

Developing a strategic approach

'Improving energy efficiency is one the best ways to reduce costs and increase profits.'

Thinking strategically means taking a holistic approach to your organisation's position in the marketplace.

An organisation must analyse the countless varieties of influences that can impact on its operations, such as the vagaries of market forces, global and local competitors, the quality of suppliers and work force flexibility. These elements must be analysed and assessed for their impact so that the organisation may prudently plan its goals and seek out the best opportunities for success over the long-term.

Energy management should be an integral part of this, and be linked to an organisation's corporate objectives rather than viewed as an end in itself. Successful management practices should embrace an energy reduction strategy, where decisions made by all those concerned in the operation of the business are constantly viewed in light of energy implications.

Improving energy efficiency is one the best ways to reduce costs and increase profits. Improved energy efficiency is also often associated with increased productivity. If an energy management strategy is not pursued at senior levels, then a corporate strategy that strives to maximise returns is failing investors and stakeholders alike. Raising energy issues at a corporate level can also assist in the adoption of new cost and energy saving technologies.

Think strategically

An organisation's energy management strategy can take many different guises.

The detail of any approach to creating a strategy is company-specific, and depends on the corporate culture of your organisation and stage it has reached in energy management (refer to your energy matrix). The framework within which you will construct an energy management strategy will probably require a range of options.

Whichever approach your organisation adopts, it is likely to contain one or more of the following elements:

- a commitment from senior management to proceed with an energy saving program;
- a recognition from management that energy use is just as important as any other aspect of the business;
- a system of reporting and monitoring energy flows and use;
- an energy audit to determine overall energy use;
- an ongoing plan containing a number of energy saving projects coordinated together, rather than being implemented in an ad hoc manner.

Senior management needs to accept the important role energy management plays in their business. Once there is commitment from the directors, staff can be made available to take part in the energy management program.



An Energy Management Strategy

When you commence a structured approach to energy management, experience shows there is a clear sequence of events that brings the best results. Any organisation, whether introducing energy management for the first time or upgrading its existing efforts, needs to be aware of this and adapt its activities accordingly.

1. Organise management resources

Once commitment from senior management is achieved, establish a clear accountability for energy management with appropriate allocation of financial and staffing resources as well as reporting procedures.

2. Appoint an Energy Manager

Appoint a senior staff member as the energy manager. This person is responsible for the overall coordination of the strategy and reports directly to senior management. The energy manager may come from any department, such as technology, accounting, purchasing, or administration. The overriding factor is that the energy manager must be motivated to reduce energy costs.

3. Prepare a corporate Energy Management Policy which indicates energy reduction targets.

An Energy Management Policy Statement includes general aims and specific energy cost reduction targets, timetables and budgetary limits, the methods to be employed and the organisation of management resources. A written Energy Management Policy will serve to guide efforts to improve energy efficiency and represents a commitment to saving energy.

4. Establish an energy use monitoring and reporting system

A system should be established to collect, analyse and report on your organisation's energy costs and consumption. A useful way of organising this data is to use a database or spreadsheet. This is required in order to establish an overview of energy use and related costs. Set up a database to record historical and ongoing energy use and cost information, and produce a summary report of this on a monthly basis. From this information, data trends can be analysed and tariffs reviewed. You can record information and drawings of buildings, the equipment and systems, and when they operate.

5. Implement a staff awareness and training program

A key ingredient to the success of any energy management strategy is to maintain a high level of awareness among staff. It is important to communicate the strategy's plans and report results. Staff may need training from specialists to demonstrate energy saving practices and use of equipment.

6. Identify technological energy saving opportunities

An energy audit establishes where and how energy is being used, and potential for energy and cost savings. By understanding the energy use of each process, energy flows can be determined. An audit will include recommendations for actions that result in energy and cost savings. It is important for these recommendations to be endorsed by senior management as key goals to be achieved in the energy management strategy.

7. Prepare a detailed project implementation plan based on audit findings and budgets.

Develop a plan of action, based on the results of the energy audit. The targets for energy savings need to relate to specific areas of your organisation. The plan should include a project implementation timeline and state any funding and budgetary requirements.

8. Implement projects

Implement the projects in order of priority as set out in the action plan. The progress of individual projects will need to be closely monitored to ensure they stay within budget and achieve the energy target within the specified time frame.

