



**South
Derbyshire**
District Council

South Derbyshire District Council

The Green Purchasing Guide

Date: April 2010
Version No: 1.1
Author: Jessica Horton/Carl Veal
Dept: Procurement & Business Improvement

Introduction

This document sets out the Council's policies on environmental purchasing.

It is the Council's responsibility to ensure that negative impacts on the environment are kept as low as possible. The Council is a major purchaser of goods and services and can therefore have a significant effect on the local environment.

The purchase of environmentally friendly products has two potential benefits – the market for such products is created and supported, and bulk purchases can bring about cheaper prices for such products.

An environmental purchasing policy helps to minimise the following, potentially harmful effects:

- ✗ Emissions to air, water and land during production, operation and disposal of goods (including carbon dioxide emission from energy consumption and associated air pollution and global climate change)
- ✗ Depletion of the world's resources, particularly those which are scarce or non-renewable
- ✗ Associated waste products, including packaging

Any purchasing policy must be based on value for money, and buying green could be defined as:

the optimum combination of whole life cost (including cost to the environment in terms of environmental impact) and quality (or fitness for purpose) to meet the user's requirements.

Making the right environmental choices is not always easy or straightforward. Product claims may be made which are not substantiated. Labels on goods may not give you the information you need.

There is currently no environmental standard for product marketing, although the EC "Eco-labelling" scheme is helping in some areas by giving the buyer a guarantee that the item has been assessed using strict environmental criteria and can be promoted as better for the environment.

It is the policy of South Derbyshire District Council to:

- ✓ Purchase goods and procure services, which as far as possible reflect up-to-date specifications or standards for environmental sustainability.
- ✓ Make it a requirement of Council contracts or specifications that, when working for the Council, contractors and suppliers maintain environmental standards equivalent to the Council's own standards.
- ✓ **Ban** the use of environmentally damaging products or processes by the Council where a less environmentally damaging alternative is available. Specifically banned are:
 - ✗ Chlorofluorocarbons (CFCs) and other ozone depleting chemicals
 - ✗ All timber or timber products which do not have Forest Stewardship Council (FSC) certification or equivalent (see information at the end of this document)
 - ✗ Virgin paper (even if FSC approved or equivalent) unless specially authorised
 - ✗ Leaded petrol
 - ✗ Asbestos in the composition of any products (under exceptional circumstances, where it is essential to performance, Chrysolite (white) asbestos may be used subject to prior agreement.
- ✓ **Restrict** the use of the following products by using practical alternatives:

- × Peat and peat-based products
 - × PVC and PVC products
 - × Chlorine bleach
 - × Aerosol containers
 - × Solvent-based products
 - × Hazardous and deleterious materials such as pesticides, weed killers and preservatives, where it is not possible to avoid these, appropriate suppliers will be instructed to ensure that the required COSHH data accompanies all deliveries of hazardous products.
- ✓ **Reduce** the purchase of new products by re-using, repairing or refurbishing existing products.
 - ✓ **Specify** products that are made from recycled material.
 - ✓ **Specify** products that can be recycled.
 - ✓ **Specify** products that cause minimal damage to the environment in their manufacture, distribution, use and disposal.
 - ✓ In order to reduce the negative impact of vehicles, purchase Euro 3 specification lean burn diesel engine vehicles.
 - ✓ **Paper:**
 1. Where paper is to be used for printing, letterheads or photocopying, purchase 100% recycled paper that comprises 100% post consumer waste.
 2. Other paper and paper products should be at least 75% post consumer waste recycled content, with envelopes being at least 70% recycled (brown manila) or 30% recycled (white manila).
 3. Virgin paper (even if FSC approved or equivalent) should only be used for specialist printing or specialist applications where it can be proved that an alternative use is not possible with available technology or reasonable modifications. Any use of virgin paper should be authorised in writing by the Head of Service. Any virgin paper purchased should be FSC certified or equivalent.
 4. Paper disposables (toilet paper, towels, etc) should be 100% post consumer waste recycled.
 5. Any unwanted paper should be re-used or recycled.
 - ✓ Where possible, buy second-hand or refurbished furniture and equipment.
 - ✓ Where possible, purchase local products and services. Care must be taken to ensure there is no breach of UK or EU Procurement Regulations.

