

Environmental Management

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An environmental management system – Where to start?

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Eco-efficiency for the Marine Industry Fact Sheet

How do you start an environmental management system?

An environmental management system (EMS) is developed using the quality systems Plan—Do—Check—Act methodology (see figure 1). The process begins by identifying the environmental impacts of the business. All the laws, rules and regulations, standards and codes that affect environmental management of the business are then identified. As a basis for all activities, a company environmental policy is developed. Objectives and targets are set and met by developing formal procedures. Responsibilities and resources are assigned and efforts are monitored to assess the success of the system. This monitoring is then used as a basis for the regular review of the system.

An EMS requires that procedures and monitoring activities are documented (at least electronically) and communicated to relevant personnel within the organisation. This promotes standardised work practices and helps to measure progress towards objectives and targets.

Complementary to other systems

Environmental management systems are designed to integrate with other management systems within a company. Quality management and control, occupational health and safety, total quality management or lean manufacturing systems can all be integrated with an EMS to add the extra dimension of environmental issues to existing procedures and processes.

An EMS can be accredited by a certification organisation or can be on the company. Some customers require certification as a condition of purchase. Certification also tends to add more credibility to the system in the eyes of the regulator, and can be a way to distinguish companies from competitors without certification. The external auditing associated with certification can also be useful for companies in assessing their performance against industry benchmarks. Certification does, however, take time and money to achieve because of all the documentation required, and is not necessary for all companies. ^[2]

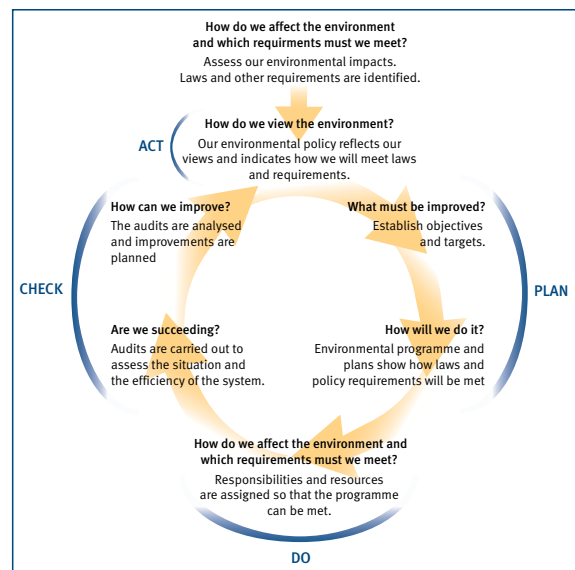


Figure 1: The Plan-Do-Check-Act methodology ^[1]



Case study: Southport Yacht Club

In 2000, the Southport Yacht Club needed a way to ensure that it was complying with environmental regulations and to continuously improve the management of environmental issues on its site.

An environmental management system, known as the SYC 33/50 Program was implemented, and aimed for reductions of 33% and 50% in contaminant releases within one and two years respectively. Both goals were achieved. Now the system is called the Beyond the SYC 33/50 Program, and aims to achieve 10% reductions, year on year, through ongoing programs.

‘Originally, we decided to implement an EMS to stay ahead of environmental legislation, but as changes were implemented, we noticed significant increases in marine life around the club. Now there is even strong barnacle growth in the lifting bay, which was a discharge point for the hardstand, where before we had none.’

– Steven Fisher, then Environmental Manager of Southport Yacht Club.

What to do—find a system suitable for you

Programs

Clean Marinas—the Clean Marinas-Australia program gives accreditation to marinas implementing an EMS that conforms to guidelines for good practice. The program provides ongoing advice and supplies a handbook that specifies good practice for all aspects of environmental management at marinas. The issues of staff training and education of boat enthusiasts are also addressed. As the operator of an accredited Clean Marina, companies benefit from the use of Clean Marinas-Australia logos, flags and materials. Businesses also receive the benefit of centralised Clean Marinas-Australia's marketing programs, which promote Clean Marinas throughout the boating community. More information can be found at: www.marinas.net.au/clean_about.php.

ecoBiz—ecoBiz is a program managed by the Queensland Environmental Protection Agency (EPA) that requires companies to implement an approved system focusing on the more efficient use of resources such as energy, water and waste. Companies that adopt the ecoBiz principles receive accreditation, are permitted to use the ecoBiz logo on marketing, and are promoted by the EPA as good environmental operators. Rebates are also available for eco-efficiency related opportunities that the company identifies. More information can be found from the EPA or at: www.epa.qld.gov.au/environmental_management/sustainability/industry/ecobiz_queensland/

Internet resources

There is a wealth of information about EMSs on the internet, with many sites devoted to the topic. For example, the USEPA has published a series of reports, Environmental Management Systems: Systematically Improving your Performance, with editions for the shipbuilding and ship repair and ports sectors^[3]. These complement many resources from the USEPA on environmental management systems at www.epa.gov/ems/.

For further information

Ecobiz can assist you to reduce costs and improve eco-efficiency in your business Call 1300 369 388 for further information.

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Books

There are many books on environmental management systems. Some books which give practical advice and describe the experiences from companies implementing environmental management systems are:

- Environmental Management – Brorson and Larsson^[1]
- Effective Environmental Management – Principles and Case Studies – Sullivan and Wyndham^[2]
- ISO 14001: A Practical Approach – Schoffman and Tordini^[4]
- ISO 14001 – Case Studies and Practical Experiences - Hillary^[5]

Consultants

There are also many environmental consultants in Queensland with expertise in the area of environmental management systems. Your usual environmental consultant should be able to help you find the right advisor.

Standards

Official EMS standards are accompanied with guidance documents that outline their requirements. The most common environmental management standard, ISO 14000 includes the following documents^[6]:

- ISO 14001:2004 Environmental management systems – Requirements with guidance for use
- ISO 14004:2004 Environmental management systems – General guidelines on principles, systems and support techniques
- ISO 19011:2003 Guidelines for quality and/or environmental management systems auditing
- ISO 14031: 2000 Environmental management – Environmental performance evaluation – Guidelines.

References

1. Brorson, T. and Larsson, G (1999) Environmental Management. Stockholm: EMS AB.
2. Sullivan, R. and Wyndham, H (2001) Effective Environmental Management - Principles and Case Studies. Crows Nest, Australia: Allen & Unwin.
3. USEPA (2005) Environmental Management Systems (EMS), United States Environmental Protection Agency, Washington DC, USA. Retrieved 14-12-2005 from: www.epa.gov/ems/
4. Schoffman, A. and Tordini, A (2000) ISO 14001: A Practical Approach. New York, USA: Oxford University Press.
5. Hillary, R. (2000) ISO 14001 - Case Studies and Practical Experiences. Sheffield, UK: Greenleaf Publishing Limited.
6. ISO (2004) Environmental management systems - Requirements with guidance for use - ISO 14001:2004, International Standards Organisation, Geneva.