

# green glossary



This guide is designed to help you understand many of the terms associated with environmentally friendly paper. It works in conjunction with the edp environmentally friendly paper swatch. To find out more about each paper's environmental credentials refer to the individual swatch for each product. For more detailed information, contact the EDP office in your state.



**Elementally chlorine-free.** Woodpulp bleached without the use of chlorine gas, a product found to cause toxins in pulp mill effluents.



**Totally chlorine-free.** Paper made from woodpulp bleached without the use of chlorine chemicals, i.e. no chlorine gas or chlorine dioxide.



**Recycled.** Paper which, partly or wholly, is manufactured from recycled material.



**The EU Eco-Management and Audit Scheme.** A voluntary environmental management system for companies and organisations. This standard requires public reporting on progress towards environmental targets, and rigorous environmental management.



**International Environmental Management Standard.** ISO14001 specifies the actual requirements for an environmental management system. It applies to those environmental aspects, over which the organisation has control and can be expected to influence.



**Nordic Swan** - An eco-label applied, in the main, to papers produced by Scandinavian integrated pulp and paper mills that have particularly low sulphur emissions.

**Triple Bottomline,** or Corporate Social Responsibility (CSR) is key for successful businesses with increased stakeholder demands for transparency, accountability and responsibility.

The Environment is firmly at the heart of any CSR policy with companies expected to report and implement environmental policies and demonstrate a commitment to sustainability.

Graphic designers play their part by ensuring that the paper they specify on behalf of their client accurately reflects their client's environmental position.

The client depends on the designer to use good judgement when specifying a paper – to choose a paper, which will demonstrate a responsible corporate attitude towards the environment.

So why don't more designers specify environmentally friendly papers when surely their clients would approve?

Widespread misinformation abounds about environmentally friendly papers and how we classify them. The aim of this Green Glossary is to inform about environmentally friendly paper and frequently used environmental terms.

Designers can be forgiven for finding themselves confused when looking to specify environmentally friendly papers, with the myriad of environmental jargon volunteered to "inform" our choice. The source of the woodpulp, the constituents of the paper, the paper manufacturing process, and the environmental credentials of the papermaker, must all be taken into consideration when choosing a paper.

The language used to credit the paper in a client's company financial and environmental reports must stand up to scrutiny. They present audited financial information, prepared with great precision and detail.

So let's decode this eco-jargon and work towards an environmentally friendly paper credit for company financial and environmental reports, which actually means something – a statement, which advances sustainability and stands up to audit.

  
**edwards dunlop paper**

Melbourne 03 9263 9800  
Sydney 02 8746 8746  
Brisbane 07 3902 7100  
Perth 08 9201 1311  
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[www.edpaper.com.au](http://www.edpaper.com.au)

## ***A list of environmental terms relating to paper and the papermaking process.***

### **Acid Free**

Papers which are free from traces of acid, i.e. made under neutral sizing conditions.

### **Alternative Fibre**

Alternative pulps to woodpulp used in papermaking such as hemp, esparto, bamboo, or cotton. Sometimes referred to as "tree-free".

### **Annual Renewable**

Crops harvested annually as an alternative to woodpulp (as above).

### **Biodegradable**

Waste material composed primarily of constituent parts that occur naturally, are able to be decomposed by bacteria or fungi, and are absorbed into the ecosystem. Paper is normally biodegradable.

### **Biodiversity**

A large number and variety of species of animals, plants, fungi and microorganisms. Ecologically, wide biodiversity is conducive to the development of all species.

### **Bleached Pulp**

Pulp whose natural brightness has been improved using chemicals.

### **Bleaching**

Bleaching method using chlorine or other chemicals to whiten the colour of the woodpulp used in papermaking.

### **Blue Angel**

A German eco-label for recycled paper.

### **Canadian Standards Associations**

A sustainable forest management standard developed by the Canadian timber industry.

