GREEN OFFICIENCY:

Running a cost-effective, environmentally aware office

ENVIRONMENT AGENCY

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Running a cost-effective, environmentally aware office

This Good Practice Guide was produced by the Environmental Technology Best Practice Programme

Prepared in collaboration with the Environment Agency and from material produced by Wastebusters Ltd.

This Guide is based on the original booklet *Green Officiency - Simple Steps to a Greener Office*, and is produced with the permission of Surrey County Council and Elmbridge, Spelthorne and Reigate and Banstead Borough Councils.

Summary

This Guide will help people working in offices to reduce their impact on the environment - and their costs - by improving the use of office resources. The Guide will enable office workers to identify their impact on the environment and provides ideas that cost little or nothing to implement.

This publication covers the common environmental impacts of a typical office. The advice given emphasises prevention of waste at source through better purchasing, which is the most cost-effective method of reducing the cost and impact of waste.

The information within this Guide will help office workers to quantify current practice and take practical actions. Adoption of the measures given will help any organisation to assign responsibility and set targets to encourage continual improvement. It will also enable more effective internal and external communication on waste reductions achieved.

The advice in this Guide draws on the combined experience of clients and consultants, the Environment Agency and the Environmental Technology Best Practice Programme, working together to reduce waste and improve environmental performance in the service sector.

Contents

What is Green Officiency?

Green Officiency is a term used in this Guide to mean the way resources are used within an office. Following the good practice advice contained in this Guide will help you to run an efficient, cost-effective office that has the least detrimental impact on the environment.

Why should office workers be concerned about the environment? All businesses, regardless of sector and size, have an office or administration of some kind. This Guide has been designed to help small and medium-sized offices save money, improve environmental performance and respond to environmental enquiries from suppliers and customers. The tried and tested principles used are equally applicable to larger offices and are compatible with some of the requirements of ISO 14001 and EMAS.

Many businesses spend around 4% of their turnover generating waste. This is because the cost of waste is not just the cost of disposal but also includes wasted energy, water, raw materials, consumables and labour. The true cost of waste can be between 5 and 20 times the cost of disposal, and in an average company is around ten times the cost of disposal.

You can save your company money by using resources more efficiently and, therefore, producing less waste. Offices are no exception. The less waste you produce and the fewer resources you use, the smaller your impact will be on the environment.

This Guide will get you started on the road towards a more efficient and environmentally responsible office.

Customers, financial institutions, employees and suppliers have a growing interest in companies' environmental performance. Your company's reputation is easily affected by the way its operations are managed and how it responds to questions about environmental impacts. Legislation on environmental issues is becoming stricter year by year. Failure to comply can result in stiff penalties and a seriously damaged reputation.

By following this Guide, you can reduce the cost of wasted office resources to your company, ensure legal compliance and, consequently, help to secure your company's reputation for the future.

If you are just getting started on cost savings and environmental improvement, this Guide is structured to help you tackle the key issues in a logical progression.

The Guide focuses on the following subject areas:

■　　paper;

■　　waste;

■　　recycling;

■　　water;

■　　energy;

■　　transport;

■　　environmental reporting.

If you have already taken some steps to improve efficiency in your office, simply dip into whichever Section is currently relevant to you. A number of Guides are available from the Environmental Technology Best Practice Programme to help you further. For example, Good Practice Guide (GG38C) *Cutting Costs by Reducing Waste - A self-help guide for growing businesses*, contains practical advice to help you develop your own waste reduction programme. A list of other useful publications, web sites and contacts is given in Section 10.

1.1 HOW TO USE THIS GUIDE

The seven areas of paper, waste, recycling, water, energy, transport and environmental reporting are the core Sections of this Guide. To help you find things quickly, each Section is divided into the following five areas:

■　　**Cost saving and environmental benefit** - outlines the main cost and environmental benefits of taking action, including a short Industry Example.

■　　**The purchasing link** - what to consider when buying products and services.

■　　**Baselines** - shows you how to work out a normalised baseline figure for your current performance. Significant baselines are numbered for easy reference.

■　　**Benchmark** - how to compare your performance to industry benchmarks.

■　　**Practical actions** - a series of practical suggestions to help you improve your performance in each area.

■　　**Management and targets** - a short section to establish responsibility, targets and timings.

The Industry Examples presented near the beginning of each Section are from small and medium-sized offices across a range of industry sectors. They prove that you do not have to be a large business or have a 'process' to improve efficiency and save money.

Taking a systematic approach

Developing a more structured, managed approach to the environment will not only save you money but will also help you respond to enquiries from suppliers and clients. An increasing number of large and small businesses are implementing environmental management systems. While it is beyond the scope of this Guide to cover environmental management systems in detail, it will help you to adopt a systematic approach and is compatible with some of the requirements of ISO 14001 and EMAS.

2.1 ENSURE COMMITMENT

Improving environmental performance requires change, and change requires senior management support. A signed commitment from senior management towards minimising the adverse environmental impacts of your organisation is a good first step. Use the information in this Guide to put together a good business case for committing senior management to improvements. The best approach for ensuring ongoing commitment is a formal environmental policy, followed by a commitment to report on performance annually. Contact the Environment and Energy Helpline on freephone 0800 585794 for more information on writing an environmental policy.

2.2 REVIEW YOUR CURRENT PERFORMANCE

In order to identify opportunities for making environmental improvements in your organisation you need to conduct a review of existing practice. Quantification of key environmental effects is also essential for good environmental reporting. Use the baseline area of each Section to measure your current performance and compare against industry benchmarks. These figures can be used to forecast potential savings and put a persuasive case to senior management for further investment.

You can also obtain a free copy of the easy-to-use software (IT249) *Waste Account*, available through the Environment and Energy Helpline on 0800 585794. This will help you to record your starting position and monitor the savings you make as you reduce your waste.

2.3 SET PRIORITIES

In most cases you will not have the time or the resources to work on all your Green Officiency issues at once, therefore, you will need to set priorities. Assess your current performance in each of the areas covered and choose issues to tackle in the

short, medium and long term. Paper and waste are usually the best areas to start, then, where applicable, follow the Guide for a comprehensive improvement programme.

2.4 ASSIGN RESPONSIBILITIES

Assigning responsibilities is one of the most important steps for ensuring your improvements are taken seriously. If you do not nominate an individual it can be very difficult to achieve real improvements and monitor progress. Make someone responsible for ensuring that the priorities you set are being tackled.

2.5 DO IT!

The aim of this Guide is to help you take action. Use the practical actions listed as 'quick wins' to help motivate staff, before moving on to more complex changes over the longer term.

2.6 COMMUNICATE

Communication is the key to improving efficiency and environmental performance as most initiatives require everyone's involvement. Make sure that everyone understands what you want to do and why. Provide regular feedback on your targets and achievements to staff.

External communication, through reports and press coverage, can also be important as it gives your organisation a positive image and adds momentum to your programme. Section 9 outlines how to record and report on your company's performance.

2.7 MONITOR SUCCESS

The key to a systematic approach is regular review. Check the progress you have made and where you might need to concentrate in future. Review progress against your baseline figures, perhaps six months and one year after starting the programme, and establish new priorities for action (see Fig 1).

Fig 1 The improvement loop

The Improvement Loop

Assess

Plan

Do

Review

Environment and Energy Helpline 0800 585794
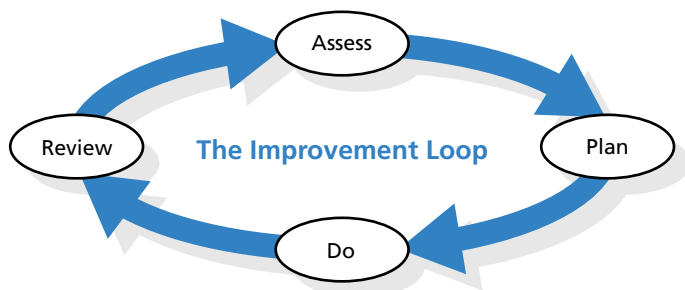
Paper

In 1998, the UK as a whole used 12.5 million tonnes of paper and board. Contrary to the expected trend towards the 'paperless office', paper consumption continues to rise by around 20% each year. The average office worker uses up to 100 sheets of paper every day and in a typical office half of the total waste is paper-based. Paper is, therefore, a major purchasing and disposal cost to the average office, yet it is a cost that can be brought down easily through reduction, re-use and recycling.

