environment sense



WEST LOTHIAN BUSINESSES



Find out how other organisations are doing, and network with like-minded individuals, at our regular business-to-business seminars on topical environmental issues that matter to your business.

To find out more telephone 0131 477 7000 or look us up on www.business-environment-network.org.uk



Preface

We are delighted to present this updated guide to small and medium sized enterprises in West

Lothian. It has been produced specifically to help smaller businesses benefit from improved

environmental management and has been sponsored by West Lothian Council with additional

funding through the European Regional Development Fund, and in-kind sponsorship from Gardiner

Russell Design, Pillans & Wilson Greenaway and Curtis Fine Papers.

Our partnership is committed to promoting good environmental practice throughout the local

business community. In this respect West Lothian Council has been a key supporter and funder of

the West Lothian Waste Minimisation and Environmental Management Initiative, which is run by the

Business Environmental Partnership.

Smaller businesses are very important to the West Lothian economy and we are committed to

helping this key sector improve their competitiveness. West Lothian Council is therefore very

grateful to both Business and Environment Network and The Business Environmental Partnership

for the preparation of this guide which will help us achieve this aim. We hope that local businesses

will embrace, and benefit from, the challenge of the environmental agenda.

Councillor Willie Dunn

West Lothian Council
Economic Development Spokesperson

Gregor Murray

Chairman Business Environmental

Partnership

Gerry McLaughlan

Chair Business and Environment Network
(Scotland)



Gunon

Gentli L. M.



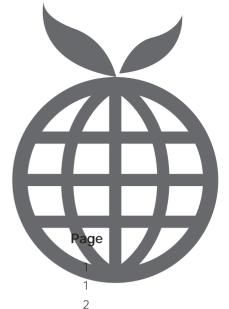
The Business Environmental Partnership is a division of Midlothian Chamber of Commerce and Enterprise working to promote good environmental practice amongst businesses.

It is supported by the following partners and funders: Business Enterprise Scotland, Business and Environment Network, The City of Edinburgh Council, Department of Trade and Industry, East Lothian Council, Scottish Water, East of Scotland Waste Minimisation Project, Eastern Scotland European Partnership, Edinburgh Chamber of Commerce, Envirowise, European Regional Development Fund, Forward Scotland, Midlothian Council, Midlothian Chamber of Commerce and Enterprise, Scottish Enterprise Edinburgh & Lothian, SEPA, Scottish Power, Power Systems, Shanks Waste Solutions, Shell, The BOC Foundation, The Hanson Environment Fund, The Committee of Scottish Clearing Bankers, West Lothian Council, Pillans & Wilson Greenaway Ltd and Gardiner Russell Design Ltd.

Business and Environment Network (Scotland) is a voluntary network promoting greater environmental awareness and improved environmental management and performance through the use of existing sources of information, funding and practical assistance. Partners & sponsors include: Shanks Waste Solutions, Bank of Scotland, Midlothian Council, East Lothian Council, The City of Edinburgh Council, West Lothian Council, Transco, Edinburgh Chamber of Commerce, The Business Environmental Partnership, Scottish Water, The Scottish Environment Protection Agency and Pillans & Wilson Greenaway Ltd.

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1 Introduction

It is possible that you have already had to address one or more environmental issues in relation to your business before now. It is also probable that you are too busy with day-to-day issues to be able to spend much time on environmental management.

This guide has been produced specifically to help the overworked manager realise the commercial benefits of good environmental practice. It applies whether you are offering a service, running a shop or manufacturing a product.

1.1 What are the Commercial benefits of Improved Environmental Management?

Cost Savings

Through waste minimisation, energy efficiency and company and employee transport.

- Minimised commercial risks and liabilities
 By meeting regulatory requirements and preventing pollulation
- Improved Competitive Advantage

 By meeting customers' environmental expectations and by developing products and services with associated environmental benefits.
- Improved employee satisfaction

 By involving and motivating staff in environmental improvement projects.

1.2 How is the Guide Structured?

In order to help you identify some of the environmental issues that might be relevant to your business, the following table contains an overview of some of the environmental issues for various businesses. It is not a comprehensive list but should help you get started.

The next four chapters provide more detailed advice and practical suggestions to help you to realise the business benefits under the headings: Cost Savings; Minimising Commercial Risks; Improving Your Competitive Advantage and Making Things Happen. The final chapter contains contact details of helpful organisations and useful publications.

1.3 Environmental Issues for some local Businesses

	Energy/transport	Water	Waste	Air Emissions	Chemical	Other
Tourism						
Bed and Breakfast, Hotel	Heating, hot water, lighting	Guest use, catering, laundry cleaning	Glass and paper, food waste, packaging	Odours and other emissions from kitchens	Cleaning chemicals	Could provide public transport information when bookings are made. Green Tourist Business Scheme
Tourist Attraction	Heating, hot water, lighting	Catering, toilet facilities, cleaning	Packaging, food waste, litter		Cleaning chemicals, Herbicides and pesticides	Access by public transport. Growing customer interest in 'Green tourism'
Retail						
Restaurant	Cooking, chilling, heating, hot water, lighting	Food preparation, dishwashing, tollets, cleaning	Solid waste including food scraps, packaging, fats and oils	Odours and other emissions from kitchens	Cleaning chemicals	Demand for organic foods and natural products
Pub/Club	Heating, lighting, extraction	Washing, toilets	Glass, cans and other packaging	Air filtration and circulation	Cleaning chemicals	
Hair Salon	Heating, hot water, lighting, equipment	Rinsing water effluent from perms, colours and washes, toilets, laundry	Plastic bottles and packaging. Hair		Solutions used for treatments, shampoos	Demand for environmentally friendly products. Animal testing of cosmetics
Dry cleaners Laundry	Dry cleaning/washing machines, tumble dryers, heating, lighting	Rinsing water	Packaging	Steam emissions from the use of dry cleaning chemicals	Detergents/dry cleaning chemicals	Biodegradability of soap powders
Retail Shop	Heating, lighting, chilling		Packaging waste, out of date stock			Customer demand for environmentally friendly products and reduced packaging
Transport						
Garage, vehicle repair respraying	Equipment use, compressed air, heating, lighting	Effluent from wash bays and other cleaning processes	Grease and oil, batteries, old parts, packaging, containers, unused paint, chemical waste	Vehicle emissions. Emissions from paint spraying and solvents, fumes from welding	Fuels, solvents, cleaning chemicals, oils, antifreeze	Engine tuning to optimise efficiencies
Transport and distribution	Vehicle mileage Driver training	Effluent from vehicle cleaning	Packaging waste. Waste from vehicle maintenance	Vehicle emissions	Storage and handling of oil	Route planning.Vehicle design. Cleaner fuels