### **Carbon Dioxide (CO<sub>2</sub>)**

Produced by burning fossil fuels or wood based products, which raise atmospheric carbon dioxide levels and contribute to the greenhouse effect.

### **Certification**

The process of evaluating practices against an agreed standard by an accredited independent third-party.

### **Chain-of-custody**

The step-by-step verification process through which products are traced from their origin to the final end product. For paper this means the forest to the finished product.

### **Chemical Woodpulp**

Produced by cooking wood chips in a pressure vessel with cooking liquor. The chemicals in the liquid dissolve the lignin, so the fibres are liberated. (See lignin) The woodpulp is used to produce higher quality papers, as the fibres are longer and stronger.

### **Chlorine**

A bleaching agent used in the woodpulp production process to create whiter, stronger paper.

### **De-Inking**

Removal of printing ink and impurities from recovered paper; to produce recycled fibre pulp with improved whiteness and purity.

### **ECF (Elemental Chlorine Free)**

Woodpulp bleached without the use of chlorine gas, a product found to cause toxins in pulp mill effluents.

### **Eco Label**

Eco labels are designed to guide consumers and purchasers in their desire to shop with a "green" conscience, and thus contribute to a better society. There are a range of eco labelling schemes from different sources and countries. Not every eco label can be relied upon.

### **Effluent**

Waste liquid discharge from the papermaking process, usually including a small amount of suspended solids and dissolved chemicals. Biological effluent treatment plants at paper mills neutralise the effluent so water can be returned to the environment and effluent solids can be re-used as a soil conditioner.

### **EMS (Environmental Management System)**

An internal system for handling environmental issues within a company. It sets requirements for how activities impacting the environment shall be accounted for and documented. Examples of environmental management systems are ISO 14001 and EMAS.

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

A voluntary environmental management system for companies and organisations, applicable in Europe and based on EU regulations. This standard requires public reporting on progress towards environmental targets, and rigorous environmental management.

### **EU Eco-Label**

Launched 10 years ago to avoid a proliferation of separate national schemes. It is "a unique certification scheme to help European consumers distinguish greener, more environmentally friendly products and services (not including food and medicine)". Award of the label means that the item has been "checked by independent bodies and complies with strict ecological and performance criteria". Criteria exist only for copying paper and a few other products. [www.eco-label.com](http://www.eco-label.com)

### **Forest Certification**

A process of labelling wood that has been harvested from a well-managed forest. Not all forest certification schemes can guarantee timber does come from well-managed forests.

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

An international, non-governmental organisation, which promotes responsible and sustainable forest management. FSC system of forest certification and product labelling allows papermakers to identify woodpulp that comes from well-managed forests. Its chain of custody sources woodpulp from the forest to the final user. FSC is the only eco label endorsed by WWF, Friends of the Earth, Greenpeace and the Woodland Trust.

### **Furnish**

The mixture of various pulps - or raw materials - used in the manufacture of paper. Main constituents are wood or other pulps, sizing material, fillers, dyes and other additives.

### **Greenhouse Effect**

Is caused by gases in the atmosphere, which absorb the earth's heat radiation, which results in an increase in temperature. The most important greenhouse gases are carbon dioxide, methane, nitrous oxide, chlorofluorocarbons and ozone.

### **Ingredients Of Paper**

Paper is composed of cellulose fibres such as from wood or cotton and additives, such as fillers, dyes and sizing.

### **ISO 14001**

International Environmental Management Standard. It specifies the actual requirements for an environmental management system. It applies to those environmental aspects, over which the organisation has control and can be expected to have an influence.

### **LCA (Life Cycle Assessment)**

A method for assessing the environmental impact of a product "from the cradle to the grave".

### **Lignin**

Wood is made up of cellulose fibres and lignin. The lignin acts as glue, which binds all the fibres together. Lignin is removed to make chemical woodpulp in the papermaking process.

### **Longlife Paper**

Paper made in accordance with ISO 9706 to contain an alkali reserve to give it characteristics of permanence.