There are a number of key environmental issues associated with virgin paper production, such as loss of natural habitat and damage to water tables due to intensive tree farming, high chemical and energy use in manufacture and detrimental effects from the landfilling or incineration of paper waste. However, paper is a natural resource that can be recycled up to five times, substantially reducing these impacts. By buying locally produced, recycled paper, you can help boost the market for recycled products, which will in turn support the recycling industry and reduce unnecessary virgin imports.

While electronic information systems in many offices are regularly reviewed and updated, there are rarely equivalent assessments of stationery purchasing. Paper is often thought of as an unavoidable overhead and uncoordinated purchasing by individual departments can make monitoring difficult.   Practice shows that centralised purchasing can yield significant bulk purchasing benefits and simple regular reviews often lead to continual savings.

Industry Example 1 The Oxford Group

The Oxford Group is a small consulting and training company of 40 staff, based in Oxford, currently experiencing rapid growth. As a result of an environmental audit, the Company implemented a number of initiatives around paper use which resulted in a cost saving of £40 000/year. These included the use of recycled paper for all internal and corporate stationery, double sided printing and copying as standard and a 'Ban the Manual' campaign to encourage clients to receive manuals electronically to avoid the use of hard copies.

3.1 THE PURCHASING LINK

Recycled papers are readily available at equivalent quality, 'printability', appearance, and range as virgin papers.

As a rule you should try to use papers with the highest percentage of post consumer waste rather than virgin printers offcuts and mill waste. There are a number of standards and labels that classify paper according to its raw material content and manufacturing process (see Table 1).

Before you buy paper ask the following questions:

■ What is its recycled content? How much post consumer waste does it contain?

■ Has the environmental impact of its manufacture been minimised?

Table 1 Classification of paper (raw materials and manufacturing)

Label/logo	Raw materials criteria
NAPM Approved Recycled	The National Association of Paper Merchants awards the NAPM Recycled Paper Mark to all branded papers and boards containing a minimum 75% genuine paper and board waste, no part of which must contain mill produced waste.
German Blue Angel	Label awarded to paper and board products containing 100% waste paper (minimum 51% post consumer waste).
Mobius Loop (three chasing arrows)	There are two versions of the Mobius Loop - one denotes whether the product can be recycled, the other its recycled content. When using the latter, the percentage of recycled fibre used appears in the centre of the loop. Where the product comprises entirely recycled fibre, there is no figure. These symbols are often used without authority and in a misleading manner. Always check the basis for using these labels with your supplier.

Label/logo	Mill performance criteria
Nordic White Swan	Awarded to paper mills meeting minimum environmental performance standards.
ECF, TCF and Chlorine free	**Elemental chlorine free** (chlorine gas has not been used to bleach the pulp during the pulping process). **Totally chlorine free** (no chlorine compounds have been used during the pulping or paper making process). **Chlorine free** is often used to mean either of the above, ask for clarification from the paper supplier.
EU Eco-label	Specifies maximum limits for discharges to water, emissions to air and energy consumption as well as requiring sustainable forestry management for virgin fibre.

3.2 BASELINE: CALCULATING USE AND COST OF PAPER

Use the following calculations to record the amount of paper you use, its total cost and the proportion of paper used that has a recycled content.

Total reams of paper purchased/year	Total cost		Number of staff		❶ Total paper use (reams/ person/year)	❷ Cost (£/person/ year)
		÷		=		

To put paper use into perspective you may wish to tell staff the average number of sheets of paper they use each day. There are 500 sheets in each ream.

3.3 BASELINE: CALCULATING USE OF RECYCLED PAPER

Reams of recycled paper purchased/year		Total reams of paper purchased/year				❸ % of paper with recycled content
	÷		x	100	=	

3.4 BENCHMARK

- Aim to purchase paper that has a 100% recycled content.

- Using both sides of paper can reduce your use by 50%. This is a good start.

A best practice small office can use as little as seven reams of paper per person per year.

If you only want 1 copy be careful you don t get 11!
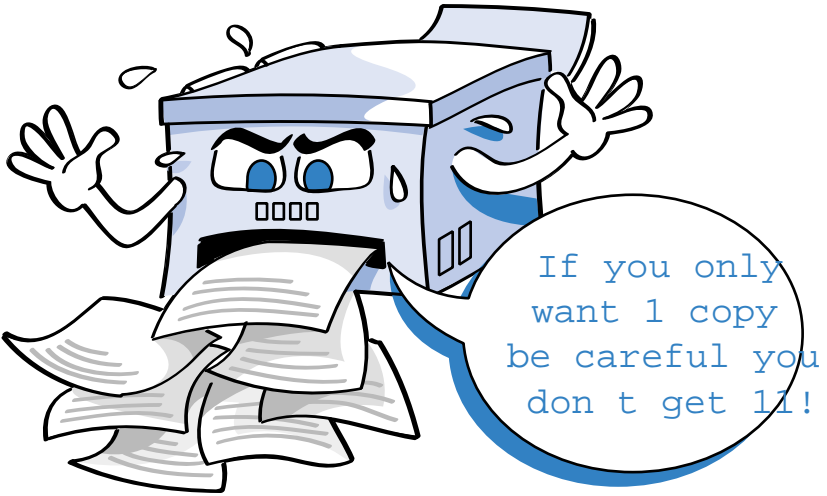
3.5 PRACTICAL ACTIONS

Reduce

- Ensure that all photocopying and publications are produced in double-sided format on recycled paper. Question whether you need to print draft copies at all. If this is unavoidable, print double-sided and then recycle. Put reminder posters near printers and photocopiers.

- Cancel junk mail and unwanted publications to reduce the amount of waste that has to be thrown away.

- Avoid overproduction of marketing and publicity material by reviewing distribution lists and regularly updating databases.

- Use electronic communication where possible to reduce printing and faxing. Ensure that your staff are comfortable with new technology and provide training where necessary. Encourage them not to print out e-mails unless absolutely necessary.

- Ensure fax machines are set so they do not produce unwanted header or report sheets.

- Reduce confidential waste costs by ensuring that the non-confidential paper collection is secure and give clear instructions to staff as to which material is strictly confidential.

Re-use - to cut purchase costs

■ Collect all paper that has been printed on one side and re-use it for printing in draft or for scrap message pads.
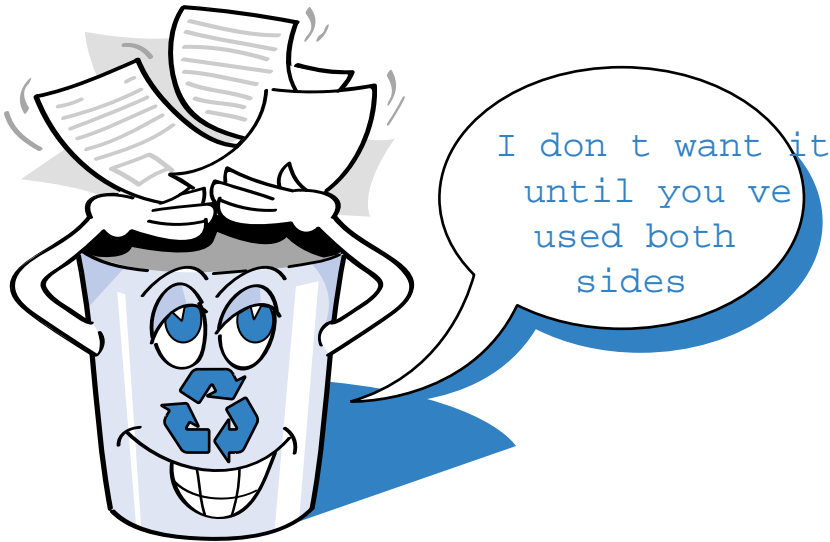
■ Re-use envelopes wherever possible, especially for sending information internally.

■ Donate surplus card or coloured paper to your local school or nursery.

Recycle - to cut disposal costs

■ Contact your local authority or waste minimisation club for details of paper recycling companies in your area. The frequency of collection and cost of recycling will depend on the amount of paper that you generate.

■ Place paper recycling bins in all offices. A good guide is one bin between six staff and one next to each photocopier and printer. Use paper ream lids as additional desk top collection trays.

■ Ensure that cleaning staff are in support of the recycling scheme and that emptying the recycling bins is part of their contracted work.

■ Promote the scheme to staff by putting up posters around the offices and on bins explaining the types of paper that can be recycled.