	Energy/transport	Water	Waste	Air Emissions	Chemical	Other
Building Services						
New building and refurbishment	Compressed air, site equipment, vehicle use	Effluent from cleaning processes, site drainage	Demolition waste, concrete, plaster, brick, wood, steel, paint	Dust from demolition and construction. Solvents from paints		Worker commuting. Noise. Government policy to promote new building on brownfield sites
Glaziers, plumbers	Vehicle use		Glass, packaging waste, lead piping			
Heating, ventilation, refrigeration services, electricians	Vehicle use		Packaging, fluorescent tubes		Refrigerant gases	Customer demand for energy efficient appliances
Contract cleaning	Vehicle use		Used cloths		Cleaning chemicals, aerosols	
Manufacturing						
Craft Industries	Heating, lighting, equipment use		Process waste/ packaging		Paints/finishes	
Engineering	Compressed air, equipment use, motors, heating, lighting		Metal wastes. oil wastes	Air emissions from solvent use and welding	Coolant oils, degreasing chemicals	
Electronics	Compressed air, equipment use, heating, lighting	Cleaning systems	Packaging. rework, plastic and metal	Fumes from soldering	Cleaning chemicals	Environmental issues associated with disposal of electronic goods
Food manufacturing	Heating, cooking, refrigeration	Cleaning	Food waste, packaging waste	Odours and other emissions from cooking processes	Cleaning chemicals	Health and safety/hygiene
Plastics manufacturing	Process requirements, heating and lighting	Water used in cooling systems	Process waste/ packaging		Lubricating oils	

	Energy/transport	Water	Waste	Air Emissions	Chemical	Other
Manufacturing						
Printing	Equipment, heating, lighting	Effluent from printing and cleaning processes	Packaging waste, faulty product and change of runs	Air emissions from use of solvents	Solvents, inks and other printing chemicals	Demand for more environmentally friendly methods and recycled paper. New technologies
Woodworking	Equipment use, heating and lighting		Wood waste, sawdust	Dust and emissions from solvent based finishes	Varnishes and other finishes	Sustainability of timber supplies
Professional services						
Architects, management consultants, accountants, computer services, legal services	Heating, lighting, computer/IT equipment		Office waste/unwanted office equipment			Potential to incorporate environmental considerations into advice provided to customers
Medical practices/ Dentists	Heating, lighting, equipment	Discharges to drain which can include amalgam	Clinical wastes: mercury compounds and other special wastes			Longer term health implications
Other						
Photographers and developers	Heating and lighting	Discharges from processing	Packaging waste, film waste	Fumes from photographic chemicals	Photographic chemicals	New technologies such as digital cameras
Landscape gardening	Vehicle fuel	Water used during planting and maintenance activities	Horticultural/botanical wastes, pesticide residues	Vehicle emissions	Pesticide and other horticultural chemicals	Use of peat

1.4 For Your Own Use

	Energy/transport	Water	Waste Air Emissions	Chemical	Other
Your Company					



2 Cost Savings

Even for a small business, a reduction in operating costs can significantly improve profitability. Several demonstration projects have shown that substantial savings are possible, through both energy management and waste minimisation. As an example, the Business Environmental Partnership's Waste Minimisation and Environmental Management Initiative has identified over £1.7 million savings for small businesses, with over £650,000 already realised. There are many more examples of businesses which have achieved savings without the need for major capital investment.

Cost savings can be achieved through any of the following:

- (£) Waste Minimisation
- (£) Improving Energy Efficiency
- (£) Company and Employee Transport

2.1 Waste Minimisation

Waste is the use of energy, materials and labour for activities which do not add value to the product you make or the service you provide to your customers. Many companies found that simple analysis of the process can help identify opportunities for significant savings. Such savings go straight to the bottom line.

- The East of Scotland Waste Minimisation Project, co-ordinated by (then) East of Scotland Water had, by June 2000, achieved actual savings of over £4m in participating companies. The demonstration project assisted 8 full member companies and 36 associate members. A second phase of the project is known as REAP.
- A waste minimisation audit of textile manufacturer Halley Stevensons uncovered potential to improve their wax process line.
 When implemented, this will achieve annual cost savings of over £2,000, with a payback period of less than one year.
- Iron foundry Ballantines generated 25 tonnes of waste sand per week, which it was unable to reuse. Investigation found Encore, an aggregate recycling company, which is able to utilise waste foundry sand as an aggregate mix. This mutually beneficial relationship saves Ballantines an estimated £1,000/year in disposal costs, plus waste licensing and transport costs.

- An environmental review at Waddies Print Group identified potential savings of over £45,000 per annum, were ink supplied in new cartridges rather than the traditional tins. Trials have indicated a substantial reduction in wasted ink, less requirement for special waste disposal, and a lowered legal responsibility with regard to waste.
- Highlander Snacks conducted a review of waste in 4 areas: product waste, water, gas and electricity. Potential annual savings could be approximately £30,000 through recommended initiatives. £25,000 savings was quickly achieved.
- Malt extract manufacturers Scotmalt employed an undergraduate student, through the annual Environmental Placement Programme, to undertake some monitoring work. They have now realised costs savings in the region of £60,000 per annum through reduced water and energy wastage.

