



Waste Mini

Reduces cost

of energy & water

raw materials

handling

transport

and disposal

WHAT IS WASTE MINIMISATION?

Waste minimisation is the prevention or reduction of the generation of waste at source and includes efficient use of energy, water and raw materials.

WHY MINIMISE WASTE?

Concern for our resources and man's impact on the environment are major issues for the 1990s.

Waste minimisation encourages the economic and efficient use of raw materials and other resources.

Recent legislation has driven up costs of waste disposal and companies face more stringent regulation. In addition to the disposal costs, there are those resulting from wasted materials, water, energy and the actual time used in creating the waste. So waste minimisation is becoming an increasingly attractive option for businesses. Waste minimisation not only helps to reduce the impact of an industry on the environment, but it also makes sound commercial sense.

Waste Minimisation Can Reduce The Costs Of:

- production
- handling, transportation and off site disposal
- raw materials
- energy and water
- long term environmental liability and insurance.

Waste Minimisation Can Improve:

- income and competitiveness
- overall operating efficiency
- the safety of employees
- the company's image in the eyes of its shareholders, employees and the community.





WASTE MINIMISATION AND THE ENVIRONMENT AGENCY

The vision of the newly-formed Environment Agency is to create a better environment in England and Wales for present and future generations. Promoting and achieving waste minimisation is a major means to achieving this vision.

If we are to protect the environment we all need to reduce the use of water, energy and materials as well as reducing harmful emissions into the environment.

OUR COMMITMENT

To this end, the Agency will give advice to companies on suitable techniques for achieving waste minimisation and environmental regulation to run their businesses to the highest environmental standards.

THE BENEFITS

As these recommendations and methods are incorporated into the day-to-day running of your business:

- emissions and waste will be reduced benefiting the environment
- your company's operating costs will be reduced benefiting your profits.

Information on waste minimisation and its associated benefits should also be available through your local authority and various business support organisations such as the Chamber of Commerce.

Our knowledge of waste minimisation as well as information gleaned from the 'success' stories will help to further perpetuate and promote this important initiative.

CLEANER RIVERS

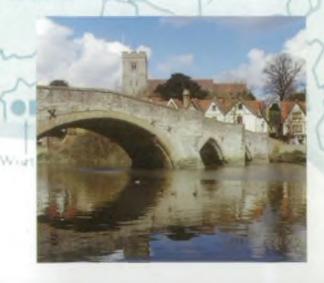
The Environment Agency is working hard to achieve a continuing overall improvement in the quality of rivers, estuaries, coastal waters and underground reserves through the prevention and control of pollution. Good water quality depends on the frequency, volume and types of effluent discharged.

Taking too much water from our rivers means less for the environment and the life that depends on it. So reducing water demand is a key element of waste minimisation and there are often cash savings for industry in their bills.

Industrial pollution of the water environment can cause excess plant nutrient growth such as some species of algae or other plants that grow and take over an area. Such an imbalance in water can push out the plant life and suffocate fish and other water-living creatures.

THE EFFECTS

- reduced discharges to water means clarity and quality is improved
- reduced emissions into the air helps to address global warming, acid rain and air pollution
- reduced solid waste generation means that less goes to landfill sites or incineration.



HOW TO ACHIEVE WASTE MINIMISATION

One of the best ways to minimise waste is to improve an organisation's housekeeping. This means reducing waste of materials, energy and water through good practices and use of the right equipment. Good housekeeping measures often cost nothing to implement and in many cases can save money.

To make the most of the opportunities for waste minimisation, a systematic audit of inputs and waste generating activities will help. Not all waste minimisation opportunities are obvious and some such as changing the production process can require investment in order to realise all potential cost savings.

The Environment Agency can offer help and advice. Contact your local Environment Agency Office on 0645 333 111.

The Basic Steps Are:

- getting the continued backing of employees and management
- selecting the audit team
- finding out the facts
- identifying the options
- evaluating the options
- implementation and on-going commitment.

Good Housekeeping

- ensuring that housekeeping and material handling procedures are clear
- improving training and motivation schemes
- regular auditing of inputs against outputs
- reducing the loss of materials due to mishandling or incorrect storage conditions
- improving raw material specifications
- replacing toxic chemicals with non-toxic alternatives
- repairing leaks and recovering spills
- regular preventative maintenance.

Another option for waste minimisation is by modifying production processes.