Contents

1. How to use this guide
 2. Selection criteria using life-cycle analysis
 3. Aims
 4. Office Equipment and Stationery
 5. Paper
 6. IT Equipment
 7. IT Consumables
 8. Electrical Appliances
 9. Batteries
 10. Ozone Depleting Substances
 11. Paints
 12. Food and Catering
 13. Ground Works, Parks and Open Spaces
 14. Vehicles and Fuels
 15. Timber products
- Appendix A – A Checklist for Green Purchasing

1. How To Use This Guidance

This guide should be used when purchasing all supplies, services and works and when establishing the conditions of a contract with goods or/and service providers. This guidance is to help you take into account the longer-term benefits and costs when selecting a product or item of equipment. By reviewing the entire life-cycle of a product you can choose more environmentally, and economically, sustainable products. A life-cycle analysis includes identifying the environmental effects during manufacture, packaging, transportation, waste and disposal issues, as well as the environmental effects, such as energy and resource consumption, during use.

2. Selection Criteria using Life-Cycle Analysis

A life-cycle analysis requires taking account of the total cost of a purchase – assessing not only the immediate purchase price, but also other costs such as:

- Direct running costs (e.g. energy, water and other resources used over the lifetime of the product or service)
- Indirect costs (e.g. less energy efficient IT equipment will produce more heat, causing plant in air conditioned buildings to work harder to remove it, so increasing the electricity consumption)
- Administration costs (e.g. overheads from purchases that require special handling and disposal such as certain pesticides and cleaning products)
- Spending to save (e.g. purchasing more durable or energy efficient products which may initially be more expensive, but results in long term savings)
- Training (e.g. if the product is not user friendly it may entail time, money and effort being expended in training staff to operate it)
- Recycling capabilities (e.g. purchasers can create markets for their own waste such as paper, toner cartridges etc, by buying products containing recycled materials)
- Specifying refurbished products (e.g. not generally insisting on new items when refurbished parts or products could be used)
- Cost of disposal (e.g. it may be worth paying a premium to a supplier giving an undertaking to remove the product or a hazardous substance at the end of its useful life.)

There are a number of recognised standards such as energy efficiency ratings, recycled material contents, and environmental friendliness to help you with your 'analysis'. Note, however, many brands claim to be 'environmentally friendly'. If a product makes an environmental claim it should carry an explanation about why it is less harmful to the environment than other products.

When assessing a product's disposal options follow DEFRA's (Department for Environment, Food and Rural Affairs) 'Waste Hierarchy':

- Reduce – only buy something when absolutely necessary
- Re-use – have systems in place whereby furniture, equipment and other office items can be re-used within the council instead of discarded
- Recycle – specify that the supplier of the item should operate or subscribe to a take-back scheme for packaging and unwanted/spent items, which cannot be re-used or recycled.

Whole Life Costing – An Example

Whole Life Costing Comparison - Batteries			
	Alkaline	Zinc Chloride	NiMH
Cost of 4 Pack (£)	2.50	1.50	6.50
Battery Life (Hrs)	15	6	7
Number of packs for 1000 hrs of power	67	167	1
Purchase Cost (£)	167.50	250.50	6.50
Recharging Unit (£)	-	-	10.00
Energy to Recharge (£)	-	-	1.43
Disposal Cost (£)	5.70	14.20	0.04
Total Costs (£)	173.20	264.20	17.97

3. Aims

Increase:

- Use of recycled building materials particularly when contracting for a refurbishment
- Recyclability and recycling of products at end of use
- Use of bio-degradable items and using durable rather than 'disposable' items
- Consideration of natural materials over man-made ones producing harmful emissions
- Awareness of specific environmental innovations available – e.g. ultra efficient gas-condensing boilers
- Habitat creation and enhancement, e.g. creating green space as part of new developments

Decrease

- Use of hazardous materials – e.g. certain pool chemicals, wood preservatives, HCFCs etc.
- Use of products entailing hazardous substances during manufacture – e.g. solvents/lead in paints
- Energy and water use – e.g. specify energy efficient lighting, water saving fittings/plant
- Resource use – e.g. minimise packaging and amount of products used (e.g. cleaning products)
- Use/destruction of endangered resources/habitats – e.g. use of tropical hardwoods
- Pollution (including noise) e.g. switch to greener fuels, specify products with low volatile organic compound emissions.