■ Provide staff with ongoing feedback about the scheme, including figures on the amount of paper collected. Suggest making a donation to charity or planting a tree when targets are met.

■ Use 100% recycled paper (with maximum post consumer waste content) as standard.

■ Ensure that service and maintenance warrantees are not adversely affected by using recycled paper. There is no valid reason why they should be affected.

Management and targets	Date

Who is responsible for
paper purchasing?

❶ What is our baseline level
of paper used?

reams/person/year

❷ How much do we currently
spend on paper?

£/person/year

❸ How much of our paper has
a recycled content?

%

Target: Reduce paper use to:

reams/person/year

by *(insert date)*

Target: Reduce paper costs to:

£/person/year

by *(insert date)*

Target: Increase use of
recycled paper to:

%

by *(insert date)*

Waste

Waste is expensive, it costs UK industry at least £15 billion/year. However, half of all companies do not know how much they actually spend on waste. When you consider the value of raw materials, energy and wasted labour, the real cost of waste is often 5 - 20 times the cost of disposal alone.

The waste hierarchy shown in Fig 2 illustrates how priority should be given to the way we deal with waste. Use the 'Reduce - Re-use - Recycle' rule for all of your office wastes - and remember that the higher up the waste hierarchy you reduce your waste, the greater your cost savings will be.

Fig 2 The waste hierarchy

Eliminate *1*

Reduce *2*

=

Re-use *3*

Product

Material

Recycle *4*

Dispose of *5*
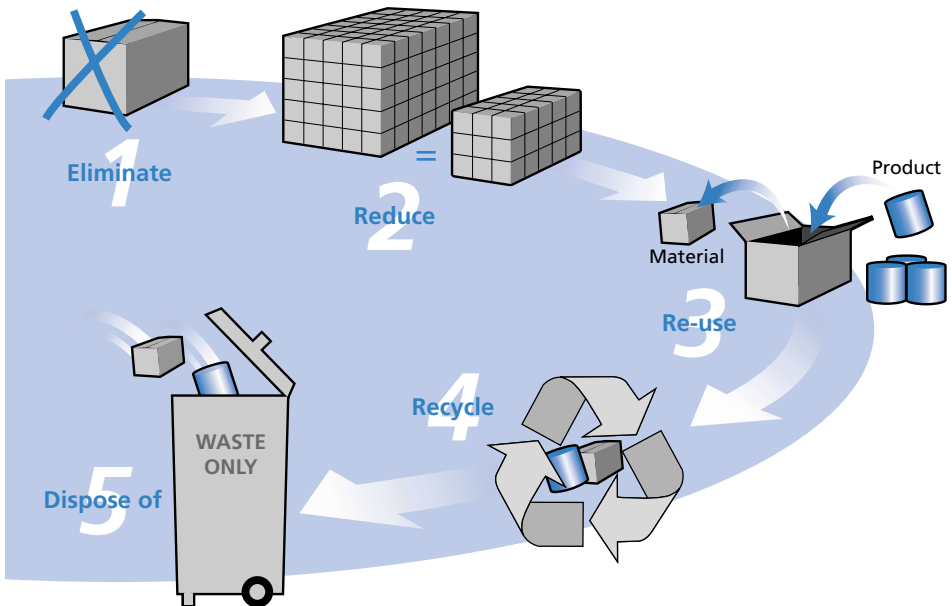
WASTE
ONLY

Reducing waste at source through careful purchasing and better utilisation of materials is the best way to make dramatic savings in your waste costs and reduce your impact on the environment. Following this, you should aim to **re-use** and then **recycle** as many of the products in your office as possible. Disposal of waste to landfill or incineration should be a last resort after all the above options have been considered.

Industry Example 2 **Architype**

Architype is an architectural practice established in 1984, with a staff of 13 in its London office. Environmental issues are central to the Company's culture. The Company was keen to improve office practice and had begun to receive enquiries from clients regarding environmental performance. The Company joined a local waste minimisation club - Waste Alert South Thames - and began to minimise waste. Suppliers are now asked to take back the packaging, where possible, from their deliveries. Some of the remainder, especially cardboard and polystyrene chips, is re-used by local antiques shops. Architype has also reduced purchase costs and waste through greater use of computers, eg by using presentation packages and digital cameras, its use of acetates and photographic paper has been reduced.

4.1 THE PURCHASING LINK

There is a strong link between purchasing and waste management. However, communication between those responsible for these functions is surprisingly uncommon. Involve both parties in considering the whole life-cycle of the products you purchase. This should include the source of raw materials, manufacturing processes used, packaging, distribution, use and potential for re-use and the disposal requirements of the product. What you buy has an effect, ultimately, on how much waste you produce. Before you buy any product ask yourself the following questions:

- Do I need to buy it?
- Am I buying more than we need?
- Is it heavily packaged?
- Can it be re-used?

4.2 BASELINE: ESTIMATING YOUR WASTE PRODUCTION AND COSTS

Use this calculation to translate the volume of your waste bins into weight in kilograms. **This figure should include waste that is recycled.** Estimate the weight of waste you recycle using the same bin conversion figures or refer to Table 2 for average weights of recyclable products. Remember to include one-off collections or bulk wastes such as computers and furniture and any building or maintenance wastes.

Volume of your bins		Conversion factor 150 (m³) or 110 (yd³)		Number of bins collected/year		❹ Total annual waste disposal (kg)
	÷		X		=	

NB If your bins are cubic yard containers, multiply their capacity by 150 to give kilograms, if in cubic metres, multiply by 110. If you share bins or have a sack collection, the average weight of a full black rubbish sack is 8 kg. Conversion factors apply only to non-compacted general waste, eg paper and plastics, and may not be accurate for different mixtures of waste or compacted materials.

Do you know the cost of waste disposal? Check your waste disposal contract for details of charges per bin and annual rental charges.

Cost of collection of one bin (£)		Number of bins collected/year		Rental charge/year (£)		❺ Total annual waste disposal cost (£)
	X		+		=	

NB You may need to add specific waste collections to this baseline, eg clinical waste, sanitary waste, confidential waste or special wastes (solvents, paints).

Table 2 Weights of common recyclable products

Waste type and quantity	Weight
One large sack of paper	Approx. 10 kg
Laser printer toner cartridge	Approx. 2 kg
4 000 glass wine bottles	1 tonne (0.25 kg each)
50 000 drinks cans	1 tonne (0.02 kg each)
250 000 plastic vending cups	1 tonne

Use the above figures to calculate how much waste you produce per member of staff and how much this costs your company, as follows:

Total annual waste disposal (kg)		Number of staff in your organisation		❼ Waste/person (kg/year)
	÷		=	

Total annual waste disposal cost (£)		Number of staff in your organisation		❽ Waste disposal cost/person (£/year)
	÷		=	

4.3 HIDDEN COSTS

Remember that the true cost of waste includes the value of the paper, stationery, furniture and other equipment that you are throwing away. **This is likely to be 5 - 10 times the disposal cost alone.** Look in your bins and see if there is anything that should not be there. For instance, unused stationery or paper used on only one side. Consider the reason for disposal for every item in the bin.

4.4 BENCHMARK

A good practice office produces less than 200 kg of waste per staff member per year.   Most offices find they can reduce their waste costs by around 20% through low and no cost measures. Use this as a guide when setting your targets.
Source of data: BRE Office Toolkit.

4.5 PRACTICAL ACTIONS

Reduce

■ Choose minimally packaged products or ask your suppliers to supply products in less packaging. Ask your suppliers to take excess packaging away with them when they deliver.

■ Reduce your use of costly overhead acetates by using computer based presentation packages.

■ Discourage excessive use of stationery by implementing an ordering system. This allows you to monitor departments and target high use areas for reductions.

■ Ensure that vending machines allow the use of china mugs rather than plastic vending cups.

■ Avoid purchasing disposable catering products such as milk jiggers, sugar sachets and paper plates.

