

## ***SUSTAINABLE PROCUREMENT GUIDE***

### **Section 1.0 – Introduction**

#### **Overview**

Brunel University London is committed to furthering sustainable development throughout the University. Sustainable development, as stated by the Brundtland Commission, is development that ‘meets the needs of the present without compromising the ability of future generations to meet their own needs.’ Brunel University London is able to do this through its procurement processes and by adopting and implementing purchasing policies that embrace sustainable procurement. The adoption of sustainable procurement will educate and create awareness within the University and encourage staff to embrace sustainability principals, thereby impacting positively on social welfare and the environment.

#### **Brunel University London has in place an Environmental Policy and a Sustainable Procurement Policy that sets out the strategic objectives of the University**

All purchases, however large or small in value, can have an impact on the environment so all staff with purchasing responsibilities have an important role to play.

#### **Objective**

This guide is designed to assist staff responsible for procuring goods and services on behalf of the university and in line with the University’s Sustainable Procurement Policy.

This guide aims to do the following:

- Outline some of the environmental and sustainability principles that should be taken into consideration when making procurement decisions.
- Demonstrate current good practice and identifies the opportunities available to pursue sustainable procurement while staying within the framework of public procurement law and obtaining value for money.
- Provide resources for finding information relating to sustainable procurement
- Provide a rubric for judging the sustainability of products and services

#### **Value for money**

The Procurement Strategy of Brunel University London requires that goods and services purchased by the University represent the best value for money. Value for money should not consider the cheapest option but take into account whole life costs, quality and long term savings. Sustainable procurement meets this requirement. Considering the costs throughout the life cycle of a product or service including how the most economically, environmentally and socially sustainable choices can be made will lead to long term savings.

#### **What is sustainable procurement?**

Sustainable procurement is about taking environmental, social and economic factors into account in purchasing decisions. It is the process by which organisations buy goods and services taking into account a number of factors including:

- Value for money considerations such as price and quality
- Whole life cost
- Environmental aspects
- Social aspects
- Sustainable or recycled materials/products

The aim of sustainable procurement is to integrate environmental, social, ethical and economic considerations into the purchasing process with the goal of reducing adverse impacts on the environment. It forms a key part of an overall push for sustainable development by the University and the UK government.

## **Reasons for purchasing sustainable goods and services**

Buying in a sustainable manner can help to:

1. Achieve best value for money – by taking whole life costs into account
2. Reduce carbon foot print
3. Stimulate the market for sustainable technologies
4. Maintain and improve our standard of living
5. Improve health and the environment
6. Save money

## **Principles of sustainable procurement**

Consider the 4 R's (Reduce – Reuse – Recycle - Rethink) before entering into a procurement process.

### **Reduce**

Reducing unnecessary purchasing is the best way to integrate sustainability into procurement:

- Ensure products are definitely needed
- Ensure products are fit for the purpose to avoid costly and wasteful mistakes
- Ensure products are durable and covered by a long warranty
- Ensure packaging is the minimum necessary for protection
- Avoid disposable products designed for single use

### **Reuse**

- Find out if there is redundant equipment in other departments which could be put to use
- Specify goods which are repairable and easily upgraded
- Specify goods which come with clear and comprehensive maintenance, repair and operating instructions and which are supported with guaranteed stocks of easily replaceable parts
- Consider suppliers that operate take back schemes for end of life equipment and packaging

### **Recycle**

- Specify products made from recovered or recyclable materials
- Purchase products on which the materials are identified for ease of recycling

Wherever possible, avoid products made from mixed materials as these are more difficult to recycle

## **Rethink**

Sometimes the way we do things requires a complete rethink. For example:

Have all products been considered? Does your choice provide the right benefits and timing at the right costs? Are the risks and uncertainties acceptable?

It is feasible to join other organisations in a collaborative approach and use the extra buying power to promote environmental alternatives and establish good deals with suppliers?