Also

- Minimise the amount of materials consumed
- Buy goods that are made from recycled material and/or are recyclable
- Arrange with suppliers to minimise packaging and/or take packaging back for reuse/recycling
- Use more durable products
- Maintain and repair equipment so as to extend its life
- Buy energy efficient appliances
- Use vehicles that are less polluting.

4. Stationery

Stationery and other office products are the Councils most common purchases. Many stationery products are seen as low-priced, disposable items – however, they can have a significant impact on the environment, especially as they are usually purchased in large quantities.

Issues

Several of the substances used to manufacture stationery items have an adverse effect on the environment including:

Green Purchasing

Version 1.1- April 2010

- Plastics – manufactured from oil resources which are non biodegradable
- Solvents – adhesives, correction fluids and spray mounts contain solvents which deplete the ozone layer and release volatile organic compounds which cause air pollution, smog and respiratory irritation.

Good Practice

- ✓ Buy items that can be reused e.g. refillable highlighter pens
- ✓ Buy items that are recycled and recyclable such as cardboard files
- ✓ Use solvent free, water based adhesives, highlighters, marker pens and correction fluids
- ✓ Buy solar powered calculators
- ✓ Avoid plastic coated paper clips
- ✓ Avoid pencils made from hardwood
- ✓ Avoid writing implements that contain xylene or other solvents that damage the environment
- ✓ Purchase pens and pencils made from recycled materials

5. Paper

The Council is committed to reducing the amount of paper it uses, to purchasing more recycled paper and increasing the recycling of waste paper.

Issues

- Some paper is produced from timber grown on intensively managed, single species plantations, managed with high levels of chemical fertilisers and pesticides. These methods can lead to loss of topsoil, lowering of the water table and loss of biodiversity.
- The Forest Stewardship Council (FSC) promotes environmentally, socially and economically beneficial forest management, and the FSC logo identifies paper products that are sourced from sustainably managed forests.
- Paper production requires high amounts of energy, which contributes to deforestation, global warming and acid rain.
- Paper production can involve pollution through use of chemicals – the bleaching process used to whiten paper can involve the use of chlorine gas and production of toxic dioxins. There are now different processes available, which use oxygen, hydrogen, sodium peroxide, soap or more efficient pulping techniques that eliminate the need to use chlorine bleach.
- Paper produced from new wood pulp uses very large volumes of water.

Claims To Watch Out For

- **Sustainable paper** – some manufacturers claim their paper is sustainable because for every tree felled another is planted, however if natural forest is replaced with single species plantations, diversity is reduced and soils may become acidified.
- **Recyclable paper** – all paper is recyclable.
- **Recycled paper** – any paper that contains over 55% recycled content may be described as recycled. This can be misleading as some companies produce paper labelled as recycled when it is made only from a mix of unused waste from the paper mill and virgin pulp.
- **Wood free** – this does not mean that the paper contains no wood fibres, but rather a term used for virgin pulp produced by a chemical rather than a mechanical pulping process.

Good Practice

- ✓ Reduce the amount of paper used
 - Use scrap paper for notes etc.
 - Do double sided photocopying and printing.
 - Write on both sides of the paper
 - Avoid unnecessary multiple copies
 - Use a central memo board
 - Use e-mail – do not print copies of e-mails
 - Circulate correspondence rather than making individual copies
 - Reuse envelopes especially for internal distribution.

- ✓ Avoid post it notes – the adhesive makes them impossible to recycle.
- ✓ Purchase 100% recycled paper wherever possible, comprising of at least 75% post consumer waste.
- ✓ If it is necessary to purchase virgin paper ensure it carries the FSC logo, to certify it is from a sustainable source.
- ✓ Avoid purchasing paper which uses chlorine in the bleaching process
- ✓ Specify recycled paper when commissioning publications
- ✓ Always dispose of waste paper that cannot be used via the “blue bag” or similar scheme.
- ✓ Purchase paper with Blue Angel, NAPM and Nordic Swan standards
- ✓ Remove names from junk mail listings - this can be done at the Mailing Preference Service, Dept 97, Freepost, London, W1E 7EZ