These Include:

- introducing clean technology and new processes which produce less waste
- modifying the product to avoid waste generating processes
- optimising operating conditions
- installing flow meters and analysers to detect below par performance
- ensuring equipment operates at optimum efficiency
- improving the layout of equipment and piping.

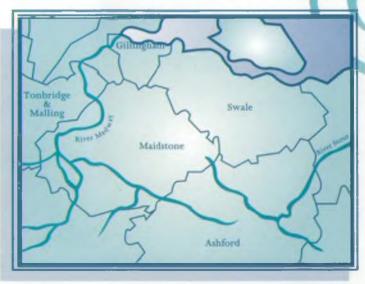
Recycling and Re-use Within The Production Process

- separating hazardous and non-hazardous waste streams
- segregating waste in a way that allows it to be recovered or reused
- recycling waste within the production process.
- recovering or reusing waste on site
- finding markets for the waste eg. exchange schemes or links with industries dealing with secondary materials.





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WASTE MINIMITATION PROJECTS

Nationally waste minimisation projects have been very successful, notably the Aire and Calder Project in North Yorkshire, where businesses near the river have saved more than £3 million per annum in water bills, energy consumption and effluent treatment. Water use has been cut by 15 per cent and effluent discharged into rivers and sewers by 27 per cent.

AVIS WAY GREEN BUSINESS PROJECT IN NEWHAVEN

This project is unusual in that it targets an industrial estate. The Avis Way Green Business Project is one of several initiatives under the Newhaven Regeneration Programme. The Agency in partnership with East Sussex County Council is exploring ways in which waste minimisation initiatives can be introduced on the estate.

THE MEDWAY/SWALE PROJECT

The Medway/Swale Waste Minimisation project was the first in Southern England and covers the Lower Medway from Allington Lock north to Grain, Sheerness and the Swale in north Kent. Its purpose is to help businesses, particularly small and medium sized firms, to reduce their impact on the environment by reducing the amount of waste they produce.

Run on the basis of a Green Business Club, the project is managed by CEST (the Centre for the Exploitation of Science and Technology). The Environment Agency is its major sponsor, along with Kent County Council. Consultants W.S. Atkins have been recruited to run the project on a day to day basis.

Huge savings are being made as a result of the project, Weidmuller Ltd an engineering company has managed to cut its paper use in half by examining how it uses paper and streamlining its systems together with introducing electronic mail and data systems.

Another company who specialise in cables and electrical equipment have managed to save £9,000 a year by reusing and recycling offcuts from their production processes.

Pfizer, a pharmaceuticals company has introduced a system to recycle water which has resulted in savings of 250,000 gallons of water a day.

WHAT IS THE SOUTHAMPTON & EASTLEIGH WASTE MINIMISATION PROJECT?

The Southampton & Eastleigh Waste Minimisation Club is helping Hampshire businesses get the commercial benefits from reducing their waste.

The club builds on the experience of other projects in the UK, but has been adapted to meet the specific needs of smaller businesses in the local area.

The club is managed by the Southampton Environment Centre (SEC) an independent, registered charity with extensive experience in helping smaller firms with environmental management issues. SEC is assisted by expert waste minimisation consultants, including the Environment Agency.

A similar project is planned for the Isle of Wight.

THE NEW PACKAGING REGULATIONS

Businesses are encouraged to minimise their waste by this legislation. The Producer Responsibility Obligations (Packaging Waste) Regulations 1997 aim to decrease the amount of packaging waste going to landfill by setting businesses targets for recycling and recovering packaging waste.

The regulations will help to ensure that the real environmental costs of producing, using and disposing of packaging falls directly on those who produce or use it.

The Environment Agency plays a lead role in implementing, monitoring and enforcing these regulations. Contact your local office on telephone 0645 333 111 if you require further information.





SOUTHERN REGION ADDRESSES

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ISLE OF WIGHT AREA

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For general enquiries please call your local Environment Agency office. If you are unsure who to contact, or which is your local office, please call our general enquiry line.

ENVIRONMENT AGENCY GENERAL ENQUIRY LINE

0645 333

For 24-hour emergency hotline number for reporting all environmental incidents relating to air, land and water.

ENVIRONMENT AGENCY EMERGENCY HOTLINE

0800 80 70 60

Environment Agency Information Centre Head Office **ENVIRONMENT AGENCY** 127090

ENVIRONMENT **AGENCY**

Regional Headquarters