## **What is a sustainable product?**

A sustainable product can be described as being:

- Durable, easily upgraded and repairable
- Energy efficient and resource efficient
- Ethically sourced
- Fit for purpose and provides value for money
- Made with maximum use of post consumer materials
- Made with minimum use of virgin materials
- Non (or reduced) polluting
- Reusable and recyclable

## **Legislation**

As from January 2006, public procurement in the EU became influenced by two new public sector procurement Directives (Directive 2004/18/EC and Directive 2004/17/EC) (published April 2004). These Directives include simplification and consolidation of existing Directives for public works, supplies, services and utilities and contain provisions that are supportive of sustainable procurement criteria.

The Directives introduced new processes that aim to reduce complexities. They set out clearly how social and environmental criteria can be applied in awarding contracts. It is vital that we embrace sustainable procurement and these new processes and ensure compliance with the Directives. The procurement directives apply only to purchases over specified high value thresholds. However, it is important to remember that sustainable procurement principals are relevant to all levels of purchasing ranging from low value frequent purchases to large-scale capital projects.

### **Public Services (Social Value) Act 2012**

An Act to require public authorities to have regard to economic, social and environmental well-being in connection with public services contracts; and for connected purposes.

The Act requires that when procuring goods and services the authority must consider:

- (a) how what is proposed to be procured might improve the economic, social and environmental well-being of the relevant area, and
- (b) how, in conducting the process of procurement, it might act with a view to securing that improvement.

## **Procurement process**

Purchasers are advised to consider environmental and sustainability issues as early as possible in the procurement process, as this is the point when greater influence can be exerted on the process, and where the strongest opportunities for achieving sustainable procurement can be found.

### **Stage 1 - Identify the need**

The process of identifying the need is the most important point in the procurement process for considering environmental and sustainability issues. You may want to question whether the purchase is really essential, or could use be made of an existing product or a more environmentally friendly product or service. Working with potential suppliers at this stage can also be beneficial and lead to, for example, reduced or returnable packaging, minimised road transport and more environmentally friendly production processes.

### **Stage 2 – Specification**

Consideration needs to be given to the way goods/services are specified in tender documents. Environmental requirements can be included in contracts provided that they:

- Apply equally to all tenderers
- Are appropriate and relevant to the product or service required
- Are not anti-competitive or specify branded products
- Are included in the tender documents
- Use a recognised European Standard

### **Stage 3 - Choosing suppliers**

In choosing suppliers, care must be taken to ensure all potential suppliers are treated fairly and that they are each assessed using the same criteria. Suppliers may be rejected if they have been found guilty of a criminal offence, concerning professional conduct, or if they have been guilty of grave professional misconduct, which can be proven. There is an opportunity to consider environmental matters in both of these cases. The University uses a standard pre-qualification questionnaire (PQQ) that includes a section of questions on environmental matters. Potential suppliers should demonstrate that they take a serious commitment to protecting the environment in their systems and processes. This could either be by holding or working towards recognised standards such as Eco-Management and Audit Scheme (**EMAS**), International Standards Organisation (**ISO 14001**), Fairtrade or their equivalents. For further information/advice on Environmental standards and symbols, contact the Procurement department or the Sustainability & Energy manager.  
Appendix 1

### **Stage 4 - Awarding the contract**

The evaluation criteria must be defined for tenders undertaken for all contracts within the European Procurement Directives in the tender advertisement, and within the tender documentation. To consider factors other than price alone, it is advisable to use 'the most economically advantageous tender' option. This allows the evaluation of bids using a range of criteria for example: cost, quality, technical merit, environmental characteristics, aesthetic and functional characteristics and running costs etc, all of which can have a direct impact on the environment. In assessing bids, the 'whole life cost' of goods/services should be taken into account.

Please note that the award criteria must be relevant to the subject of the contract. You should ensure that any environmental considerations are built into the tender specification at the earliest possible stage.

### **Stage 5 - Managing the contract**

The contract forms the framework within which both parties can work together for continuous improvement and mutual benefit. The process of contract management involves monitoring the contractor's performance against the standards laid down in the contract conditions and specification.

Contract conditions can be used to set environmental and/or sustainability targets for performance of the contract, whereby both parties can work together on continuous improvement to performance. For example, reducing transportation, re-working the procurement chain to remove wasteful processes, increasing the recycled content of products, minimising packaging or using only returnable packaging materials.