Recommended Actions

General

Recent initiatives such as the East of Scotland Waste Minimisation Project have consistently demonstrated that companies underestimate the full cost of their waste, which can typically be ten times the cost of disposal.

Envirowise research suggests that savings equivalent to 1% of turnover are often easily and cheaply achievable through waste minimisation programmes.

Water

Employees often regard water as a free resource, particularly when undertaking washing processes.

The costs of water and effluent disposal have both risen sharply over the last few years and is expected to continue to rise in the near future.

Investigate opportunities to:

Avoid or reduce wastes as a first priority

and then to:

- re-use your wastes
- recycle your wastes
- Contact the Business Environmental Partnership for practical advice on waste minimisation
- Review washing operations to see if there is any scope to reduce water use, for example by using spray head taps
- Ensure there are no water leaks, including underground pipes
- Consider installing controllers and other water saving devices

2.2 Improving Energy Efficiency

The cost saving benefits of energy management have been well publicised and with the introduction of the Climate Change Levy energy efficiency becomes even more cost effective. There are often practical opportunities to reduce costs which do not require any capital investment, through good housekeeping and staff awareness. As shown below there are many opportunities for smaller businesses as well as the larger organisations.

Moredun Research Institute identified potential • An investigation into energy use at Bell Bakers annual savings of £10-15,000 through relocating and rationalising freezers, improved lighting controls, more efficient scheduling of

identified £17,000 potential annual cost savings, of which over £8,000 required little or no capital expenditure.

 Dalhousie Castle Hotel installed a new heating controller in all bedrooms following a trial which demonstrated 24% costs savings. Energy efficiency measures will soon achieve a further £12,000 pa in savings. Tourist attraction Edinburgh Butterfly and Insect World must maintain high operating temperatures to preserve stock. A recent essential refurbishment of the glasshouse, substituting a polycarbonate material, has reduced heat energy requirements by 25% and offered greater protection for the insects during a recent severe winter

The following table provides some initial guidance. Further advice and information is available from the Scottish Energy Efficiency Office and the Business Environmental Partnership.

Energy **Recommended Actions** General Useful analysis can be undertaken using data Use the energy bills to identify the scope from energy bills. for savings Savings of between 10% and 20% of energy Make someone responsible for energy costs are generally easily achievable from low management cost or zero cost measures. Raise staff awareness of energy issues and provide training where appropriate Staff awareness and participation is often critical in ensuring the success of energy improvement plans. Contact one of the organisations listed at the end of this guide for more detailed advice and information **Energy Purchasing** The markets for electricity, gas, oil and propane Check to make sure that the best tariff have all become more competitive and there is has been negotiated/consider joining a now a wide range of suppliers. Many buying group companies have been able to reduce their energy costs by as much as 20% by negotiating Ensure contract conditions are assessed with the various suppliers. carefully as they can be as important as the tariff itself

Heating and Hot Water

Heating typically accounts for about half the energy used in offices. Heating costs rise by almost 10% for each 1°C of additional heating.

Cost effective controls are now available that can determine the optimum heating period needed in the morning to match weather conditions.

- Turn down thermostats instead of opening windows
- Check windows and doors for draughts and heat loss
- Set air conditioners to switch on only when temperatures reach a defined temperature

Recommended Actions

Heating and Hot Water

Savings of 5% – 10% can often be achieved by checking and optimising gas boiler efficiencies.

 Ensure that there is a regular maintenance schedule for heating equipment and include efficiency checks on any gas or oil boilers

Lighting

Energy efficient lights typically use only 20% of the electricity of a conventional tungsten filament lamp.

Slimline fluorescent tubes use up to 30% less electricity to run compared to standard 38mm tubes.

One fluorescent tube with a good quality reflector provides nearly the same amount of light as two tubes without a reflector.

Machinery and Equipment

Compressed air is a very expensive form of energy. A 3mm diameter hole in a standard industrial compressed air system can cost as much as £420 per annum.

A photocopier left on overnight wastes enough energy to make 5,300 A4 copies.

- See if there are ways which would enable you to take more advantage of natural light
- Where possible, replace tungsten lamps with compact fluorescent lamps
- Ensure that lights are not left on unnecessarily
- Ensure lamps and fittings and roof lights are clean
- · Consider fitting sensors to control lights
- Ensure there are no leaks in any of the compressed air lines or equipment
- Only use compressed air if absolutely necessary
- Ensure energy savings features on computers and photocopiers are activated

2.3 Company and Employee Transport

With rising fuel costs and increasing congestion, transport issues have become increasingly important for businesses. In addition to the need to use fuel efficiently, a co-operative attempt to reduce congestion will help to improve delivery efficiencies, reduce delays and wasted time, and may reduce employee stress, illness and absenteeism.

 Agilent Technologies developed a package of measures to encourage employees to consider alternative modes of travel to work, including promotion of bus and rail, facilities for cyclists and Priority parking spaces for ca sharers. The Travel Plan achieved a 5%

reduction in solo-occupancy car trips

Supported by West Lothian Council and the Chamber of Commerce, the Kirkton Campus Green Commuting Forum was set up to lobby transport providers and to work together to promote and perhaps provide better public transport to the area.

 City Couriers provides an environmentally friendly courier service including speedy city cyclists and gas powered vans. Not only are harmful emissions significantly reduced, gas is cheaper than other fuels. Benefiting from this unique approach, City Couriers have already established an impressive client list, which includes many of Scotland's top companies. The Royal Bank of Scotland post a wealth
 of transport information on their intranet site,
 which also incorporates a matching facility for
 employees to car-share to their Gyle offices.

Transport

Recommended Actions

Company Vehicles

Petrol and diesel consumption figures for vehicles can be readily checked by simple monitoring.

Good driving techniques can reduce consumption by 20%. They also reduce the number of accidents.