I m no mug you can use me again
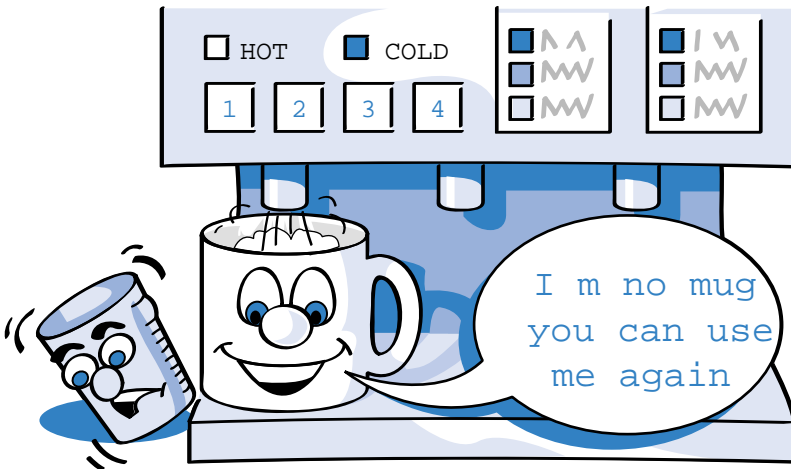
- Prior to confirming catering arrangements for meetings, confirm the numbers attending, most people over order!

Re-use

- Hold an annual 'stationery amnesty'. A surprising amount of material can be recovered by asking staff to hand in all their unused equipment for re-use.

- Make the best use of computer equipment by upgrading and re-using old machines for low power work, eg as print servers.

- Ask your computer supplier/manufacturer about refurbishment contracts. Ensure redundant equipment is collected and that you receive revenue for the residual value.

- Renovate furniture rather than buying new replacements, this can save up to 50% of the costs of new products.

- Make use of local resource centres and charities that re-use computers, furniture and other materials from businesses. Contact your local authority or waste minimisation club for details.

Reduce the cost of disposal

In addition to reducing the amount of waste that is being thrown away, reduce the cost of disposing of the remainder by ensuring your current waste collection arrangements suit your needs.

- Check that you need all of the bins currently supplied by your contractor. If some are not fully utilised, ask your disposal contractor to remove them, or reduce the frequency of collection, for example, ask for them to be emptied at your request, rather than at a time set by the contractor. Remember to renegotiate your costs.

- Flatten or compact cardboard and other bulky wastes to make the most efficient use of disposal facilities.

Ensure legal compliance *(refer to Section 10 for more information)*

- Ensure you have 'Duty of Care' documentation to cover **all** waste collection from your organisation, including recycling. Identify a member of staff with responsibility for holding this documentation.

- Ensure that special waste disposal procedures are in place for items such as tins containing waste paint, oil containers, sanitary waste and fluorescent tubes. Ask the Environment and Energy Helpline if you are not sure about special waste procedures.

- Check whether your company is obligated under the packaging waste regulations. If you are unsure, contact the Environment and Energy Helpline and speak to an advisor who can tell you the current criteria.

<table>
<tr><td colspan="2">Management and targets</td><td>Date</td></tr>
<tr><td colspan="2">Who is responsible for waste management?</td><td></td></tr>
<tr><td colspan="2">❹ How much waste do we produce?</td><td align="right">kg/year</td></tr>
<tr><td colspan="2">❺ How much do we currently spend on waste disposal?</td><td align="right">£/person/year</td></tr>
<tr><td colspan="2">❻ Cost of waste disposal per kg (❺ ÷ ❹)</td><td align="right">£/kg</td></tr>
<tr><td colspan="2">❼ What is our baseline level of waste disposal per person?</td><td align="right">kg/person/year</td></tr>
<tr><td colspan="2">❽ What is our baseline cost of waste disposal per person?</td><td align="right">£/person/year</td></tr>
<tr><td>Target:</td><td>Reduce waste production to:</td><td align="right">kg/person/year</td></tr>
<tr><td></td><td></td><td>by (insert date)</td></tr>
<tr><td>Target:</td><td>Reduce waste disposal costs to:</td><td align="right">£/person/year</td></tr>
<tr><td></td><td></td><td>by (insert date)</td></tr>
</table>

section
4

Recycling

Recycling is an increasingly popular option for dealing with office waste. However, while it has clear benefits over landfilling of waste and using virgin materials, recycling is not without its own environmental impacts, eg the transportation of materials and the energy consumed in recycling processes. Recycling should be considered only after reduction and re-use options have been addressed (see the waste hierarchy, Section 4). Re-use will cut **both** purchase and disposal costs. Recycling will reduce only disposal costs.

Re-use and recycling are often confused. Use this example to clarify the terms to staff.

You should **re-use** a piece of paper by printing on the other side or make it into a scrap pad. Used scrap pads and double sided paper should be put in a separate container and collected by a contractor. The paper is then **recycled** (a mechanical and chemical process) and starts a new life as a different product, eg newspaper or cardboard.
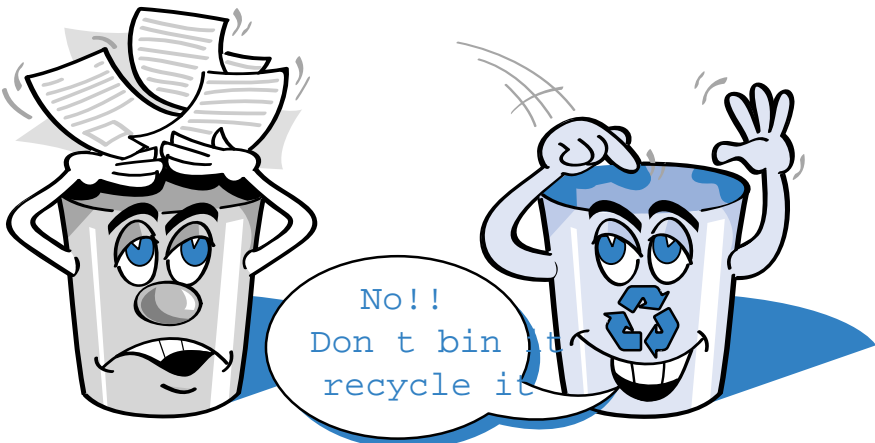
Approximately 70% of office waste is recyclable, however, on average only 7.5% of office waste reaches a recycling facility. By recycling as much as possible you may be able to reduce your waste disposal costs significantly, particularly as the cost of disposal is increasing due to the landfill tax. Recycling often costs less than disposal to landfill, particularly if you segregate your waste and have room to store larger volumes.

> **Industry Example 3**
>
> A scheme to collect used cartridges for recycling was established at a company that purchases approximately 1 440 printer cartridges/year, the profits from which are donated to charity. This scheme reduces tonnage to landfill by 2.9 tonnes/year. In addition, the company switched to buying remanufactured toner cartridges, which has resulted in savings of over £8 000/year.

5.1 THE PURCHASING LINK

It is important not only to collect materials for recycling, but also to close the recycling loop by purchasing materials with a recycled content, eg paper and stationery products, toilet paper and refuse sacks. The use of these materials will help to stimulate the market for recycled products and support the recycling process.

What you buy not only affects your recycling rate but also has an effect on the recycling market. Before you buy any product ask yourself the following questions:

■   Is it made from recycled materials?

■   Is it made from marked and easily recycled materials, such as paper, glass or wood?

■   Are its component materials easy to separate for recycling?

■   Is its packaging easily recyclable?

5.2 BASELINE: CALCULATING YOUR RECYCLING RATE

Your recycling rate is the percentage of total waste in your office that is recycled. Use the total annual waste disposal figure identified in Section 4 (which should include the weight of any recycled materials) to work out your recycling rate.

Annual waste recycled (kg)		❹ Total annual waste disposal (kg)			❾ Recycling rate (%)
	÷		x	100 =	

5.3 BENCHMARK

A good practice office - operating efficient recycling schemes for paper, cardboard, glass, cans and toner cartridges - can achieve a recycling rate of 60 - 70%.
Source of data: BRE Office Toolkit.

5.4 PRACTICAL ACTIONS

**General** *(paper recycling is covered in Section 3)*

- Establish clear senior management commitment to recycling - problems can occur if recycling is not seen as an integral part of good business practice. Emphasise the potential for cost savings to convince management of the benefits.

- Close the loop by buying recycled products wherever possible.

- Get together with other local companies to make the collection of recyclables more economical.

Glass and cans

- Contact your local authority for information on glass and can collection services in your area. You may be able to receive revenue on aluminium cans through a specialist contractor.

- If the volume of glass and cans is too small for collection by a contractor to be viable, contact your local authority or waste minimisation club for further guidance.

- Provide separate bins for cans, and brown, green and clear glass to ease collection.

- Install can crushers if the volume of cans used is high.

Other office materials

- Buy remanufactured toner cartridges - high quality cartridges are available with the same performance as new cartridges at a lower price.