Purchase Recycled Paper

- Making pulp paper from recycled waste consumes up to 50% less energy than using trees
- Fewer chemical processes are involved in the production of recycled paper reducing the polluting effect of any waste released into rivers
- Increasing the demand for waste paper for recycling means less paper will go to landfill where it releases methane, a greenhouse gas, as it decays.
- Reduces the pressure for more plantations where natural forests still exist – therefore protecting wildlife habitats and local ecology
- Recycled paper production uses up to 50% less water

Paper Classification Schemes

The British Paper and Board Industry Federation

Used to identify the type and volume of waste paper in a product. The letters indicated below prefix the percentage of that type of waste included in the paper.

- A** - unused mill waste
- B** - unused printers' off cuts
- C** - white office waste
- D** – low quality waste

E.g. A classification of 50B/50C would indicate the paper is comprised of 50% unused printers' off cuts and 50% office waste.

NAPM Recycled Logo

The National Association of Paper Merchants (NAPM) standard indicates the paper is comprised of 75% post consumer waste paper. The standard does not include unused mill waste as recycled paper.

Blue Angel

A German standard which certifies that the paper is made from 100% waste paper of which at least 51% is low or medium grade.

Nordic Swan

A Scandinavian standard based on emissions to air and soil that applies to both virgin and recycled paper. It sets emission limits for several potentially harmful factors, including the chlorine and sulphur dioxide produced during the pulping process.

TCF

This process does not use pure chlorine; instead it uses a very small amount of chlorine dioxide to bleach pulp. This reduces the amount of chlorinated compounds produced but is less sustainable than the totally chlorine free method.

TCP

Indicates that no chlorine has been used during pulping. Instead the paper is bleached using less harmful hydrogen peroxide.

6. IT Equipment

Issues

- Energy – their manufacture and use adds to the depletion of the world's resources and contributes to global warming and acid rain.
- Raw materials – using metal, plastic and glass contribute to depletion of the world's finite resources.
- In the UK office, equipment makes up 20% of office energy use, nearly two thirds of this is due to monitors and PCs. Many models now incorporate sleep or standby modes that can result in energy savings of up to 70%
- Visual display units – can be a health risk if they do not comply with the relevant EU regulations.
- Office equipment, such as laser printers and photocopiers, produce ozone during use, which causes air pollutant, cause smog and irritate the eyes, nose and throat.
- Disposal – replacement may be frequent due to new advances in technology and difficulty of upgrading or repairing. Recycling is difficult due to many different components incorporated.

Good Practice

- ✓ Consider carefully before replacing old model – is the new one really necessary? Can you upgrade?
- ✓ Purchase computers/machines which can be easily upgraded, repaired etc.
- ✓ Purchase from manufacturers who take back appliances at the end of their useful life.
- ✓ Purchase suitable reconditioned/remanufactured equipment
- ✓ Buy equipment that is energy efficient, e.g. PCs, monitors and printers that meet the 'Energy Star' requirements
- ✓ Ask for details of average and standby power demands
- ✓ Buy equipment with an automatic sleep or power down mode
- ✓ Ensure photocopiers, printers and fax machines can cope with all types of recycled paper.
- ✓ Ensure equipment can produce double sided copies and set equipment to default to printing double sided
- ✓ Purchase laser printers and photocopiers that have an ozone filter
- ✓ Purchase from manufacturers that do not use ozone-depleting substances in manufacturing process
- ✓ Use recycled toner cartridges and collect used toner cartridges for recycling
- ✓ Turn off monitors and computers when not in use
- ✓ Ensure redundant computers are recycled.

Energy Star Label

This is awarded to equipment/units with less than 30 watts of energy consumption on stand-by, and a quick re-start. Note: some Energy Star models achieve much lower energy use on stand-by than others.

7. IT Consumables

Issues

- Over 3 million toner cartridges are disposed of to landfill sites each year in the UK and consumption is rising by about 15% per annum. Toner cartridges waste comprises of plastic that is made from non-renewable oil, metal and residual toner, most of which will not degrade for thousands of years.