- Regular servicing, including tuning, will save money and reduce exhaust emissions. Ensure tyres are checked regularly and steering realigned if tyre wear is noticed
- Check to ensure that you are using the most cost effective methods of transport for goods

Employee Travel and Commuting

The optimal management of travel benefits both employer and employee.

- parking provision is very expensive
- for the employee, commuting has a monetary cost as well as a time value
- for the employer, there is the cost associated with work related travel as well as the employee time lost during travel

- · Ensure routes are planned efficiently
- Consider providing incentives for employees to use public transport, cycle or walk such as interest free loans for season ticket/bicycle purchase
- Provide maps, timetables, lockers, as well as shower and change facilities for employees using public transport or cycles
- Encourage your employees to make more use of car pooling or sharing



3 Minimising Commercial Risks

It is essential that your company is aware of, and complies with, both current and future legislation, to avoid the expense of dealing with costly clean up and/or other penalties. Ensuring that environmental risks are effectively managed is also critical in minimising the associated commercial risks.

- A review of the effluent treatment system at Dage Precision Industries recommended low cost measures to reduce effluent and extend the life of equipment. Not only will this ensure compliance with Scottish Water standards, but it could potentially avoid capital expenditure of up to £100,000 on a new treatment plant.
- An investigation was conducted at Dean's
 Finishing to identify sources of zinc in the
 effluent, to avoid the need to purchase an
 effluent treatment plant. The solution was to
 change the process, enabling the company to
 meet discharge consents, produce a better
 quality product and save £10,000.
- Empteezy, manufacturer of plastic and steel storage systems, reduced air emissions by 60% through use of alternative coatings, solvent recovery and varying type range and finish of products. Cost savings of over £9,000 have also been achieved.

Prompted by an environmental questionnaire from a major supplier, Duneill Engineering conducted a review which suggested measures to minimise environmental risk and tighten legislative compliance. They also developed posters to raise employee awareness of environmental responsibilities. The customer was so impressed they wrote to complement

3.1 Legal compliance

Environmental regulation is a complex and rapidly changing area. In general, the regulations exist to prevent the release of potentially damaging materials in quantities that are harmful to either the public or the environment. Even if you are not a manufacturer, environmental regulations and standards may still be relevant to you.

The regulations operate in two broad ways – regulations that prevent harmful actions (dumping of asbestos waste for instance) and licenses that control actions so no harm is caused. You need to be aware of what you must not do, and what actions require a licence. This section gives a broad guide but expert guidance is required if you think your business may be affected. The regulating authorities can offer some assistance, but an environmental consultant should be used to obtain full advice on how the regulations affect your business.

What the current Regulations cover:

Those particularly affecting small businesses include:

Disposal of waste from business operations

You must ensure your waste is disposed of legally and that it is removed by a registered carrier, though you may in general transport your own waste to a disposal site. Transfer Notes are required to demonstrate that waste has been passed on correctly. Some hazardous wastes such as used solvents require special documentation.

Receiving, treating and disposing of waste materials

Businesses dealing with waste must be licensed. You also have a duty of care to ensure others who buy, sell or transport your waste are doing so legally and that the waste in your care does not escape or harm the environment or the public.

Recovery of Packaging Waste

If your turnover exceeds £2 million and you handle more than 50 tonnes of packaging material in a year, then you may have to register your business and recover a percentage of your packaging waste.

Disposal of liquid waste to sewers and rivers

Trade effluent which includes discharges from vehicle washing, can only be discharged to sewers with the permission of Scottish Water, who may prohibit some chemicals and charge for disposal. A consent is required to discharge water to a river (including drains which lead to rivers). You can be prosecuted if you pollute a river or stream and may have to pay for clean-up work - not knowing where your drains lead is not an excuse.

Emissions to the air (dark smoke, grit and dust from industrial processes)

The Clean Air Act 1993 prevents gross pollution of the air from industrial processes. Some more polluting industrial processes are controlled by the Environment Protection Act. If excessive dust, fumes, or odour is created you may cause a statutory nuisance and your local authority may serve a notice on you to stop.

Emissions of solvents (eg degreasers, paints etc) and other volatile substances

If significant quantities of these materials are used you may need to register your process or reduce usage.

Some Industrial Processes

Those that have a particular impact on air quality (small waste incinerators and vehicle body shops for example) are known as Part B processes under the Environmental Protection Act and have to have an authorisation to operate. They are specified in the Environmental Protection (Prescribed Processes and Substances) Regulations 1991, available from the Stationery Office.

Use of radioactive sources (such as some non-destructive testing equipment)

These must be registered and their disposal must be authorised, though some low activity sources are exempt.

Future regulations are likely to cover more industrial processes (including poultry farms), disposal of certain types of used product (particularly electrical goods and cars), recovery of petrol vapour from filling stations and abstraction of water from rivers and underground.

Who Regulates What

Scottish Environment Protection Agency (SEPA)

Contact: 0131 449 7296

- Movement of waste
- Waste storage and disposal sites
- Discharges to rivers (this may include your surface water drainage)
- Operation of large industrial processes and some smaller ones which have an important impact on air quality (such as small waste incineration plants and vehicle body shops)
- Radioactive sources
- · Registering of packaging waste producers

Scottish Water

Contact: 0845 601 8855

• Discharges to public sewers

Local Authority

• Public health issues, emissions to atmosphere, noise and other nuisance

There are many organisations which can help to identify the legal issues relating to business activities.

The Duty of Care Regulations are relevant to all businesses which produce waste, including offices and the self employed.

The regulatory authorities are willing to offer practical advice and guidance and many companies have found that working in partnership often leads to benefits for the company as well as the environment.

- Find out more about the regulations relating to your business by contacting:
 - your trade association
 - The Envirowise free Helpline
 - SEPA/Scottish Water
 - Your Local Authority
- Regularly check to make sure that you are up to date with new regulations

3.2 Pollution Prevention and Site Management

Pollution Prevention is an approach which evolved in the manufacturing industry. Its principles have now spread to the service sector. Prevention is about identifying potential environmental risks and managing them to ensure they do not materialise.