- Return your toner cartridges for remanufacture: by pre-paid envelope, through a specialist remanufacturing company or charity-run scheme.

section
5

My life s not over!
I can be remade if only the
would send me back!
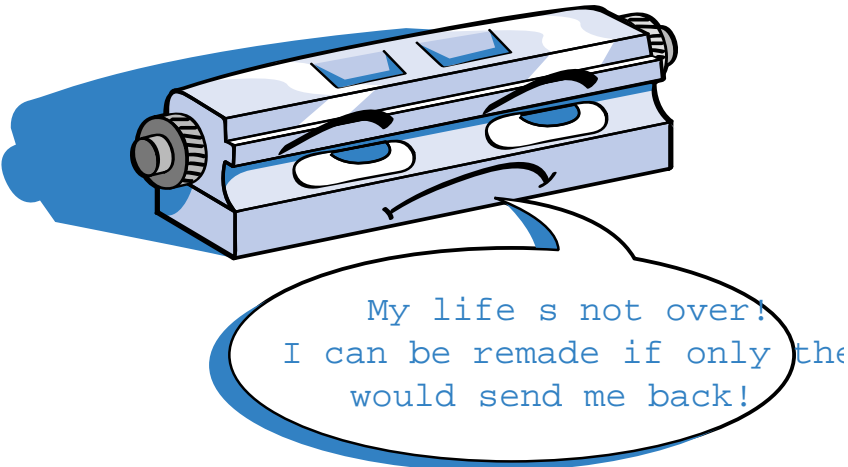
- Arrange for fluorescent tubes to be recycled or safely disposed of in small quantities.

- Arrange for mobile phones and their batteries to be recycled.

Management and targets	Date
Who is responsible for recycling schemes?	
❾ What is our baseline recycling rate?	%
Target: Increase our recycling rate to:	%
Thereby reducing disposal costs by (❻ x waste recycled (kg))	£
	by *(insert date)*

section
5

Water

Over the last decade the demand for water in the UK has reached unprecedented levels. There is also a trend towards lower average rainfall. This can lead to water shortages. In the future, organisations are liable to see tighter restrictions on their use of water and further increases in charges for metered water, yet most businesses are still not aware of how much they are using. Over two-thirds of water use in the average office takes place in the washroom, where substantial savings can often be made.

As with waste, the true cost of water is higher than the supply and sewerage charges alone. The true cost should include the energy taken to heat and deliver the water in your building. Associated energy costs should, therefore, be used as an important additional driver for reducing water use.

Industry Example 4 Richard Fairclough House

A water use survey was carried out prior to a refurbishment at Richard Fairclough House, the Environment Agency's North West Region Head Office. Results from metering checks found that water use per member of staff was a third higher than industry averages and nearly 300 litres/hour were being used for overnight urinal flushing alone. A series of water efficiency measures, including regular monitoring of water use, installation of low flush toilets, waterless urinals and tap regulators and redesigned gardens with water butts, resulted in a 50% reduction in the amount of water used at Richard Fairclough House.

6.1 THE PURCHASING LINK

The products you buy can have an effect on how much water you use. Before you buy, ask the following questions:

- Is it water efficient?
- Will it increase or decrease water use in the office?

6.2 BASELINE: CALCULATING YOUR WATER USE

Your water bill will tell you the amount of water that you use and how much you spend annually. Use the table below to calculate a baseline of water use per member of staff.

Annual water use (m³)		Number of staff in your organisation		❿ Water use per person (m³/person/year)
	÷		=	

| Annual water cost (£)		Number of staff in your organisation		⓫ Cost per person (£/year)
	÷		=	

NB 1 m³ is equivalent to 1 000 litres.

6.3 BENCHMARK

A good practice office building should be using no more than 7.7 m³ (7 700 litres) of water per person per year.
Source of data: National Water Demand Management Centre, On the Right Track.

6.4 PRACTICAL ACTIONS

■ Turn off taps fully - a 5 mm stream of water wastes 528 000 litres (528 m³) of water/year. This could cost between £250 - £705/year.

Your money
is flowing away!
I m wasting up to
£700 a year
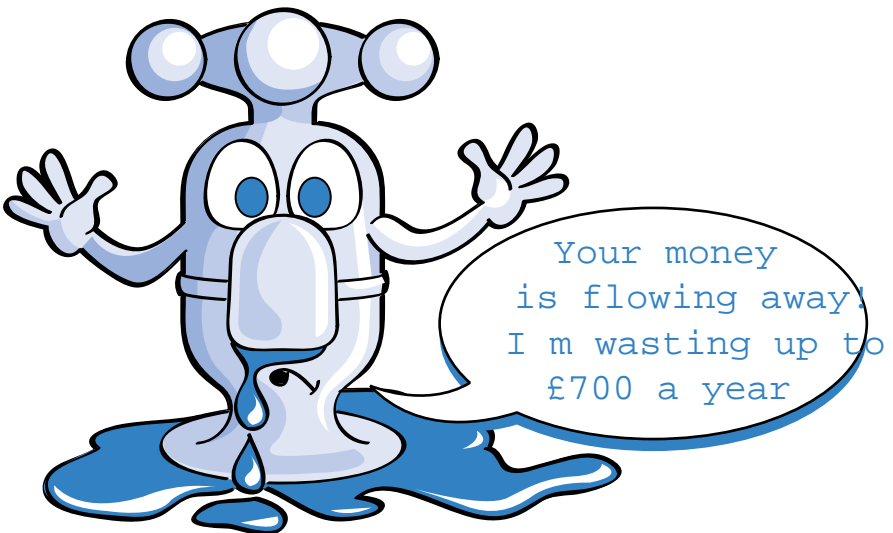
- Fit a water displacement device such as a cistern bag, eg 'hippos' supplied free of charge by most water companies or simply a one-litre plastic bottle filled with water, in toilet cisterns to reduce the amount of water per flush.

- Fit an automatic flush controller on urinal systems to ensure that the cistern only flushes during office hours or after use rather than continuously. These devices can reduce water use and costs by 50%.

- Fit existing urinals with deodorising pads to remove the need for water flushing, or consider installing waterless urinals if refurbishment is due. Potential savings are between £70 - £170/urinal/year.

- Fit push-button taps to save up to half the water used through conventional taps. Push-button taps cannot be left on accidentally, help prevent floods in the event of a sink becoming blocked and are more reliable than hydraulic models, especially in areas of bad limescale.

- Check your pipes for leaks - leaks can be expensive and can also cause damage to the building. Check your meter readings regularly and carefully - if you are paying for water that you cannot account for you may have a leak.

- Contact your water services provider - it can supply you with a range of water saving tips. Water companies can conduct visits and provide advice on minimising water use for all types of organisation.

Management and targets	Date
Who is responsible for water management?	
⑩ What is our baseline level of water use per person?	m³/person/year
⑪ How much do we currently spend on water?	£/person/year
Target: Reduce water use to:	m³/person/year
Target: Reduce water costs to:	£/person/year

Energy

Energy consumption is the largest controllable outgoing in an office. In 1996, energy cost UK offices around £1 300 million and with increasing use of electronic equipment, energy bills will continue to rise if no action is taken. Experience shows that simple good practice measures can easily reduce office equipment energy costs by up to 50%.

Significant savings are also possible by making the most of the recent deregulation of energy providers and ensuring that your buying power is maximised through centralised purchasing. There is potential for substantial savings to be made by moving from your existing supplier or simply renegotiating your charges.

Direct energy use and emissions from businesses, including electricity generation and business transport, account for over 40% of UK 'greenhouse gas' emissions. Climate change, due to the build up of greenhouse gases in the Earth's atmosphere, is one of the major problems facing the global community today. The UK Government is committed to a range of policies to achieve reductions in greenhouse gas emissions, in particular a 20% reduction in CO_2 emissions by 2010. Businesses have a key role to play in meeting these targets by increasing energy efficiency.

The practical actions listed at the end of this Section will not only save you money on your energy bills but will also reduce your CO_2 emissions. Monitoring of CO_2 emissions is an important tool for assessing the environmental performance of your business and is covered in more detail in Section 8.

