<http://www.awa.asn.au>>

Queensland Government–Waterwise
<<http://www.derm.qld.gov.au/waterwise/>>

It is Easy Being Green <<http://www.itiseasytobegreen.com/>>