9. Report and review results

Review energy consumption regularly. Report results/progress to management and staff on a regular basis. This will assist to increase awareness of energy efficiency issues among employees and will encourage an ongoing commitment to the program.

10. Annual Review

An energy management strategy will be more effective if its results are reviewed annually and the plan of action revised. The review should at least detail actions undertaken during the year and projects and implementation plans for the next twelve months.





CASE STUDY 1

Since 1978, Melbourne University has taken a structured approach to energy management and implemented numerous energy conservation programs, such as the 'KillerWatt' program. These have embraced a wide range of activities from people motivation to technical solutions, from simple to complicated tasks.

The latest developments in technology and new products have been examined continuously and applied where appropriate to generate savings and conserve energy. As a result, several comprehensive energy saving programs have been successful with cumulative savings totalling more than \$10 million.

Between 1978 and 1993, Melbourne University's programs have saved 908 785 GJ of energy, which is equal to a reduction of 202 000 tonnes of greenhouse gas emissions entering the atmosphere. Energy consumption has been reduced by 15% over this period, despite increases in equipment usage, air-conditioned space, new buildings, extensions or refurbishment of existing buildings, and the number of hours buildings are open.

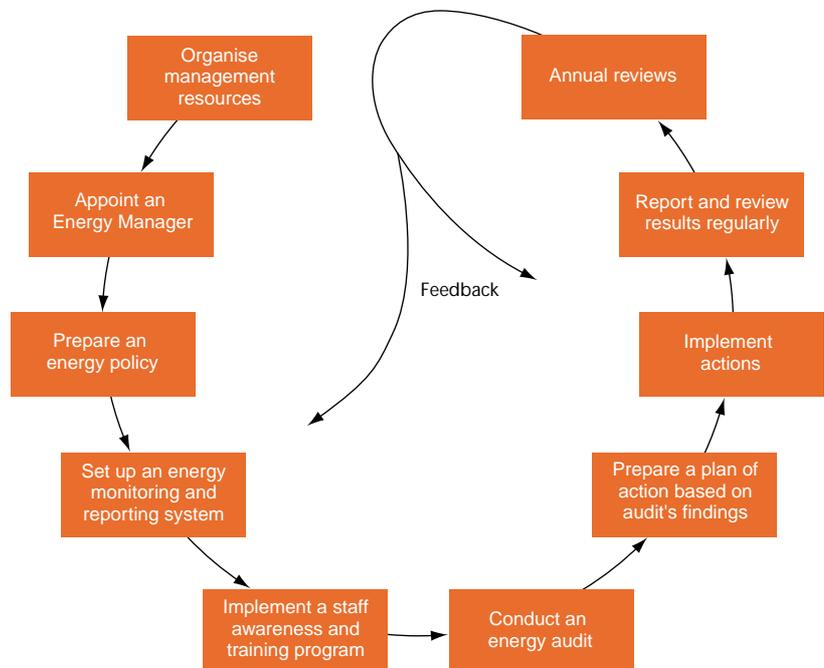
An ongoing process

The time taken to implement an energy management strategy depends on your position on the energy matrix, the extent of the problems you face and the resources that your organisation is willing or able to devote to them. If insufficient expertise and money are invested, then your organisation is likely to fail to reduce or gain control of its energy consumption. In some cases, it may even slip backwards.

Energy management is a process of continuous improvement. It needs ongoing attention to ensure any gains are maintained over time.

Without continual support from senior management, adequate funding and the right quality of energy management staff, control will be lost. If this happens, your organisation may slip into a worse position than it occupied before it began trying to save energy. Having once experienced failure, it is more difficult a second time around to convince senior management to make the investments of time and money required for energy management to succeed, and to motivate other staff to treat energy saving seriously.

Flow chart of an energy management strategy



Tips

No matter how well you design and implement your energy management strategy, your success will depend on how well it is attuned to your organisation's culture. Identifying the culture in which you operate can help you decide the most appropriate strategy to use in representing your work to senior managers and in motivating people to save energy.

The table on page 21 will help you identify the kind of culture in which you have to operate. This will help you determine the most appropriate strategy and style to adopt in representing your work to senior managers, and in motivating people to save energy.