Industry Example 5 Reed Business Information

Reed Business Information, in Sutton, made substantial reductions in energy consumption by implementing a number of energy saving measures. A building management system was installed to monitor air conditioning, chiller use and other plant to ensure they were operated only when needed. A lighting control system now schedules lights to go off at periods throughout the day and when the offices are unoccupied, and lighting in overlit areas has been reduced. Local lighting controls are used throughout and selected lights have been replaced with compact fluorescent lamps and lower wattage bulbs. As a result of these changes in energy management, electricity consumption has been reduced by 15% and gas consumption by 67%.

7.1 THE PURCHASING LINK

What you buy ultimately has an effect on how much energy you use. Before you buy any product ask the following questions:

■   Which product is cheaper over its whole life, including energy use, maintenance costs and consumables?

■   How much energy does the product use when in use and in standby mode?

■   Will the product produce heat that may affect air conditioning requirements?

7.2 BASELINE: CALCULATING YOUR ENERGY EMISSIONS AND COSTS

The information you need to make these calculations can be obtained from your fuel bills. These should cover a full year and be the actual consumption and cost, not an estimate by the utility company. You also need to calculate your treated floor area, as energy use and emissions are best compared as consumption per m^2.

	Annual kWh		Treated floor area (m^2)		Annual kWh/m^2		CO_2 conversion factors		CO_2 emissions kg/m^2/year
Gas		÷		=		x	0.19	=	
Oil		÷		=		x	0.25	=	
Coal		÷		=		x	0.30	=	
⑫ Total fossil fuel kWh/m^2									
⑬ Total electricity kWh/m^2		÷		=		x	0.44	=	
⑭ Total CO_2 emissions kg/m^2/year									

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NB Treated floor area (TFA) is the gross floor area (total area inside external walls) excluding plant rooms and other areas not heated, eg stores, covered car parks and roof spaces. Ideally it should be measured, but an estimate of treated floor area can be made by multiplying the gross floor area by 0.9. The conversion factors used include upstream emissions, eg those from refineries to reflect your full environmental impact better.

Source of data: Environmental Reporting: Guidelines for Company Reporting on Greenhouse Gas Emissions, DETR 1999.

Next, calculate how much you currently spend on energy/m^2 of your offices. You may also wish to calculate cost per staff member by dividing the total annual cost by the average number of staff on site.

	Total annual cost (£)		Treated floor area (m^2)		Annual cost (£/m^2)
Gas		÷		=	
Oil		÷		=	
Coal		÷		=	
Electricity		÷		=	

15 Total cost £/m^2

Cost per person £/person/year

7.3 BENCHMARK

Compare your baseline figures for fossil fuel and electricity consumptions, emissions and costs with the good and typical industry averages opposite. Use these benchmarks when setting your targets.

Consider fossil fuel and electricity consumptions separately; this will help you to pinpoint which needs more urgent attention.
Source of data: Energy Use in Offices (ECON19) BRECSU 1998.

	Gas / oil consumption		Electricity consumption		Emissions[1]		Cost	
	Good practice kWh/m²	Typical practice kWh/m²	Good practice kWh/m²	Typical practice kWh/m²	Good practice $kgCO_2/m^2$	Typical practice $kgCO_2/m^2$	Good practice £/m² TFA	Typical practice £/m² TFA
Smaller office	79	151	33	54	30	54	3.50	6
Naturally ventilated open plan	79	151	54	85	40	69	4.50	7
Air conditioned open plan	97	178	128	226	78	139	8	14
Headquarters	114	210	234	358	131	207	13	20

Source of data: Energy Use in Offices (ECON19) BRECSU 1998.

[1] *Revised from UK Energy Statistics 1999.*

7.4 PRACTICAL ACTIONS

Energy purchasing

■ Ensure that energy is purchased centrally and get renewal quotes from existing and alternative suppliers annually.

■ Investigate taking all, or a percentage, of your energy from renewable sources or 'green tariffs'.

Heating and cooling

■ Find out how the heating and cooling systems are supposed to operate, and take advantage of any energy efficient ideas which are built in.

■ When heating, reduce the temperature of a room by one degree; it is unlikely that anyone will notice and you could cut the heating bill by as much as 10%. Most staff are comfortable at 19°C. Similarly, set air conditioning not to come on below 24°C.

■ Turn off heating and cooling in unoccupied rooms, making sure they are well ventilated to prevent condensation and mould.

■ Use timers and temperature control sensors to control output. If there are problems with inadequate heating at the start of the day, have the controls checked rather than override them by putting the heating on continuously.

■ Make sure fans, pumps and central plant such as cooling towers, boilers and chillers do not operate outside the periods when buildings are occupied, except where they are needed for preheating or precooling.

■ Make sure windows and doors are closed when heating or air conditioning is on.

■ Check insulation (walls, roof and pipes) and draught proofing is adequate to prevent unreasonable heat loss.

■ Ensure appliances such as fridges have a European Union Energy Rating of A or B.

■ Install local water heaters where possible, otherwise reduce the temperature of stored hot water (to a minimum of 60°C to avoid Legionella breeding).

Lighting

■ Replace tungsten bulbs with energy efficient, compact fluorescent lamps and slimline tubes. They typically make immediate savings of 50% and last up to ten times longer.

■ Use natural light wherever possible. Keep windows clean and encourage the staff to open the blinds rather than turn on the lights. Make sure lights can be switched off manually (particularly near windows) or install daylight sensors.

- Install presence detector lighting controls in places not in constant use, eg lavatories, store rooms and meeting rooms.

- Ensure lighting controls are clearly labelled especially if they are grouped together.

- For new installations, ensure you have several separate circuits so that lights in darker areas can be turned on independently of those in lighter areas.

- Run a 'Switch Off' campaign. It is **always** cheaper to switch off lights, however short the time period.

- Consider whole life energy cost savings - it may save you money in the long run to pay more initially, eg compact fluorescent lightbulbs. Don't forget to include the time spent and inconvenience of more frequent lightbulb replacement.

Office equipment

- Purchase equipment with USEPA 'Energy Star' standard or similar. If your computer has the 'Energy Star' or 'power save' feature make sure it is activated; machines are often set up with it disabled.

- Screen savers do not save energy. Enable power down settings and insist that staff switch off at least their computer monitors (these use twice the energy of PCs) when not in use, including when they are away from their desks for meetings or lunch.

- Ask your suppliers or manufacturers of new equipment to supply data on the average power consumed under typical operating conditions and the standby and low energy consumption.

Further help

- Detailed guidance, Case Studies and more specific advice are available free of charge from the Energy Efficiency Best Practice Programme. Call the Environment and Energy Helpline on 0800 585794.

Management and targets	Date
Who is responsible for energy management?	
12 How much fossil fuel do we use?	kWh/m^2
13 How much electricity do we use?	kWh/m^2
14 What is our baseline level of CO_2 emissions?	kg/m^2
15 How much do we spend on energy?	£/m^2
Target: Reduce electricity use to:	kWh/m^2
Target: Reduce gas use to:	kWh/m^2
Target: Reduce CO_2 emissions to:	kg/m^2
	by *(insert date)*
Target: Reduce energy costs to:	£/m^2
	by *(insert date)*

Transport

The cost of travel for businesses is increasing. It is estimated that by 2025 there will be 50% more cars on the road than there were in 1997, resulting in more traffic jams, reduced efficiency and increasing impact on the environment.

Many companies are implementing voluntary travel plans (sometimes known as Green Transport Plans) to reduce the costs and environmental impacts associated with business travel. A travel plan is a strategic package of initiatives to reduce car use and improve efficiency. The benefits of reduced car travel are numerous. Provision of incentives and facilities for employees to take public transport, cycle or walk to work can be cheaper than providing more car parking spaces. There are many other possible benefits, such as an improved image within the community, improved health and morale of the workforce and better access to labour pools.

Possibly the greatest benefit of a travel plan will come through the reduction of business travel costs through measures that reduce the need to travel and that improve the efficiency of existing business travel. For example, savings of 10% on fleet costs can be easily achieved through effective procurement and fuel management. Add to this increases in fuel taxes, together with the possibility of road tolling and of workplace parking charges, and the need to identify cost saving measures becomes even more important.

Industry Example 6 **Potential Savings**

The following savings are based on a business with 50 company cars doing 30 mpg and 15 000 business miles/year @ 58 pence/litre, excluding VAT. The company's total fuel cost/year will be around £66 250.

Increasing the efficiency of vehicles from 30 mpg to 40 mpg would save around **£16 560/year**.

A reduction in the same company's mileage repayment rate of 5 pence/mile would save **£37 500/year**.