## **Good Practice**

1. Encourage suppliers and contractors to consider the major impacts of their products and services, and if necessary, to offer more sustainable alternatives.
2. Specify clearly what is wanted. Environmental standards can be set as part of the specifications, for example the use of recycled materials, energy efficiency or the ability of products to be recycled or reused.
3. Specify that sustainable goods and services can be provided, for example that all timber used is independently certified to be from a sustainable source.
4. Contractors can also be expected to provide services in accordance with the environmental strategies, as long as the strategy's requirements are specified in the tender document and they are relevant to the service being provided.
5. Do not specify sustainable products by brand name, particular brands may only be available from one source and this would be anti competitive. Instead specify what a product does, as this will allow all contractors equal opportunity to supply products that meet the specification.
6. Ask suppliers to advice on alternative products or methods that may be more sustainable.

## **Whole life cost**

Whole life costing means taking into account the total cost of the product over its lifetime. The main environmental impacts of products occur at different times throughout their lifecycle. For some products, such as a plastic chair, the main impacts arise in the production and disposal whereas a fridge or freezer, which uses electricity, has impacts all the way through its life.

There are a number of recognised standards that can help assist you with your lifecycle analysis, such as energy efficiency ratings, environmental friendliness, recycle materials content etc.

For further advice on this please contact Procurement Department.

## **Working with Small and Medium –sized Enterprises (SMEs) and local suppliers**

The University is striving to work with local SMEs and to open up greater opportunity for them to do business with the University. When making low value purchases you must consider using local suppliers. However, it is against the fundamental principle of the EU legislation to invite only local suppliers to tender for large value contracts to the exclusion of others.

## **Ethical purchasing**

Procuring ethically is about buying things that are made ethically by companies that act ethically. Ethical can be a subjective term both for companies and consumers, but in its truest sense means without harm to or exploitation of humans, animals or the environment.

As an ethical consumer, every time you buy something you can make a difference. The benefits to society of buying ethically are potentially far-reaching. It encourages innovative products and companies while discouraging others that ignore the social and environmental consequences of their actions. It empowers the consumer, giving you a say in how the products you buy are made, and how the company that makes them conducts its business. It can and has made a difference in the past.

#### **SECTION 4.0 - ENVIRONMENTAL STANDARDS/SYMBOLS**

You may have noticed various logos and symbols on products - these may be environmental labels which have been awarded by accreditation organisations. Some more widespread examples of environmental labels have been provided for your information.

Please note that whilst some labels, such as the European Eco-label covers a broad range of products and their environmental impact, other labels will only cover specific products.

Some manufacturers and retailers make up their own 'green claims', but it is important that these claims comply with the requirements of recognised standards such as the international standard ISO 14021. Further information on ISO 14021 is available at [www.iso-14001.org.uk](http://www.iso-14001.org.uk)

The government has also published a 'Green Claims Code' guide which provides advice on best practice in making green claims.

#### **IMPORTANT NOTE: SPECIFICATIONS**

**Please note that you cannot specify a product that has been awarded any environmental label or 'Eco-label' in your contract/tender documentation, as you must treat all products that have not been awarded these labels equally if they can meet the equivalent environmental requirements. You can state "or equivalent" in your documentation, as long as the product is of an equivalent standard and the bidder can submit the necessary proof as evidence.**

Below are some of the many standards and symbols that are widely used and recognised in the UK and globally:



#### **Swedish Standards Institution (Nordic Swan)**

The Swan is the official Nordic Eco-label, introduced by the Nordic Council of Ministers.

The Swan logo demonstrates that a product is a good environmental choice. The green symbol is available for around 60 product groups for which it is felt that eco-labelling is needed and will be beneficial. These days, everything from washing-up liquid to furniture and hotels can carry the Swan label. The Swan checks that products fulfil certain criteria using methods such as samples from independent laboratories, certificates and control visits.

The Nordic Swan label is usually valid for three years, after which the criteria are revised and the company must reapply for a licence. This way, it ensures that products better suited to the environment are constantly being developed.