Pollution Prevention will help to:

- reduce environmental risks and associated commercial liabilities
- obtain cheaper insurance cover
- avoid insurance and financial implications from pollution prosecution
- reduce waste/emissions and associated costs
- contribute to a positive image/improve employee relations

Pollution Prevention and Site Management

Recommended Actions

Many environmentally hazardous chemicals are still widely used, even in small businesses. Responding to the concern, the chemical companies are now producing alternatives such as citrus based cleaning agents, low solvent paints and bacteriological alternatives to chemical pesticides.

As well as ensuring that environmental risks are effectively managed, it is good practice to prepare practical emergency and spillage procedures. Even small spillages of oil or cleaning solvents can be expensive to clean up, particularly if they pollute water.

A well maintained site will help create a good impression with staff, customers and the local community.

- Review chemical and waste storage and handling and ensure all environmental risks are minimised. For example, by ensuring that oil containers are bunded
- Develop spillage and emergency procedures and ensure that all staff are aware of these
- If your business uses refrigeration or air conditioning equipment or solvents for cleaning, check to see if they contain ozone depleting substances, i.e. CFCs, HCFCs or halons. If so, you may need to find an alternative
- If you use any other hazardous chemicals, check with your supplier to find out if there are any alternative, less environmentally damaging, substances
- Check your insurance policy



4 Improving Your Competitive Advantage

As well as ensuring that your company is efficient in the manufacture of your product or the delivery of your service, there are a number of other ways in which environmental management can contribute to your competitive advantage. The following areas will be considered:

- Meeting your customers' environmental expectations
- Developing new business opportunities
- Planning for the future

4.1 Meeting Customers' Environmental Expectations

Customers are showing increasing interest in the environmental performance of the businesses from which they purchase goods or services. This applies both to the general public and to commercial customers and can take the form of informal assessments or more formal questionnaires. Some organisations such as the larger companies are also including environmental sections within their tender process.

It is clearly important for any business to be able to respond positively to such interest. Taking the initiative by addressing the environmental issues relevant to your business and by developing an Environmental Policy will help to ensure that you are able to meet your customers' environmental expectations.

- Paragon Inks, a small UV Ink manufacturer, has both exceeded customers expectations and achieved competitive advantage by providing a value added service which reduces customers waste disposal costs and generates a profit for Paragon Inks.
- Paterson SA is the first hairdressing chain
 in Scotland to develop an environmental
 management programme. The programme,
 which includes targets for waste and energy,
 was partly based on questionnaire research
 with their customers. To demonstrate their
 commitment, a copy of their Environmental
 Policy is displayed in all salons.
- Following an environmental review, K&I
 Coachbuilders became the first Scottish
 company to achieve the Vehicle Builders and
 Repairers Association's quality standard XL
 incorporating ISO9002, which includes
 environmental management.
 - Recognising the growing interest of overseas visitors in environmental issues, the Scottish Tourist Board have developed the Green Tourism Business Scheme to help guest houses and hotels improve and demonstrate their environmental performance.

4.2 New Market Opportunities

The environmental sector is regarded as having significant potential, for conventional businesses that introduce environmental features into their products or services, as well as those which specialise in environmental goods and services.

- Electronics company Thistle Design, designer and produced an integrated system for water level monitoring. The environment sector has subsequently become one of their main markets, representing ¹/₃ of turnover, and additional future orders are estimated at £12,000 per year.
- Recognising the lack of economically viable applications for waste glass,
 Mac-Glass Recycling developed products from cullet unusable by the container industry.
 The company now produces a range of products using waste glass as an alternative to sand, transforming the business from a collecting/sorting operation.
- The Caledonian Tree Company developed an innovative root enhancement system made from post-consumer recycled plastic With support from Midlothian Council the company relocated manufacturing to Scotland where it will further develop the product range.
- Living Water has clients throughout the UK for their natural treatment systems. As well as treating waste waters, the reed beds and constructed wetlands attract wildlife and become attractive features in their own right.

4.3 Planning for the Future

With so many issues to be addressed on a day to day basis, businesses rarely have time to take a step back and plan for the future. When opportunities arise, it is important to consider the environmental factors which could be relevant to your business, as part of the planning process. As examples:



Following the introduction of the Landfill Tax and the Climate Change Levy, it is expected that the Government will introduce other tax measures such as:



The development of new environmental technologies might make conventional technologies obsolescent

- an aggregates tax on raw material extraction
- reductions in VAT for further energy saving materials and actions
- incentives to promote the use of natural gas for vehicles

From a wider perspective, as governments and others respond to the challenge of Sustainable Development, it is essential that small businesses evaluate the implications from a strategic perspective to ensure survival and take advantage of new business opportunities.

One useful method to help you identify possible factors which need to be considered involves analysing possible trends under the five headings:

Political/Legal Policy initiatives, new regulations

Economic Tax incentives, least cost production

Socio-cultural Population demographics, lifestyle changes, attitudes, consumerism

Technological New technological developments, rate of obsolescence

Environmental Product/service design, efficient processes, waste minimisation,

Producer Responsibility initiatives

To help smaller businesses assess the longer term options, Midlothian Chamber of Commerce and Enterprise produced 'Success & Sustainability'. The ultimate aim of this guide is to help businesses ensure their long term prosperity.

Gaining a Competitive Advantage

Recommended Actions

It is becoming increasingly common for organisations to ask their suppliers for copies of their environmental policies and evidence that they are complying with environmental regulations.

Many companies are now actively responding to the environmental challenges affecting their industry by developing new products and services with associated environmental benefits.

- Ensure that you are in a position to meet any of your customers environmental demands
- Develop an Environmental Policy (see Section 5)
- Explore opportunities to build partnerships with suppliers to help reduce environmental impacts
- Assess the design of your product/ service from an environmental perspective and evaluate potential of any opportunities to strengthen the environmental features and to exploit new market opportunities. For example, design products:
 - to have a long life
 - to be easily repaired
 - to be energy efficient
- Incorporate environmental considerations into business planning



5 Making Things Happen

From a business perspective, it is essential that you are efficient in your use of resources and comply with those regulations which relate to your activities. As discussed in the previous chapter, it is beneficial to address the wider environmental issues to help maintain and enhance your business competitiveness.