Good Practice

- ✓ Use fewer toner cartridges. Circulate more information by e-mail and avoid printing
- ✓ Avoid leaving the lid up when photocopying as this uses more toner.
- ✓ Buy recycled printer ink cartridges
- ✓ Buy cartridges with vegetable based inks
- ✓ Buy toners that are non-toxic and free from identifiable carcinogenic substances
- ✓ Buy remanufactured and/or refillable toner cartridges for laser printers and photocopiers. (This should be considered carefully as some cartridges may not be 'fit for purpose' within the business environment – seek guidance from I.T. Division)

8. Electrical Appliances

Appliances, such as fridges and microwaves must be energy efficient. Energy efficiency of a product should be assessed when replacing old appliances (Category A and B for products carrying an EC energy label). It is preferable to purchase equipment that runs on mains electricity rather than batteries (batteries take 50 times more power to manufacture than they can ever provide). However, where batteries are required, rechargeable batteries should be selected.

Light Bulbs

Energy saving light bulbs use only 20% of the energy normal light bulbs use. They last 8 times as long as a standard bulb and over the whole lifetime are much cheaper despite higher initial cost.

9. Batteries

- Batteries require more energy to produce than they actually generate
- Lead acid batteries used in vehicles and some power tools – the battery acid and lead salts can cause environmental contamination
- Cadmium/mercury batteries – used batteries represent a potential for harm to human health and the environment because of the toxic materials, such as cadmium and mercury, that some of them contain. The elements can leak out into the soil when disposed of in landfill sites, or cause air pollution when incinerated.

Good Practice

- ✓ Avoid buying equipment that requires batteries if at all possible. Use mains operated appliances or solar powered appliances – e.g. calculators, watches, radios, pumps etc.
- ✓ Purchase lead acid batteries with minimum lead plus maximum life.
- ✓ Buy rechargeable batteries – although they contain higher cadmium levels than standard batteries they can be used up to 500 times before disposal
- ✓ If you must buy standard batteries choose those which have a reduced mercury level preferably with zero mercury content
- ✓ Avoid zinc carbon and zinc chloride batteries, these are cheap and widely used, but they contain polluting metals and have a high output.
- ✓ Buy batteries only from manufacturers or suppliers that operate take-back schemes for recycling them at the end of their life.

10. Ozone Depleting Substances

Issues

The ozone layer lies about 15 to 20kms above the earth's surface and acts as a protective screen by absorbing some of the sun's ultraviolet radiation. Certain human made substances have been found to deplete the ozone layer, resulting in an increased risk of skin cancer and eye cataracts and adverse effects on aquatic systems and vegetation.

Ozone depleting substances include:

- Chlorofluorocarbons (CFCs), hydrochlorofluorocarbons (HCFCs) and hydrobromofluorocarbons (HBFCs), which are used in refrigerants, air conditioning, aerosols, furniture and thermal insulation foams and blown polystyrene packaging.
- Halons, which are used in fire extinguishers, have been recognised as having the highest ozone depleting potential of all human made substances.
- Carbon tetrachloride and 1,1,1 trichloroethane, which are solvents used in adhesive, correction fluids, cleaning products, paints and varnishes.
- Methyl bromide, used as pesticide

Good Practice

- ✓ Specify against all products that contain or have used ozone depleting substances in their manufacture
- ✓ Hydrocarbon refrigerants such as pentane and butane are currently considered the most environmentally preferable for use in fridges and freezers.
- ✓ Avoid furniture that contains foam manufactured with the use of ozone depleting substances
- ✓ Avoid thermal insulation, which is manufactured with the use of ozone depleting substances, instead use mineral wool, shredded paper waste or sheep's wool insulation
- ✓ Wherever possible and in consultation with experts replace halon fire extinguishers
- ✓ Avoid excess packaging especially polystyrene foam
- ✓ Give preference to manufacturers who take back packaging after use.

Cleaning Materials

Issues

Cleaning materials contain chemicals that can cause pollution:

- Phosphates – in detergents cause damage to water supplies and are responsible for eutrophication; overloading watercourses with nutrients leading to algal booms, killing water wildlife.
- HCFC's and CFC's – some cleaning materials are supplied in aerosol form which may use CFC propellants. These have a depleting effect upon the ozone layer, which shields the Earth from damaging ultraviolet rays from the sun. This can cause cancers and crop damage, and contribute to global warming.
- Optical brighteners, synthetic perfumes and colourings – these substances make no real difference to the cleaning process and can be environmentally damaging, as they are slow to biodegrade
- NTA and EDTA – foam building agents added to cleaning products, which can react with lead and mercury lying dormant at the bottom of riverbeds, releasing the heavy metals and enabling them to enter the water supply
- Toilet blocks – may contain Paradichlorobenzene (PDCB), which may have an adverse effect on aquatic plants and marine life.