Further information on the Nordic Swan can be found at [www.svanen.nu/Eng](http://www.svanen.nu/Eng)



### **European Union Eco-labels (EU Flower)**

The EU Eco-labels are awarded to products to certify that they are considered to be more environmentally sound than similar products in the same product group. These Eco-labels are awarded on a voluntary basis to goods and services that meet strict criteria to minimise the impacts to the environment. Products with the Eco-label flower symbol achieve high environmental standards. The flower symbol can be found across Europe on a wide range of products, including white goods, paints and varnishes, paper products, soil improvers, detergents, textiles, footwear and light bulbs. The exceptions are food, drinks and medical products.

Further information on Eco-labels is available at [www.eco-label.com](http://www.eco-label.com)



### **Eco-Management and Audit Scheme (EMAS)**

EMAS is a voluntary initiative designed to improve a company's environmental performance. Its aim is to recognise and reward those organisations that go beyond minimum legal compliance and continuously improve their environmental performance. In addition, it is a requirement of the scheme that participating organisations regularly produce a public environmental statement that reports on their environmental performance.

Environmental management has become a core business issue for many organisations. Minimising the amount of waste that is produced, reducing energy consumption and making more efficient use of resources can all lead to financial cost savings, in addition to helping to protect and enhance the environment. EMAS is strongly backed by Government and the environmental regulators - organisations who participate are recognised as making strong commitments to the environment and to improving their economic competitiveness.



**Energy Saving Trust**

This consumer focused logo appears on a range of products including electrical and white goods (fridges, freezers, dryers, washers, light bulbs, gas boilers etc). It rates appliances on a scale of 'A' to 'G' with 'A' being the most energy efficient.

For more information, please visit [www.est.org.uk](http://www.est.org.uk)



**The Carbon Trust**

The Carbon Trust is an independent company funded by Government. Its role is to help the UK move to a low carbon economy by helping business and the public sector reduce carbon emissions now and capture the commercial opportunities of low carbon technologies.

Further information is available at [www.thecarbontrust.co.uk](http://www.thecarbontrust.co.uk)



### **Forestry Stewardship Council (FSC)**

The Forest Stewardship Council (FSC) is an international network to promote responsible management of the world's forests.

FSC brings people together to find solutions to the problems created by bad forestry practices and to reward good forest management.

The FSC logo identifies paper products that are sourced from sustainable managed forests,

Further information is available at [www.fsc.org](http://www.fsc.org)



### **International Standards Organisation (ISO 14001)**

The ISO 14000 family is primarily concerned with "environmental management". This means what the organisation does to minimise harmful effects on the environment caused by its activities, and to achieve continual improvement of its environmental performance.

Contractors can be certified if they have assessed their significant environmental impacts, set long term objectives and pursue annual targets to meet those objectives and monitor progress against these targets.

Further information is available at [www.iso.org](http://www.iso.org)



### **Soil Association**

The UK's leading environmental charity promoting sustainable, organic farming and championing human health. Since 1946 it has been working to raise awareness about the positive health and environmental benefits of organic food and farming and supporting farmers in producing natural food consumers can trust.

The Soil Association symbol can be found on over 70% of Britain's organic produce - a guarantee that it has been grown or produced to the highest standards of organic integrity. The Soil Association also undertakes certification of timber and wood products.

Further information is available at [www.soilassociation.org](http://www.soilassociation.org)



**Energy Star**

Energy Star® is a government-backed program helping businesses and individuals protect the environment through superior energy efficiency.

Further information is available at [www.energystar.gov](http://www.energystar.gov)



**Fairtrade Foundation**

The FAIRTRADE mark is an independent consumer label which appears on products as an independent guarantee that producers in the developing world are getting a better deal. Process requirements also encourage producer organisations to continuously improve working conditions and product quality, to increase their environmental stability of their activities and to invest in the

development of their organisations and the welfare of their producers/workers. Further information is available at [www.fairtrade.org.uk](http://www.fairtrade.org.uk)

Brunel University is a Fairtrade accredited University and it is committed to supporting, using and promoting fairtrade products. Please refer to University Policy on Fairtrade.