Those companies which most successfully realise the benefits of environmental management:

- involve employees and allocate responsibilities
 develop environmental policies and action plans
 regularly review performance
- communicate their policies and achievements to staff, customers and other interested parties

Many companies are also developing Environmental Management Systems as an effective method of managing the environmental aspects relating to their businesses.

- Building on existing good environmental practice, Capital Cooling prepared an Environmental Policy to demonstrate their commitment to continual improvement.
 They have now recruited a new employee to further develop the environmental management system.
- Napiers, the Edinburgh based manufacturer and retailer of natural medicines, creams and ointments already employ a number staff who are very environmentally aware.
 Largely on their own initiative, the staff have developed an Environmental Improvement Plan and have shared the responsibilities for implementing the plan. Not only does this help to meet their customers' demands for high environmental standards, it has also developed a strong sense of pride amongst the staff.
- Alba Trees put key staff through an environmental training session as a first step in development of their environmental management system. Work is ongoing towards ISO 14001 accreditation which will further enhance the company's credentials in a market that is very aware of the issues.
- Macmerry Industrial Estate, was surveyed by an Environmental Placement Programme student to identify key issues, as part of an environmental awareness raising initiative The Macmerry Sustainability Partnership has now been established with East Lothian Council, Power Systems Scottish Power and Scottish Water to help businesses benefit from the opportunities identified.

5.1 Involving Employees

Employees are an excellent source of ideas for environmental improvement and can often be motivated by being involved. Furthermore, their active support is going to be critical if the business is to successfully implement improvement plans. Personnel development programmes, such as Investors in People, provide an excellent framework within which to incorporate environmental training. Encouraging and raising awareness of environmental issues with employees will both motivate and encourage staff loyalty, as well as helping you to realise the wider commercial benefits of environmental management.

5.2 Environmental Policy and Action Plan

An Environmental Policy is a formal commitment, which sets out your approach to the environment and your longer term objectives. It should be promoted to employees, customers and any other stakeholders in your business. The policy should include a commitment to meet all relevant regulatory and legislative requirements plus a commitment to continual environmental improvement.

In order to ensure that the Policy is implemented, it is a good idea to develop an Environmental Action Plan. The plan will include more detailed objectives, agreed by management and staff, and will be reviewed regularly.

It is likely to be most effective if the objectives and targets are measurable and realistic, and if responsibilities and resources are allocated to each objective, with target dates for completion.

Making Things Happen

Many organisations, publications and consultants give practical guidance on the development and implementation of environmental policies and action plans, as well as the development of more formal environmental management systems.

It is often a good idea to run staff awareness programmes and to establish environmental action teams to help get the employees involved.

The Institute of Environmental Management and Assessment supports the professional development of environmental managers and auditors. The IEMA now has over 500 members in the central belt of Scotland, and growing.

Recommended Actions

- Ensure that you are in a position to meet any of your customers environmental demands
- Assign environmental responsibilities
- Develop an environmental policy and action plan
- Ensure that employees are actively involved in any environmental initiatives
- Incorporate environmental training within staff development plans
- Communicate your environmental achievements to staff, customers and the local community
- Consider the development of an environmental management system



This is to certify that the management and staff of

Environmentally Considerate plc

recognise the importance of the environmental issues relating to the business and are committed to:

- meet or exceed regulatory requirements
- minimise the use of materials, water and energy
- minimise wastes produced in all parts of the business
- minimise environmental risks associated with all our operations
- minimise the environmental impact of our transport operations
- assess the environmental impact of all our operations on a regular basis
- continuously improve our environmental performance
- work with customers and suppliers on the environmental issues relevant to our activities
- involve all staff in the implementation of this policy.

Signed	Date	
Managing Director		

The above is an example of a simple Environmental Policy which properly implemented and monitored will encourage good environmental practice.



6 Useful Contacts

6.1 **Organisations**

Listed below are just some of the organisations that can provide information and advice to help you with any of the various environmental issues relating to your business.

Biowise Biotechnology at work

Helpline Tel: 0800 432 100 www.dti.gov.uk/biowise

Biowise aims to help companies find biotechnology solutions to industrial problems including treatment of effluents/emissions and the remediation of contaminated land. Biowise can provide both advice and information.

Business Environmental Partnership

Tel: 0131 654 1234 www.met.org.uk/bep The Business Environmental Partnership (BEP) can provide free advice and practical assistance to help businesses with waste minimisation and environmental management.

The BEP can also provide supervised student placements through the Environmental Placement Programme which is run in association with the Shell Technology Enterprise Programme (STEP).

Business & Environment Network

Tel: 0131 477 7000

www.business-environment-network.org.uk

Business and Environment Network (Scotland) is a voluntary network promoting greater environmental awareness and improved environmental management and performance among businesses. Business and Environment Network (Scotland) organises a series of seminars to promote best practice and share business experience.

Tel: 01923 66 44 61 www.bre.co.uk/waste

Building Research Establishment (BRE) BRE provides information and advice on the impacts of buildings and their components on global, local and indoor environments. Also provides information on the availability and demand for construction and demolition waste.

Chambers Of Commerce

Edinburgh Chamber of Commerce Tel: 0131 477 7000 Midlothian Chamber of Commerce and Enterprise Tel: 0131 654 1234

West Lothian Chamber of Commerce Tel: 01506 777937

Chambers of Commerce provide a local forum for business. Services include business support and advice, quest speakers and events, visits to interesting locations, networking opportunities, business training, and affinity schemes.

Unit (JEMU)

Tel: 0207 215 1078 www.dti.gov.uk.jemu

DETR/DTI Joint Environmental Markets JEMU aims to provide industry with details of opportunities available for exporting to overseas environmental markets. JEMU currently holds a database of 5,000 UK suppliers of environmental goods and services.