Good Practice

- ✓ Examine cleaning methods – could the purchase of cleaning materials be reduced by reducing the frequency of cleaning or ensuring concentrated detergents are correctly diluted.
- ✓ Purchase products that are biodegradable, where possible try to ensure they are 100% biodegradable
- ✓ Purchase phosphate free detergents
- ✓ Purchase HCFC/CFC free aerosols.
- ✓ Avoid aerosols – use pump action recycled plastic containers
- ✓ Buy products which do not contain optical brighteners or synthetic perfumes
- ✓ Buy cleaning products based on vegetable oils such as palm or coconut as these break down faster than petroleum oils
- ✓ Avoid products containing bleaches – use those containing fruit and organic acids
- ✓ Avoid products tested on animals

11. Paints

Issues

Many paints and varnishes contain potentially hazardous substances that can have adverse environmental effects during manufacture, use and disposal. These include:

- Heavy metals – these can pollute soil and watercourses and affect the health of humans, animals and plants
- Solvents – which deplete the ozone layer and release volatile organic compounds (VOC's), which can cause air pollution, smog and respiratory irritation
- Titanium Dioxide – a white powder added to paint to produce brilliant white lines. Manufacturing the powder uses high levels of energy and water and results in discharges of chlorine, which is highly toxic to all living organisms, and sulphur dioxide emissions

Good Practice

- ✓ Purchase paints and varnishes which conform to UK Regulations on heavy metals, such as cadmium, lead, mercury and chrome.
- ✓ Use paints coloured with natural pigments
- ✓ Avoid white paint that contains titanium dioxide. Ensure no paints include hazardous substances listed on the UK Red List or EU Black and Grey Lists
- ✓ Avoid paints that contain solvents
- ✓ Specify a preference for paints and varnishes that are water based or based on plant oils such as linseed oil.
- ✓ Use high quality paints, needing less frequent painting
- ✓ Dispose of paint tins and containers carefully.

12. Food and Catering

Issues

- Intensive agriculture depends upon extensive uses of pesticides, herbicides and fertilisers
- Transporting food over long distances contributes considerably to global warming and does nothing to support local farmers and food producers
- Wildlife – intensive farming practices change harvesting regimes, destroy habitats and need large buildings in the countryside

Good Practice

- ✓ Purchase locally farmed produce to reduce transporting food over long distance and to support the local economy
- ✓ Purchase organic food grown without pesticides, herbicides or artificial fertilisers
- ✓ Buy animal products that have not been farmed using intensive factory farming methods
- ✓ Buy food packed in returnable boxes using the minimum of packing
- ✓ Buy unprocessed food not convenience foods
- ✓ Buy Fair-trade products

Fair Trade Products

Fair Trade products are those where the growers in developing countries receive a larger share of the price you pay. Fair trade associations and co-operatives use methods such as fixed advanced payments and in some cases contribute to local healthcare and education. Procurement of Fair-trade tea, coffee, sugar etc for Council catering can be specified in catering orders. Fair-trade products include tea, coffee, cocoa, rice, fruit and sugar. Many of these products are organically produced.

Organically-grown Food

Organic fruit and vegetables are grown without the use of artificial chemical, using methods that keep the soil in a healthy balance. Organic dairy products and meat come from animals fed with organic food. This approach makes organic food more environmentally friendly than conventional food with a reduced risk of diseases and chemical residues.

Beware of terms like 'natural', 'from the farm', 'countryside' etc which have no defined meaning. The word 'organic' is legally protected. The Soil Association is the main organisation in the UK that checks 'organic' food. Look out for their logo or for a European certification label.

Buying organic food is not always the most environmentally sound option if you take into account the environmental impacts of transporting goods. However, supporting local organic farming is recommended if extra cost is not prohibitive, since organic farms are generally smaller scale, employ more people and receive fewer subsidies than conventional farms do.