## SECTION 8.0 – COMMODITY GUIDANCE

The following section provides advice and guidance on commodities purchased by the Council that can have an environmental impact, and includes commodity areas such as IT equipment, food, timber, energy and water, cleaning materials etc.

This section is to be used as guidance only and has been researched from publicly available information that has been put together to help form this guide. It details some of the environmental impacts from specific products and notes some substances and materials which staff should avoid. It also provides tips for good practice and other useful sources of information.

### SECTION 8.3 - CLEANING MATERIALS

The choice of cleaning chemicals and practices used in the building is a serious issue not only for the janitorial staff, but also for all building occupants.

Some cleaning materials contain many chemicals that can cause pollution. Here are some substances to avoid wherever possible:

#### **Phosphates**

Found in: detergents, water softeners.

Damage: In lakes and rivers especially, phosphates cause a rapid growth of algae, resulting in pollution of the water, killing water wildlife.

#### **Hydrochlorofluorocarbon (HCFC's) & Chlorofluorocarbon (CFC's)**

Found in: some cleaning materials supplied in aerosol form.

Damage: has a depleting effect on the ozone layer that protects the earth from damaging UV rays, which in turn can cause cancers and crop damage and contributes to global warming.

#### **Paradichlorobenzene (PDCB)**

Found in: toilet blocks, air fresheners and insect repellents.

Damage: can have an adverse effect on aquatic plants and marine life and can cause liver and kidney failure, and severe anaemia in humans.

#### **Nitrotriacetic Acid (NTA) & Ethylenediamine-tetra-acetate (EDTA)**

Found in: cleaning materials with foam building agents.

Damage: they 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.

#### **Alkylphenol Ethoxylates (APE's)**

Found in: laundry detergents, disinfecting cleaners, all-purpose cleaners and some pesticides.

Damage: are slow to bio-degrade and have been shown to disrupt the endocrine systems of fish, birds, and mammals.

### **Volatile Organic Compounds (VOCs)**

Found in: VOCs such as xylene, ketones, and aldehydes are found in many aerosol products and air fresheners.

Damage: Many organic compounds are known to cause cancer in animals; some are suspected of causing, or are known to cause asthma and cancer in humans.

### **Chlorine bleaches**

It can be potentially harmful to health and the environment. A preferable alternative is hydrogen peroxide as it breaks down to form oxygen and water.

### **Optical brightener**

This chemical is added to washing powders to improve whiteness – they are slow to biodegrade.

### **Synthetic perfumes and colours**

Can act as irritants and some of the chemicals used are slow to biodegrade. Alternatives include such scents as pine oil and citrus.

### **Good Practice**

Purchase products that are preferably 100% biodegradable

Purchase concentrated versions and dilute properly before use, as up to 90% of general purpose cleaner is water which requires extra packaging, energy and resource to transport.

Do not buy products that contain any of the above substances listed above and limit use of optical brighteners and synthetic perfumes

Avoid products that contain chlorine bleaches, buy products based on fruit and organic acids

Buy vegetable based cleaning products rather than petroleum which take longer to break down and degrade

Avoid aerosols as some are classified as hazardous waste once used, use pump or trigger action sprays wherever possible

Specify against products that contain or have used ozone depleting substances in their manufacture

Give preference to manufacturers who take back packaging for reuse/disposal after use or offer refill services

Avoid excess packaging, especially polystyrene foam

Bulk purchase – to avoid unnecessary transport impacts

### **Useful sources of information for environmentally preferable products**

Bio-D Company [www.biodegradable.biz](http://www.biodegradable.biz)

Ecover [www.ecover.com](http://www.ecover.com)

Natural Eco Trading [www.greenbrands.co.uk](http://www.greenbrands.co.uk)

Sunshine Makers [www.simplegreen.co.uk](http://www.simplegreen.co.uk)

## SECTION 8.8 – IT EQUIPMENT AND CONSUMABLES

The main concern with IT equipment is the amount of energy consumed and the impacts associated with its disposal. Some issues raised include:

**Energy** – their manufacture and use adds to the depletion of the world's resources and contribute to global warming

**Raw materials** – using plastics, metals and glass contribute to the depletions of the world's finite resources

**Disposal** – replacement equipment may be frequent due to advances in new technology and difficulties of repairing and/or upgrading. Note old monitors that have Cathode Ray tubes are classed as hazardous waste

**Recycling** – can be difficult due to many different components incorporated in the equipment

### Good Practice

Buy equipment that is energy efficient – those that have the Energy Star label

Buy equipment with an automatic sleep or power down mode

Turn off monitors and computers when not in use

Buy equipment that can easily be upgraded and/or repaired

Consider if you actually need to buy new equipment at all – is it really necessary?