8.1 THE PURCHASING LINK

The type of vehicle your business chooses to buy or use has a fundamental effect on transport related costs and environmental impact. Before you buy any vehicle,

ask the following questions:

- ■   Do we need the vehicle?
- ■   What is the 'whole life' cost of the vehicle? This includes the initial cost of the vehicle, its residual value, and fuel, maintenance and insurance costs.
- ■   Could we use alternative fuels? Liquid natural gas (LNG) and compressed natural gas (CNG) vehicles are considerably cheaper to run than petrol or diesel vehicles owing to lower tax rates.

8.2 BASELINE: CALCULATING TRANSPORT RELATED COSTS

Business travel

Record your business transport related costs in the following table. Use these figures to set reduction targets and justify implementing a travel plan.

	Cost (£/year)		Number of staff		Average cost/person
Staff fuel repayments		÷		=	
Car park rates and maintenance (construction, security and lighting)		÷		=	
Car fleet management and administration		÷		=	
Cost of car fleet		÷		=	
Unproductive travelling time	(Estimate)	÷		=	
Opportunity cost of car park land	(Estimate)	÷		=	
Total cost of company car travel		÷		=	£/person/year
Taxis and hire car costs		÷		=	
Bus travel		÷		=	
Train travel		÷		=	
Air travel		÷		=	
⑯ Total cost of business related travel		÷		=	£/person/year

Source of text: Preparing your Organisation for Transport in the Future: The Benefits of Green Transport Plans, DETR 1999.

8.3 BASELINE: CALCULATING TRANSPORT RELATED EMISSIONS

Calculating the emissions from different modes of transport is complex because so many chemicals are involved. However, by using CO_2 as your baseline and starting with car travel you can set manageable targets for reduction.

Travel by car on business

To calculate accurately your baseline carbon dioxide emissions you need to know how much fuel is used by your company cars on company business. An easy way to collect this data is by using fuel accounts and credit card records.

If fuel data are not available, use the following factors to convert distance data from mileage records: petrol car 0.20 kg CO_2/km, diesel car 0.12 kg CO_2/km.

Fuel type	Amount used/year		Conversion factor		Total CO_2 emissions
Petrol	litres	x	2.31	=	kg
Diesel	litres	x	2.68	=	kg
LNG	litres	x	1.65	=	kg
CNG	kg	x	2.67	=	kg
Car travel related annual CO_2 emissions				=	kg

NB   The above calculations cover travel by car. A complete picture of travel related CO_2 emissions for your organisation should include all modes of travel. Refer to publications in Section 10 for further guidance.

Source of data: Environmental Reporting: Guidelines for Company Reporting on Greenhouse Gas Emissions, DETR 1999.

Use the total annual CO_2 figure to calculate how much you produce per member of staff as follows:

Total annual CO_2 emissions (kg)		Number of staff in your organisation		⓱ Car transport related CO_2 emissions (kg/person/year)
kg	÷		=	kg/year

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⑱ Commuter travel

It is often difficult to collate the necessary information to make an accurate calculation of commuter related CO_2 emissions, therefore, the split between different modes of transport is a better baseline to use. Conduct a full staff survey to establish how your staff get to and from work. Key information required is mode of transport and distance travelled and why that mode is preferred. Use this information to set targets for reducing the percentage of staff travelling to work by car (see Section 10 for publications providing further guidance on how to tackle commuter travel).

8.4 BENCHMARK

No official industry benchmarks are available for transport levels and costs, as figures will be very specific to the nature of your business. Use your own baselines (using the total cost and CO_2 figures above) to set targets for reduction.

8.5 PRACTICAL ACTIONS

■ Develop and implement a travel plan for your company. Senior management commitment is essential and the plan should be communicated throughout the organisation.   See Section 10 for more sources of information on travel plans.

All travel should be planned using the following hierarchy:

Step 1   Minimise the need to travel

■ Plan staff commitments and use easily accessible conference venues to reduce travel.

■ Locate any new offices close to public transport systems and publicise alternative transport links to visitors.

■ Investigate the feasibility of home working or telecommuting for relevant employees. This need not apply to every working day and can significantly reduce the number of journeys staff make and maximise their working efficiency.

■ Increase the use of communications technologies such as e-mail, ISDN and video conferencing.

Step 2   Promote the use of efficient transport modes

■ Improve facilities for cyclists and walkers. Essentials are secure bike racks, showers and lockers.

■ Offer interest-free loans for public transport season tickets. If you are a large organisation, try to negotiate discounts for your employees. Provide staff with up-to-date information on public transport.

■ Promote car sharing. Establish a database or an informal meeting for prospective car sharers and guarantee a free taxi ride in an emergency.

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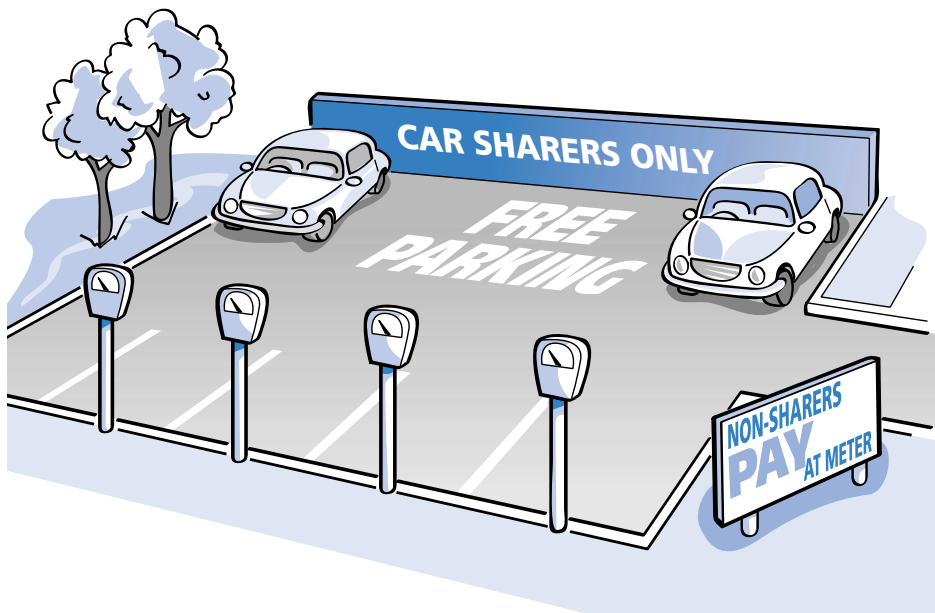
- Re-assess your car parking arrangements to include priority parking for car sharers, or charges for non-essential user parking. Use the money raised to fund transport projects.

- Change personal car mileage allowances to favour smaller cars and public transport - by having one rate only (instead of rates based on engine size), and making the maximum allowable claim no more than the cost of an equivalent second class rail fare.

Step 3   Make the most efficient use of company cars

- Purchase or lease fuel-efficient cars taking the whole-life costs into account - these can be calculated according to your projected usage, some car magazines provide comparison tables for total running costs per mile.

- Give training in advanced driving practice - fuel consumption can be reduced by 25%.

- Monitor the fuel performance of each vehicle and ensure they are regularly serviced and maintained by a reputable garage.

- If your fleet management is out-sourced, ensure that you set high environmental standards within the contract and specify aspects such as fuel economy and emissions testing.

Management and targets	Date
Who is responsible for managing transport issues?	
16 What is our baseline cost of business travel?	£/person/year
17 What is our baseline level of car travel CO_2 emissions	kg/person/year
18 How do we get to work?	% drive alone
	% car share
	% public transport
	% cycle/walk
Target: Reduce transport costs to:	£/person/year
	by *(insert date)*
Target: Reduce business travel related CO_2 emissions to:	kg/person/year
	by *(insert date)*
Target: Reduce commuter related CO_2 emissions to:	kg/person/year
	by *(insert date)*
Target: Reduce % employees driving to work to:	%

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Environment and Energy Helpline 0800 585794

Environmental reporting

Measuring your environmental performance makes good business sense. Quantification is the key to successful reporting and you can't manage what you don't measure. Reporting on environmental performance can help to focus attention on cutting waste and energy costs, which ultimately leads to overall efficiency gains and increased competitiveness.

Communicating to your stakeholders is important too. Having your own house in order gives you greater power with lenders, investors and insurers, regulators and the local community - not to mention customers and your employees. Increasingly, leading companies are using environmental criteria to select their suppliers in order to help improve their own environmental performance. By producing an annual environmental report you are able to manage the way your organisation is viewed and show that you are making progress against your targets. However, it is important that your approach to reporting is meaningful and accurate and not just a public relations exercise.