13. Ground Works, Parks and Open Spaces

Issues

- Pesticides – contain chemicals that may have a harmful effect on health and the environment. Water-soluble pesticides have the potential to contaminate ground water. They can persist in the soil, prevent germination of seedlings, can be leached from the ground and are frequently detected in water supplies. Chemically stable, fat-soluble pesticides can be spread widely by wind, rain and water movement and their concentration can accumulate to levels that may be toxic to fish and wildlife
- Peat – extraction of peat destroys rare wetland habitats
- Global warming – the transport of products over long distances contributes significantly to global warming and traffic congestion

Good Practice

- ✓ Do not use pesticides or herbicides unless essential. If you do have to use them minimise use through good management e.g. using the correct concentrations.
- ✓ Use natural weed control such as cutting and manual weeding. Apply mulches around plants to suppress weed growth. Use manual traps and encourage natural predators
- ✓ Ensure all pesticides are COSHH registered
- ✓ Ensure contractors hold a Certificate of Competence as required by the Control of Pesticides Regulations 1986
- ✓ Avoid all pesticides on the UK Red List and EU Black and Grey lists of hazardous substances
- ✓ Give preference to non-residual pesticides that break down in contact with soil
- ✓ Choose species specific pesticides to reduce damage to harmless wildlife
- ✓ Specify against pesticides that deplete the ozone layer such as methyl bromide
- ✓ Avoid products with wood preservatives containing pentachlorophenol (PCP), lindane and tributyl tin oxide (TBO)
- ✓ Avoid using residual herbicides. Systemic herbicides, which act through contact, are preferred for environmental reasons as they break down before they reach watercourses
- ✓ Minimise the use of new building and surfacing materials by using reclaimed brick and building stone and recycled aggregate
- ✓ Select timber from sustainable sources, such as FSC products or equivalent
- ✓ Select construction material that minimise the impact on the ozone layer
- ✓ Minimise the use of PVC products
- ✓ Use recycled plastic outdoor wood substitutes. Including benches, fencing, signs and posts
- ✓ Purchase dustbins made from recycled plastics
- ✓ Choose water-based and not remanufactured paints and do not use paints which contain lead

14. Vehicles and Fuel

Issues

Petrol and diesel engines produce:

- Air pollution – caused by carbon dioxide, nitrogen oxides, sulphur oxides, particulate matter, lead. All these pollutants not only lead to environmental damage, such as acid rain and global warming, but can also damage human health e.g. asthma
- Motor vehicles consume enormous amounts of energy in their manufacture and use
- Motor vehicle production leads to enormous waste and in their use create waste e.g. tyres and lubricating oils.
- Car use is increasing and with it the land use and habitat destruction from road building and maintenance.

Good Practice

Reduce the use and impact of vehicles by:

- ✓ Using the phone
- ✓ Video conferencing
- ✓ Sending an e-mail
- ✓ Reduce your journeys – are they really necessary?
- ✓ Use public transport, cycle or walk
- ✓ Car sharing using the recently launched web based car sharing scheme www.share-a-lift.com
- ✓ Regular vehicle maintenance
- ✓ Driver training
- ✓ Using cleaner formulations of conventional fuels where available e.g. ultra low sulphur diesel and petrol
- ✓ Fitting vehicles with catalytic converters and particulate traps
- ✓ When purchasing or leasing new vehicles look at fuel efficiency
- ✓ Wherever possible consider reducing the size and power of vehicles
- ✓ Look at alternative technologies that produce less air pollution e.g. vehicles running on compressed natural gas, bio diesel, liquid petroleum gas and electric
- ✓ Switch to new high efficiency diesel engine vehicles running on fuel containing no lead and using less fuel, with very low particulate matter
- ✓ Consider using retread tyres and re-refined oil.

15. Timber Products

Issues

- Timber and wood products are sustainable – trees lock in carbon dioxide from the atmosphere and help reduce global warming – the CO² remains locked in, until it decomposes
- Using tropical timber products leads to deforestation, loss of wildlife habitats, extinction of species and soil erosion as well as unbalancing the earth's climate
- Forestry – some timber comes from carefully managed plantations where new trees are continually being planted, but much timber comes from exploitation of natural forests which results in loss of wildlife habitats, use of pesticides and soil erosion caused by large areas being clear felled.