Buy from manufacturers who take back appliances at the end of its useful life

Buy reconditioned/remanufactured equipment where suitable

Buy equipment that can cope with recycled paper

Specify office equipment that is recycled, re-usable or refillable and can be recycled wherever possible

Buy equipment that is durable/long-life and low maintenance wherever possible

Ensure equipment is adequately maintained to maximise its working life

Recycle redundant computers ensuring that you wipe the hard drives clean of any data

## SECTION 8.9 - OFFICE FURNITURE/TIMBER

Most timber and wood products used in this country are imported from both temperate and tropical areas where poor forestry practice, illegal logging and forest destruction are widespread (World Wildlife Federation).

Timber and wood products are sustainable – trees absorb carbon dioxide (CO<sub>2</sub>) from the atmosphere and help reduce global warming.

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 the loss of wildlife habitats, replacement of natural forests by plantations, use of pesticides and soil erosion caused by large areas being clear felled.

Using tropical timber products leads to deforestation, loss of wildlife habitats, extinction of species and soil erosion as well as unbalancing the world's climate.

### Good Practice

Purchase timber and timber products from sustainable forests that have independently been certified by a credible, globally applicable forest certification scheme. (There are labelling schemes for sustainable timber, for example Forest Stewardship Council (FSC) products have a chain of custody certificate).

Do not buy products made from tropical hardwood

Use timber from native sustainability certified sources in Europe

Consider the repair or re-use of furniture or other timber products before making a purchase

Consider buying reclaimed timber and products made from reclaimed timber

When buying<sup>1</sup> plywood or chipboard, check that they are manufactured with low (or none at all if possible) formaldehyde<sup>1</sup> resins, and sourced from sustainable forests (Formaldehyde is a compound used as resin glue in chipboard furniture which can give rise to volatile organic compound emissions during production and initial use).

Avoid furniture and carpets that use CFC foams – check the product information

### **Useful sources for information**

Forest Stewardship Council – [www.fsc-uk.org/](http://www.fsc-uk.org/)

Forests Forever - [www.forestsforever.org.uk/](http://www.forestsforever.org.uk/)

Red list of threatened species - [www.iucnredlist.org/](http://www.iucnredlist.org/)

Timber Trade Federation - [www.ttf.co.uk/](http://www.ttf.co.uk/)

World Wildlife Federation - [www.wwf.org.uk](http://www.wwf.org.uk)

<sup>1</sup> Formaldehyde

## **SECTION 8.10 - OFFICE SUPPLIES/STATIONERY**

The University has an approved Supplier for office supplies/stationery – Office Depot. Further details about this contract is available from Procurement Department on 01895265794. Lyreco provides many 'environmentally preferred' alternatives to most products detailed in its catalogue, and these can be identified by the green tree symbol.

### **Good Practice**

Avoid pencils made from hardwood

Avoid writing instruments or correcting fluids which contain xylene or solvents that damage the environment, use water based alternatives instead

Buy solar powered rather than battery powered calculators

Buy items that can be reused (i.e. refillable pencils, markers and highlighters)

Buy recycled and recyclable stationery items (i.e. recycled pens and pencils, recycled cardboard files)

### **Paper**

Brunel University is committed to reducing the amount of paper it consumes by printing less, purchase recycled paper products and increase the recycling of waste paper.

Paper which is produced from virgin forests can have adverse environmental impacts, the most significant being the destruction of important wildlife habitats. Some paper produced from timber grown on intensively managed, single species plantations, managed with high fertilisers and pesticides, can lead to loss of topsoil and loss of biodiversity.