Energy Savings Trust

Tel: 0131 244 7683 www.est.org.uk

Environment and Energy Helpline

Tel: 0800 585794

Environment Council

Tel: 0207 836 2626

www.the-environment-council.org.uk

Envirowise

Tel: 0800 585794 www.envirowise.gov.uk

Graduates for Growth

Tel: 0131 477 8029 www.graduatesforgrowth.org

Greentie Centre

Tel: +31 46 4202203 www.greentie.org

Institute of Environmental Management + Assessment (IEMA)

Tel: 0131 553 5283 www.iema.net

Local Authority

Lothian and Edinburgh Environmental Partnership (LEEP)

Tel: 0131 555 4010 www.leep.org.uk Manages various programmes to encourage energy savings. Can provide grants, rebates or loans to assist with e.g. installation of energy efficient heating and lighting, and conversion to cleaner fuel vehicles.

Free information and advice on every aspect of environmental and energy management, either immediate solutions to urgent problems or longer-term strategies for achieving lower costs and higher profits.

The Environment Council has established the 'Conservers at Work Scheme' which provides support to individuals who want to improve their company's environmental performance. The Council also publishes an Environmental Handbook and the 'Who's Who in the Environment Scotland'.

Envirowise offers free environmental information and practical assistance. As well as advice through the telephone helpline, and an extensive range of publications such as 'Finding Hidden Profit – 200 Tips for Reducing Waste', businesses may be able to benefit from a free visit from a counsellor to identify measures to improve environmental performance.

Largely funded by Scottish Enterprise Edinburgh and Lothians and supported by CBI Scotland, Edinburgh Chamber of Commerce and the Edinburgh Universities, to assist small and medium companies to employ graduates. Offers a sifting and screening service, followed by a training and mentoring programme.

The *Greentie Centre* maintains a user-friendly database of environmental technologies, established in response to Agenda 21, to facilitate the exchange of information on greenhouse gas mitigating technologies.

The *IEMA* is a professional body committed to developing sustainable business practices. It supports members through raising the professional status of environmental management in industry, and furthering environmental competence and best practice. They provide a wide range of information, arrange workshops and publish a quarterly journal of best practice, which is also available to non-members.

Your Local Authority can provide you with support for many aspects of your business. To find the most appropriate contact in this area, refer to the listing on the inside back cover.

LEEP operate a number of energy, recycling, transport and other environmental projects throughout Edinburgh and the Lothians.

Napier University Tel: 0131 455 2672

New Deal Environment Task Force

Tel: 0131 454 9049

This scheme can assist you to recruit an unemployed 18 – 24 year old to conduct environmental projects, under supervision, and offers wage subsidies and money towards training.

Napier University run a number of short courses on

environmental management specifically for businesses.

RAGS Recycling Advisory Group Scotland

Tel: 0131 524 7049 www.rags.org.uk *RAGS* represent and promote recycling and waste minimisation in Scotland.

Scottish Energy Efficiency Office (SEEO)

Tel: 0141 242 5835 www.energy-efficiency.org The SEEO promotes many useful publications on all aspects of energy management, including 'Practical Energy Saving Guide for Small Business'. It can also provide free advice to small and medium sized businesses and may offer a free site visit from an energy advisor to help identify savings.

Scottish Enterprise Edinburgh & Lothian

Tel: 0131 313 4000

Can offer advice and financial support e.g. Innovation Fund: a repayable grant for projects leading to the introduction of new products or processes.

Scottish Environmental Industries Association (SEIA)

Tel: 0131 472 4035 www.seia.uk.com

The *SEIA* assists and promotes Scottish-based environmental companies in marketing and exporting environmental technologies and services. It acts as a catalyst for environmental technology development and commercialisation, and provides a point of contact for industry throughout Scotland.

Scottish Environment Protection Agency (SEPA) East Region Office

Tel: 0131 449 7296 www.sepa.org.uk SEPA is responsible for environmental protection in Scotland. It regulates potential pollution of natural waters and the air, the storage, transportation and disposal of controlled waste, and the keeping of radioactive materials.

Scottish Water Tel: 0845 601 8855 www.scottishwater.co.uk Scottish Water is responsible for the supply of water to businesses, together with the treatment of sewage and industrial effluents.

Small Business Gateway

Tel: 0845 609 6611 www.sbgateway.com

Provides a wealth of advice, information and support for both start-up and established businesses. Aims to be a first stop for all your information needs.

VIBES Awards www.vibes.org.uk This annual competition and award encourages business efficiency and competitiveness through improved environmental performance. Check the web-site for case studies on previous winners.

Waste Watch Tel: 0171 248 0242 www.wastewatch.org.uk Waste Watch is a national agency promoting action on waste reduction and recycling. They produce a UK Recycled Products Guide, with details of companies promoting products manufactured from recycled materials.

6.2 Useful Publications

The Better Business Pack

NatWest Ventures Tel: 0131 243 4589

Croner's Environmental Management

Croners Publications

Tel: 0208 247 1175 www.croner.co.uk

ENDS

Environmental Data Services Tel: 0171 278 4745

www.ends.co.uk

Environment Business

Information for Industry Tel: 020 7393 7845

Environmental Compliance Manual

Information for Industry Tel: 020 7393 7845

Going Green

Edinburgh Chamber of Commerce

Tel: 0131 477 7000

Green Futures

Forum for the Future Tel: 01223 564334

Green Guide to ScotlandGreen Guide Publishing

Tel: 0171 354 2709 www.greenguideonline.com

Green Office Action Plan

Friends of the Earth (Scotland)

Tel: 0131 554 9977

Less is More

Scottish Water

Tel: 0131 445 6433

Managing Waste - a business guide

The Open University Tel: 01908 858794

www.open.ac.uk/studentweb/t541

Materials Recycling Handbook

Tel: 0181 277 5540

Produced as a joint initiative between the WWF and NatWest Group, the Pack is full of checklists and practical tips to help increase profits by reducing environmental impact.

