

Introducing energy management

Energy management, energy efficiency, energy conservation are terms often used to mean the same thing. This is not necessarily the case.

Energy management can be viewed as the umbrella term that includes:

- energy efficiency—using the most efficient technology to achieve a specific task (e.g. using a compact fluorescent light instead of an incandescent), energy consumption will often be reduced;
- energy conservation—saving energy by undertaking a specific action (e.g. switching off a light when it is not needed);
- tariff negotiation—being charged the correct and most economical tariff for your operations; and
- energy type selection—using the most economical energy source for your operation (e.g. LPG for your car fleet).

A successful energy management strategy will include all of these elements.

Why energy management?

The Australian business community can benefit significantly from the moves towards energy management practices.

Evidence shows that energy management has direct commercial benefits. Audits suggest that most businesses can save between 10–25% on energy costs annually. The potential savings in commercial and industrial sectors alone are more than \$7 billion per year Australia wide.

This means that improvements in the way a business uses energy can reduce operating costs and improve profitability. Energy management can play a major role in establishing a company's competitive edge.

Responsible use of valuable energy resources of coal, oil and gas is also critical in our commitment to the environment. The greenhouse effect is now seen as a key environmental issue on a national and international level. Energy efficiency is therefore seen as a primary means to reduce the emission of greenhouse gases.

'... how energy and money can be saved by treating energy use as a management issue ...'

The aim of this Guide

The purpose of this Guide is to demonstrate to businesses how energy and money can be saved by treating energy use as a management issue, as used elsewhere in your business for resources such as labour and materials.

Though aimed at senior managers, production and maintenance staff, or designated environmental coordinators, this Guide is equally as valuable for managers of any energy using department or building looking for ways to minimise costs.

This Guide is about people and strategies rather than technology. We will explain in easy-to-follow terms how substantial savings can be made for little or no capital cost by integrating energy management into your standard operating procedures.

This Guide will help your business assess its current state of energy management and provide advice about how to review its effectiveness in this area, so you can define where you are at present, and where you want to get to next.

Most importantly, this Guide will show you how to implement an energy management strategy that meets your organisation's specific needs. An energy management strategy usually comprises a set of well-planned actions aimed at reducing a company's energy bills to a minimal practical level. Energy Management is a continuing process and is more effective when its policies and procedures are reviewed annually.



Who's thinking about energy usage?

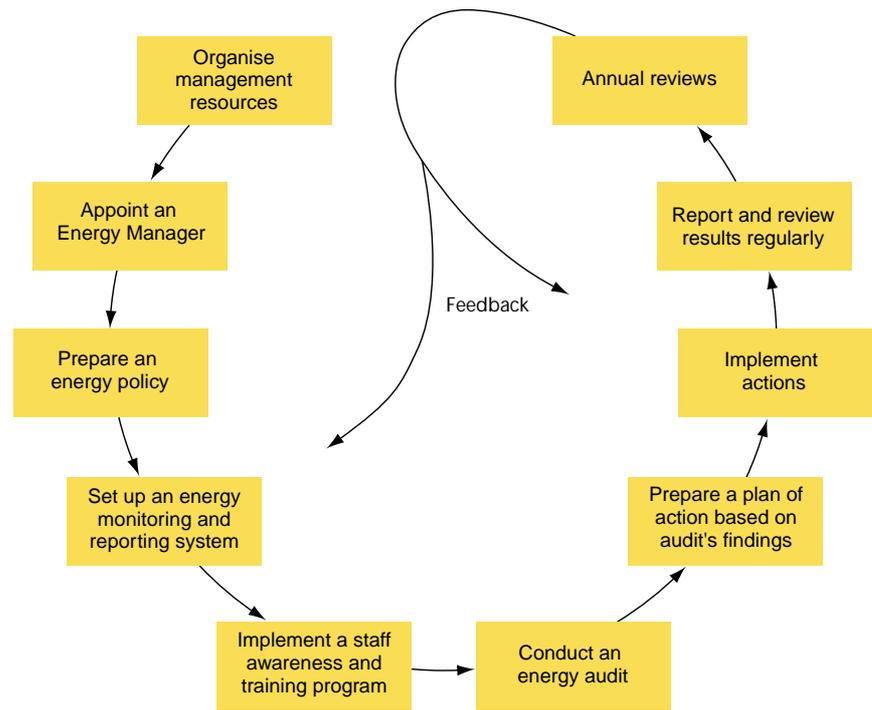
An increasing number of businesses are including energy management in other management strategies. For example, quality control, cleaner production, environmental, and asset management.

This approach is excellent because energy management is integrated within the core programs of the organisation. However, in many businesses, energy use still takes a lower position on management's agenda, which directly results in energy being wasted.

Barriers to effective energy management are:

- inefficient energy use is not viewed as a waste product issue;
- energy costs often form only a small part of total costs;
- monitoring of energy is restricted to billing meters only;
- today's energy prices are relatively low;
- energy is treated as an overhead cost rather than a raw material cost.

Flow chart of an energy management strategy



What are the key energy management issues?

This Guide will make an assessment of the following 'key' organisational aspects of energy management.

1. Focus on the Important Management Issues: twenty one questions for senior management with action point answers.
2. The Energy Management Matrix: a tool to measure the level of sophistication across a number of important energy management activities.
3. Developing a Strategic Approach: nominates the various strategies available to companies depending on their culture, organisation, staffing, and funding.
4. Your Organisation's Energy Policy: why you need a formal commitment to energy management from your organisation.
5. Taking Responsibility for Energy Management: how to integrate energy management into your organisation's formal and informal management structure and the role, attributes and responsibilities of the Energy Manager.
6. Motivating Staff to Save Energy: how to build effective relations with energy users and motivate them to conserve energy.
7. Monitoring Energy Use: what is an appropriate and effective information system.
8. Market Your Way to Success: where and how to promote and publicise energy management and your achievements.
9. Energy Management Investments: how to identify projects and justify investment in increased energy efficiency and how to demonstrate value for money to senior management.
10. Training for a Successful Energy Management Strategy: skilled, knowledgeable and supportive staff contribute to successful energy management.
11. Conducting an Energy Audit: the expected outcomes of an energy audit in the context of an overall energy management plan.

The role of Government Energy Agencies

Government agencies responsible for the promotion of energy efficiency have an important role in ensuring that independent advice and practical information is available to businesses and the community, and this role continues to prosper.

Government energy agencies help firms develop and implement their own energy management strategies and provide information about 'best practice' energy management techniques.

The success of an energy management strategy will depend on:

- full commitment from all staff in the organisation ranging from senior management to production staff;
- an effective reporting system with accountability of line managers for energy used; and
- an effective training program and staff motivation to save energy.