9.1 THE PURCHASING LINK

Some of the environmental impacts of your company may be 'hidden' in your supply chain. In order to accurately report on your performance you need to assess your suppliers as well as your own organisation. Before you choose a supplier or award a contract ask the following:

- ■ Does the supplier have an environmental policy or produce a report?
- ■ Is the supplier working within or accredited to an environmental management system?
- ■ Have the products or services been designed to reduce their environmental impact?

9.2 BASELINE: WHAT TO REPORT AND HOW

Use the baselines from each Section in this Guide as the basis for your report - paper, waste, recycling, water, energy and transport. Table 3 is one example, you may wish to choose some or all of the baselines to report on.

Table 3 Reporting your environmental impacts

Section	No.	Environmental impact	Baseline	Target	Units
3	❶	Paper use			reams/person/year
4	❼	Waste produced			kg/person/year
5	❾	Recycling rate			%
6	❿	Water use			m^3/person/year
7	⓮	Energy related CO_2 emissions			kg/m^2/year
8	⓱	Car transport related CO_2 emissions			kg/person/year

You should also report on initiatives that have an effect on your company's environmental performance, eg a travel plan, product design projects or a supplier assessment programme and include your plans for meeting your targets in the coming year.

There is no standard format for environmental reporting, you may wish to make it a regular part of the company's annual report, prepare a separate report or put it on your web site. Whatever format you agree on, ensure you build trust by being honest about both good and less desirable aspects of your performance, by comparing your performance with industry practice where possible and by providing contact points and inviting feedback.

9.3 BENCHMARK

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Use the normalised measurements (per person or per m^2) in this Guide to review your own environmental performance annually and to benchmark your company's performance against that of competitors. You should also compare the quality of your reporting against others in your sector where possible.

ACCA (Association of Chartered Certified Accountants) hosts an annual UK Environmental Reporting Award. The objectives of the award are to identify and reward innovative examples of environmental reporting. Use the good practice demonstrated in these reports to improve the standard of your reporting.

Environment and Energy Helpline 0800 585794

9.4 PRACTICAL ACTIONS

■   Senior management commitment is essential to successful environmental reporting. Assign a senior manager with responsibility for translating your commitment into action.

■   Identify the key environmental impacts of your business operations. Remember to include the indirect effects of your services and products - their impact on the environment once they have left your office.

■   Establish which good practice initiatives have already been implemented and whether any are planned.

■   Set out your company's commitment to environmental improvement in an environmental statement.

■   Following on from your environmental statement, look at your company's current policies, ensure that they adequately address your environmental impacts and produce a specific environmental policy covering the key operations and effects of your business.

■   Ensure that effective management and communication systems are in place to implement this policy.

■   Make monitoring your performance a regular agenda item for board meetings and benchmark your progress against other companies in your sector at least annually.

■   Review your progress against the targets set in this Guide. Develop the baseline indicators and targets used in this Guide to best reflect your environmental impacts.

■   Produce your environmental report annually. Add weight to your reporting by getting it independently verified.

■   Announce the publication of your report and make it available to your stakeholders.

Management and targets	Date
Who is responsible for environmental reporting?	
Target: Produce environmental policy by:	*(insert date)*
Target: Produce environmental report by:	*(insert date)*

Where next?

This Guide is designed to get you started on the road towards a more efficient and environmentally responsible office. You may now wish to investigate some of the areas covered in more depth or run an awareness-raising workshop to involve staff.

10.1 USEFUL PUBLICATIONS

10.1.1 Programme publications

The Environmental Technology Best Practice Programme produces a range of free publications and software to help small and medium-sized businesses, eg:

Good Practice Guides

GG38C   *Cutting Costs by Reducing Waste: A self-help guide for growing businesses*

GG253   *Finding Hidden Profit for Smaller Companies*

GG152   *Tracking Water Use to Cut Costs*

GG67   *Cost-effective Water Saving Devices and Practices*

GG125   *Waste Minimisation Pays: Five business reasons for reducing waste*

Software

IT96   *(WMIT) - Waste Minimisation Interactive Tools*

IT 249   *Waste Account*

All publications are available free of charge through the Environment and Energy Helpline on 0800 585794.

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10.1.2 General

Green Office Manual
Contact Earthscan Tel: 020 7278 0433

10.1.3 Waste

A Way With Waste: A Draft Strategy for England and Wales
DETR Publications: June 1999, Code 99EP0254/1
(due to be superseded in summer 2000)
www.environment.detr.gov.uk/wastestrategy/index.htm

Guidelines on Waste Reporting
DETR Publications: spring 2000
www.environment.detr.gov.uk/envrp/index.htm

10.1.4 Recycling

'Take Back' Mobile Phone Scheme
www.ectel.org

10.1.5 Water

Saving Water - On the Right Track 1 & 2:
A summary of current water conservation initiatives in the UK - March 1999
National Water Demand Management Centre

Conserving Water in Buildings Fact Sheet Pack:
14 factsheets on saving water in aspects of building management
National Water Demand Management Centre

Waterwise
A guide to saving money in your business
National Water Demand Management Centre

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Demand Management Bulletin
Bi-monthly newsletter about demand management and water conservation
National Water Demand Management Centre

10.1.6   Energy

A number of publications on reducing energy use in offices are produced by the Energy Efficiency Best Practice Programme and are available through the Environment and Energy Helpline.

Energy Use in Offices
Ref: ECON19

FOCUS: The Manager's Guide to Reducing Energy Bills
Ref: FOCUS

Managing Energy Use - Minimising Running Costs of Office Equipment and Related Air Conditioning
Ref: GPG 118

Managing for a Better Environment - Minimising the Running Costs and Impact of Office Equipment
Ref: GPG 276

10.1.7   Transport

A Travel Plan Resource Pack for Employers: An Essential Guide to Developing, Implementing and Monitoring a Travel Management Strategy for your Organisation
Contact the Environment and Energy Helpline

Preparing your Organisation for Transport in the Future: The Benefits of Green Transport Plans
DETR Publications: June 1999, Code 99ASCS0174A

Fuel-efficient Fleet Management
Ref: GPG 218
Contact the Environment and Energy Helpline

The Company, the Fleet and the Environment
Contact the Environment and Energy Helpline

Companies and Cars: The Way Forward
Ashden Trust/DETR/London First
Tel: 020 7665 1500

New Car Fuel Consumption: Save Fuel, Save Money, Save the Environment
Published bi-annually by the DETR and Vehicle Certification Agency
Tel: 0117 952 4126

10.1.8   Environmental reporting

Environmental Reporting: Getting Started
DETR Publications: December 1998, Code 98EP0285

Environmental Reporting: Guidelines for Company Reporting on Greenhouse Gas Emissions
DETR Publications: June 1999, Code 99EP0213

10.2   CONTACTS

Environment and Energy Helpline   *0800 585794*
www.etbpp.gov.uk
www.energy-efficiency.gov.uk

Department of the Environment,
Transport and the Regions   *0870 1226 236*
www.detr.gov.uk

Environment Agency

General Enquiry Line   *0645 333111*
Emergency Hotline   *0800 80 70 60*
www.environment-agency.gov.uk

National Water Demand
Management Centre

(NWDMC) Helpdesk   *01903 832073*

Association of Chartered Accountants
(ACCA)   *020 7396 5845*
www.acca.org.uk/technical

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Buy Recycled Campaign   *020 7253 6266*

The Environmental Technology Best Practice Programme is a Government programme managed by AEA Technology plc.

The Programme offers free advice and information for UK businesses and promotes environmental practices that:

■   **increase profits for UK industry and commerce;**

■   **reduce waste and pollution at source.**

To find out more about the Programme please call the Environment and Energy Helpline on freephone 0800 585794. As well as giving information about the Programme, the Helpline has access to a wide range of environmental information. It offers free advice to UK businesses on technical matters, environmental legislation, conferences and promotional seminars. For smaller companies, a free counselling service may be offered at the discretion of the Helpline Manager.

FOR FURTHER INFORMATION, PLEASE CONTACT
THE ENVIRONMENT AND ENERGY HELPLINE

0800 585794

world wide web: http://www.etbpp.gov.uk
e-mail address: etbppenvhelp@aeat.co.uk