One of a number of practical guides produced by Croners. Regularly updated and also available on CD ROM.

Monthly report covering environmental issues including environmental standards, industry/policy trends, court activity and events. *ENDS* also publish a Directory of Environmental Consultants.

Fortnightly newsletters and bi-monthly magazines covering UK and EU environmental policy, legislation. *Environment Business* also publish an Environmental Directory.

The manual covers all aspects of environmental regulations and is updated quarterly. An electronic version is also available.

An invaluable handbook of environmental guidance for managers of tourism businesses.

Bi-monthly magazine containing information opinion and debate. The focus is on communicating solutions and best practice.

Eco-friendly consumers directory. Contains only regional listings aimed at enabling the consumer to make decisions on an informed basis. Also available on-line.

Friends of the Earth produced this guide for busy office administrators who want to help the environment.

Final report of the East of Scotland Waste Minimisation Project. Contains results of the project and useful case studies.

A guide designed to help you understand the production of waste; this contains tools to review waste, checklists and case studies. Some very useful checklists are available free on the web-site.

A comprehensive guide to specifications for most sectors of recycling in the UK.

No Time to Waste – a practical guide to waste minimisation SEPA

Tel: 0131 449 7296

Success & Sustainability
Midlothian Chamber of Commerce
and Enterprise
Tel: 0131 456 1234

This useful video takes you step-by-step through the drivers for waste minimisation and outlines a systematic approach, all illustrated with case-studies.

A guide to sustainable development for owners and managers of small and medium-sized businesses – what it is and why it matters, and what to expect for the future.

West Lothian Council West Lothian Council

Services to business

The Council's Economic Development Service works within the Strategic Services group to provide an overall framework for the continuing development of the local economy.

In 1998 a joint ten-year Economic Strategy was launched by the Council with its economic partners, Scottish Enterprise Edinburgh and Lothian and the West Lothian Chamber of Commerce. Building on the strengths of the past, but recognising the challenges of an increasingly global economy, the strategy focuses on moving from an economy built on manufacturing to one that can attract and sustain more knowledge-based businesses.

The role of the Economic Development service is to closely monitor trends in the local economy and the impact of external factors upon it, identifying best practice, assembling resources and working in partnership to promote, enable or provide services and assist local businesses to invest, grow, generate wealth and create jobs.

Whilst West Lothian's overall economy is strong, there are, nevertheless, still a number of challenges. It is a key part of the service's role to work towards finding solutions to maintain and strengthen our local economy.

Service Highlights

In 2000-2001 the Economic Development Service:

- Assisted the start-up of 206 new businesses
- Responded to 3171 business information enquiries
- Provided grant funding totalling £110,000 to local small and medium sized businesses
- Assisted 866 unemployed people improve their employment prospects
- Helped create or retain1231 jobs
- Assisted 1774 people through response to large-scale redundancies
- Secured 16 major company relocations to West Lothian

Key Activities

Growing Companies

Business information; business funds; company relocations; business development advice; seminars and business training workshops; export development; e-commerce support; waste management and environmental advice.

Enterprise Promotion

Business start-up advice & counselling; enterprise promotion; start-up funds; school enterprise projects; women's enterprise; rural diversification.

Employability

Employment access & support; personal development; coaching for the long-term unemployed; training grants; redundancy support; local advice centres for jobseekers; access to lifelong learning; Education for Work programme within schools.

Resources & Intelligence Local economic research; publications; information dissemination; local economic promotion.

Partnerships

Knowledge networks; support for tourism; support for key sectors; business networking opportunities.

Our customers

Our main customers are:

- Small to medium sized businesses
- Individuals wishing to start a business
- Individuals who are unemployed or wish to improve their job prospects
- Businesses wishing to relocate to West Lothian

Our partners

Our main partners are:

- Scottish Enterprise Edinburgh and Lothian
- Employment Service
- West Lothian Chamber of Commerce
- Career Development Edinburgh and Lothian
- Scottish Executive / DTI
- Prince's Scottish Youth Business Trust
- East of Scotland European Partnership
- Edinburgh and Lothian Tourist Board
- Business Environmental Partnership
- Business & Environment Network
- West Lothian College
- West Lothian Council, Education Service
- Federation of Small Business
- LINC (Local Investment Networking Company)
- · West Lothian Ventures

How to access our services

The Business Centre in the centre of Livingston acts as a one-stop shop for all of Economic Development's services to business. It also incorporates the main business services of our key partners, including the Chamber of Commerce, Small Business Gateway and UK Online for Business. The centre provides a modern, business-like environment, including a large fully equipped training room, and a 'hands on' demonstration area hosting the latest Information and Communication technology. Through the Business Centre, a business customer can therefore receive assistance to:

- Start a business
- Develop an existing business
- · Access business funding
- · Access export support
- Access e-commerce support and IT training
- Access management development and other business training
- · Obtain business and economic information
- Find a business property
- · Access environmental advice

The Economic Development service also operates, with partners, three locally based 'Workplace' employment initiatives in Craigshill, Livingston; in Kirkhill, Broxburn; and in Whitburn.

On behalf of the Employment Service, we also deliver the *New Deal Gateway* programme from the Almond Business Centre in Livingston.

To access business services, phone, call or click

The Business Centre, Almondvale Boulevard, Livingston EH54 6QP Tel 01506-777400 Fax 01506-777919

E-mail bc@westlothian.gov.uk or visit www.wlonline.org.uk/business

Other contacts

Employability services

01506 777400

Energy Advice Centre

Provides free advice on energy

Freephone 0800 834 672

Provides free advice on energy and how to reduce fuel bills.

Environmental Health and Trading Standards

01506 775400

Advice and information on food safety, health & safety, air quality monitoring, noise control, public health, pest control.

Litter Hotline & West Lothian Council Trade Refuse Collection

01506 777800