Paper production uses a high amount of energy which contributes to deforestation, global warming and acid rain. Paper production can involve pollution through the use of chemicals, as processing techniques such as bleaching using chlorine to whiten the paper can result in harmful emissions to the environment. There are different processes available nowadays which use oxygen, hydrogen, sodium

peroxide and soap, and also more efficient pulping techniques to eliminate the need to use chlorine bleach.

Paper which is produced from new pulp uses very large volumes of water, and if paper is not recycled it will generally go to landfill, where it releases methane - a greenhouse gas as it decays.

Some non-certified labels that you may have noticed on paper products include:

**Recyclable paper:** This term means that paper can be recycled regardless of how it was produced or what it contains. It does not necessarily mean that the paper contains any recycled content.

**Recycled paper :** Paper that contains over 55% recycled content can be described as recycled. Sometimes this can be misleading as companies produce paper which is labelled as recycled when it is made from a mix of virgin pulp and unused waste from the paper mill.

**Sustainable paper/forest friendly paper :** The term is used to describe paper that comes from plantations where for every tree felled another is planted. A genuine sustainably managed forest is one that provides a renewable, economic supply of timber and provides a habitat for native wildlife, allowing the forest to regenerate as much as possible rather than being felled and reseeded.

**Wood free paper:** This means that the paper is virgin pulp produced by a chemical rather than a mechanical pulping process. It does not mean that the paper contains no wood fibres.

#### **Why buy recycled paper?**

Making pulp from recycled waste consumes up to 50% less energy than using trees

Recycled paper production uses up to 50% less water

Increasing the demand for waste paper for recycling means less paper will go to landfill

Fewer chemical processes are involved in the production of recycled paper reducing the polluting effect of any waste released into seas and rivers

It reduces the pressure for more plantations, thereby protecting wildlife and local ecology

#### **Good Practice**

Reduce the amount of paper used – think before you print, use scrap paper for notes, print and photocopy double-sided, use email, re-use envelopes especially for internal distribution

Wherever possible, buy recycled paper that is comprised of at least 75% post-consumer waste

If it is necessary to buy virgin paper, ensure that it has the FSC logo to certify that it has been produced from a sustainable forest

Specify recycled paper when commissioning publications

Always recycle waste paper that cannot be reused

Buy paper with the National Association of Paper Merchants (NAPM), Nordic Swan and Blue Angel standards

Avoid buying paper which uses chlorine in the bleaching process, wherever possible buy totally chlorine free papers or at least elemental chlorine free papers

#### **Forest Stewardship Council (FSC)**

The FSC promotes environmentally, socially and economically beneficial forest management. Its logo identifies paper products that are sourced from sustainably managed forests. Information on the FSC is detailed in section 4 of this guide.

### **Labels that refer to chlorine use**

*Totally Chlorine Free (TCF)* – the pulp that the paper is produced from is bleached without the use of any chlorine compounds and subsequent dioxin emissions.

*Elemental Chlorine Free (ECF)* – the pulp has been bleached using weaker chlorine compounds such as chlorine dioxide or oxygen rather than just pure chlorine which is more detrimental to the environment.

*Processed Chlorine Free (PCF)* – paper is manufactured without adding any chlorine or chlorine derivatives. However, PCF is used on recycled paper so if chlorine was used in the manufacture of the original paper, it is still in the finished product - but no more than that.

### **Useful sources for information**

Confederation of European Paper Industries [www.cepi.org/](http://www.cepi.org/)

Evolve Recycled Paper [www.evolve-paper.com/en/](http://www.evolve-paper.com/en/)

Forestry Commission [www.forestry.gov.uk/](http://www.forestry.gov.uk/)

Rainforest Alliance [www.rainforest-alliance.org/](http://www.rainforest-alliance.org/)

The Paper Federation of Great Britain [www.paper.org.uk](http://www.paper.org.uk)

The Waste and Resources Action Programme [www.wrap.org.uk](http://www.wrap.org.uk)

DEFRA <https://www.gov.uk/...department-for-environment-food-rural-affairs>

### **Conclusion**

The University spends in excess of £45 million per annum on works, goods and services and by using its buying power to opt for works, goods and services that respect the environment; we can make an important contribution towards sustainable development.