### **Mechanical Woodpulp**

This is produced by mechanically separating the cellulose fibres in the wood. Paper produced from it is weak and of lower quality than that produced from chemical woodpulp. Used for newsprint.

### **Mill Broke**

Waste paper produced by mills during the paper making process that has traditionally been reused in manufacturing paper e.g. trimmings, faulty paper etc. Not strictly speaking recycled, but better than sending it to landfill. Also known as 'Mill Waste'.

### **Nordic Swan**

An eco-label applied, in the main, to papers produced by Scandinavian integrated pulp and paper mills that have particularly low sulphur emissions.

### **Oxygen Bleaching**

A process in which oxygen is used to facilitate a reduction in other bleaching compounds and an essential component for TCF woodpulp production.

### **Ozone Bleaching**

Ozone allows bleaching to high brightness with reduced amounts of chlorine chemicals or without chlorine chemicals at all.

### **Paper Grades**

Paper is classified into different grades according to the end use, the pulp used and the treatment of the paper.

### **Paper Mills**

Mills (factories) that produce paper from woodpulp and alternative pulps

### **Peroxide Bleaching**

Method of bleaching woodpulp with hydrogen peroxide to remove lignin; used in with other non-chlorine bleaching compounds it reduces or avoids the need for chlorine dioxide in final bleaching.

### **Post Consumer Waste**

Waste collected after the consumer has used and disposed of it. Recovered printed materials that can be de-inked to form a recycled pulp.

### **Pre Consumer Waste**

Also known as best white waste, typically these are unprinted off cuts, scraps, trimmings, overruns, etc from printers and converters that are then formed into a recycled pulp.

### **Processed Chlorine Free**

Recycled paper in which the recycled fibre content is unbleached or bleached without chlorine or chlorine derivatives. Any virgin material portion of the paper must be TCF.

### **Pulp**

Cellulose fibre that has been separated from a plant into a form suitable for the manufacture of paper.

### **Rag Paper**

Papers made from cotton fibres.

### **Recovered Paper**

Paper recovered for recycling into new paper products.

### **Recycled Paper**

A broad term that needs to be clearly defined. Recycled paper could mean anything from 100% post consumer waste to paper made from paper machine off cuts. There is no one clear definition of a recycled paper, so it is best to specify the fibre content.

### **Recyclable**

All paper is, theoretically recyclable, but systems must be in place to ensure that this happens, before this term can be applied.

### **Recycled Fibre**

Fibre obtained from recovered paper.

### **Recycling Symbol**

Found on paper and other material, which, partly or wholly, are manufactured from recycled material.

### **Sustainable Forestry Initiative (SFI)**

A system of principles, objectives and performance measures developed by professional foresters, conservationists and scientists, among others that is based on the perpetual growing and harvesting of trees.

### **Sustainable**

Sustainability is all about preserving the world's natural resources for future generations. A fully sustainable industry would be one that has zero impact, or a positive impact on the environment. This term is regularly misused.

### **Sustainable Forests**

Sustainable forests are those, which are planned and managed to achieve environmental, social and economic targets. There are a number of schemes for certifying this and the term is often misused. The Forest Stewardship Council (FSC) is the only one, which is recognised by Greenpeace and other major environmental organisations.

### **TCF (Totally Chlorine Free)**

Paper made from woodpulp bleached without the use of chlorine chemicals, i.e. no chlorine gas or chlorine dioxide.

### **Thinning**

A practice in which certain trees are removed from a dense stand to allow the remaining trees adequate sunlight, nutrients and moisture to grow at an even rate.

### **Virgin Fibre**

Wood fibre that has never been used in the manufacture of paper or board.

### **Woodpulp**

Fibrous material prepared from wood or recovered waste paper processed into pulp either by mechanical or chemical means, for use in the manufacturing of paper or cellulose products.

### **Woodfree Paper**

Paper made from chemical woodpulp. It does not contain any mechanical pulp beyond a permissible content of 5% by mass.