Good Practice

- ✓ Purchase timber and products from sustainable forests – those that take into account environmental implications. There are labelling schemes for sustainable timber e.g. the Forest Stewardship Scheme (FSC)
- ✓ Do not buy products made from tropical hardwood
- ✓ Use timber from native sustainably certifies sources in Europe
- ✓ Consider buying reclaimed timber and products made from reclaimed timber
- ✓ When purchasing plywood and chipboard ensure they are manufactured with low formaldehyde resins and without formaldehyde glue, and from sustainably managed forests
- ✓ Where solid wood veneers are used, ensure they are at least 0.9mm thick, thinner veneers are less durable and can make repairs difficult and expensive
- ✓ Purchase durable furniture and fittings with at least a five-year warranty

The Forest Stewardship Council (FSC) is committed to bridging the gap between responsible producers and consumers of forest products worldwide. It enables producers who can demonstrate sound forest management to reach consumers who wish to have an independent guarantee that the forest or woodland of

origin is managed according agreed social and environmental principles and criteria. The FSC producers have to operate with 10 standards covering social, environmental and economic aspects of forest management

The Greenpeace 'The Good Wood Guide' provides information on timber from unsustainable sources.

Green Purchasing Guide - Appendix A

A Checklist For Green Purchasing	
✓	Does the product use fewer polluting by products then competing products?
✓	Is the product durable and easily, safely and economically serviced?
✓	Are all the features of the product necessary?
✓	Is the company producing the product in compliance with all environmental laws and regulations?
✓	Are you aware of any product alternatives that are more environmentally responsible?
✓	Is the product designed to reduce consumption?
✓	Is the product designed to minimise waste?
✓	Is the product reusable?
✓	Is the product technically and economically recyclable?
✓	Do facilities exist to recycle the product?
✓	Are recycling collection systems in place at the point of end use?
✓	Can the product be returned to the supplier at the end of its useful life?
✓	Is the product compostable?
✓	What percentage of post-consumer materials is used?
✓	Is the product energy efficient? Can the product be recharged? Can the product run on renewable fuels?
✓	Does the product reduce water us?
✓	Does the product require special disposal?
✓	Is the product free of banned substances and heavy metals?
✓	Is the product free of toxic or endangered materials?
✓	Does the product emit volatile organic compounds (VOCs) or other air pollutants?
✓	Does the product require special use instructions for health and safety?
✓	Can the packaging be eliminated?
✓	Is the packaging designed to be minimal?
✓	Is the packaging reusable or recyclable?
✓	Are recycled materials used to produce packaging?
✓	Can the packaging be returned to the supplier?
✓	Is the packaging compostable?
✓	Has a lifecycle analysis of the environmental burdens associated with the product or packaging been conducted by a certified testing organisation?
✓	Is the company producing the product, equipped to bid and bill electronically?
✓	Does the company have an environmental policy statement?
✓	What is the company's history on environmental and safety issues?
✓	Can the company verify all environmental claims?
✓	What waste reduction plans does the company have in place or have planned?
✓	Has the company conducted an environmental or waste audit?
✓	Is the company responsive to information requests from the stakeholders?

Useful Links

Below is a table of links that may be worth referencing when considering Green Purchasing Issues

ISO 14001	www.iso14000.com
Green Purchasing	Version 1.1- April 2010

Defra	www.defra.gov.uk
PEFC	www.pefc.org
FSC	www.fsc.org
The Nordic Swan	www.svanen.nu/eng/
The Rainforest Alliance	www.rainforest-alliance.org
EU Ecolabel	www.europa.eu.int/ecolabel
The Energy Saving Logo	www.est.org.uk/recommended
The Energy Star	www.energystar.gov
Energy Saving Trust	www.est.org.uk
Blue Angel	www.blauer-engel.de/willkommen/willkommen.htm
VOC Content	www.coatings.org.uk
The Mobius Loop	www.biffa.co.uk/getrecycling/symbols.php
Evolve Recycled Paper	www.evolve-paper.com
UK Power	www.ukpower.co.uk/running-costs-elec.asp