

# Sustainability speak for print businesses

The environment is one of the key issues facing print today, with all printers needing to engage with the wider community on the benefits of print. NZP presents a guide to the language of green, courtesy of Australian Paper

## Carbon Neutral

CARBON Neutral describes products, operations and activities which have had their greenhouse gas emissions measured, calculated and then 'offset' through the purchase of Carbon Credits. Carbon Neutral products, operations and activities should be certified by an independent organisation that specialises in system management and auditing.

## Chain of Custody (COC)

THE means of tracking a product along the supply chain. For instance, being able to trace paper from the forest of origin, through pulp and paper mill, paper merchant and printer to the end user. Often a third party audits the Chain of Custody system, as with the FSC and PEFC schemes. For Chain of Custody to work, each group which handles/transforms the product must be certified.

## Cradle-to-Gate

CRADLE-to-gate is an assessment of a partial product life cycle from manufacture (cradle) to the factory gate (i.e. before it is transported to the consumer). The use and disposal phases of the product life cycle are usually omitted.

## Cradle-to-Grave

CRADLE-to-grave is the full Life Cycle Assessment from manufacture (cradle) to use phase and disposal phase (grave).

## De-Inked Pulp (DIP)

PULP consisting of fibre from recovered paper which has had the ink removed.

## Elemental Chlorine Free (ECF)

PAPER pulp that is whitened/bleached, using derivatives of Chlorine that does not release harmful dioxins into the environment. Dioxins have proven to be carcinogenic and now studies have shown that mills using ECF bleaching have eliminated dioxins from mill effluent.

## EMAS

THE Eco-Management and Audit Scheme, EMAS, is the European Commission's environmental policy tool for European Union organisations to ensure sustainable development. It has been operating since April 1995, and aims to promote continuous evaluation and improvements in the environmental performance of participating organisations. Essentially and practically identical to ISO14001.

## Environmental Management System (EMS)

A business process that ensures that environmental matters are addressed through a documented system. An EMS is a systematic approach to address businesses' environmental issues and covers all facets of their operations. It allocates resources and assigns responsibilities and provides for the continual evaluation of practices, procedures and processes. A large part of an EMS is continual improvement plans and actions.

## Forest Stewardship Council (FSC)

THE Forest Stewardship Council (FSC) is an international network promoting responsible management of the world's forests. The principles for management of FSC certified forests are used to verify the management of forest holdings and are a system of tracing, verifying and labelling timber and wood based products which originate from certified forests.

## ISO 14001

THE International Standards Organisation (ISO) developed ISO 14001 as a global environmental management system to assist an organisation to achieve its environmental goals. It guides planning, implementation and operation, continual improvement, checking and corrective action, and management review processes.

## Life Cycle Assessment / Analysis (LCA)

A method of evaluating the environmental impact of a product from cradle to grave, including how it's made, how it's used and how it's disposed of.

## Mechanical Pulp

A broad description that includes all pulp where the bonding lignin in wood is not completely removed as it is in woodfree pulp. Such products range in brightness from those used in Newsprint to those used in magazine papers. Mechanical pulp brings benefits in opacity, stiffness and bulk to papers.

## Pre-consumer Waste

WASTE that has left the mill but has not reached the end user. Typically trimmings and offcuts from paper converters.



## Mill Broke

OFF cuts and rejected material that has not left the paper mill and is part of the process of making paper within the mill. Broke is routinely re-pulped and the fibre used in the production of new paper. Mill broke is not normally considered to be recycled fibre.

## Old Growth Forest

ECOLOGICALLY mature forest subjected to very little, if any, unnatural disturbance such as timber harvesting, roads and clearing.

## Plantation / Tree Farms

AREAS of intensively managed trees of either native or exotic species which are created by the regular placement of seedlings or seed specifically for timber and/or fibre production. Usually contain only one species - monoculture.

## Post-consumer Waste

THERE are various definitions of Post-consumer waste including:  
 FSC definition: paper waste that has reached the end user, typically homes and offices (excludes unsold final product).  
 ISO14021 definition: paper waste that has been converted to its final use (includes unsold final product)  
 Essentially post-consumer waste is what we put in the recycling bin.

## Regrowth Forest

FORESTED land which has been replanted with original mixed species from the area, or selectively logged and allowed to re-grow naturally to produce new forests.

## Recycled

TO obtain the Recycled label, a paper must contain recovered materials. The amount may vary considerably, from small percentages of pre-consumer to 100 per cent post-consumer materials, and any combination of the two. Most recycled papers will have a recovered content of at least 20 per cent.

## Recycled Fibre

PAPER and board that has been collected for re-use as raw fibre material in paper and board manufacture. Includes both pre and post consumer waste that is prevented from going into landfill. Paper from recycled fibre rather than virgin fibre produces less air and water pollution.

## Programme for the Endorsement of Forest Certification schemes (PEFC)

A scheme for auditing forestry operations, taking into account the effects on the environment. The PEFC council is an independent, non-profit, non-government organisation, founded in 1999 which promotes sustainably managed forests and chain of custody through independent third party certification. PEFC provides an assurance mechanism to purchasers of wood and paper products that they are promoting the sustainable management of forests. PEFC recognises local national forestry standards under the global certification, such as the Australian Forestry Standard AS4707 is recognised under PEFC. Both FSC and PEFC have the same aims, that is to engender responsible forestry and protect high risk forests.

## Renewable Energy

A term given to energy sources that are limitless or are so large that it is inconceivable that they would run out. For example solar energy, wind and wave energy. In contrast, non renewable energy refers to that source which when used depletes the reserve of that energy source eg coal, oil etc.

## Sustainable Development

DEVELOPMENT that meets the needs of the present without compromising the needs of the future.

## Totally Chlorine Free (TCF)

PAPER pulp that is whitened/bleached, using systems other than Chlorine. Alternative bleaching agents include Hydrogen Peroxide and Ozone. The term TCF cannot be associated with recycled papers because it is impossible to know if the fibre was originally whitened using a Chlorine based system.

## Woodfree

WOODFREE is a description of pulp and paper meaning that they contain little or no mechanically ground fibres. Implies that fibres are chemically treated, thereby eliminating lignin (the substance that binds wood fibres together in the tree) and making the product whiter and stronger. Woodfree is an historical paper-making term shortened from 'ground wood-free' and does not denote a paper or pulp made from materials other than wood. Mechanical pulp still contain most of the wood components and so are called wood after processing. Woodfree is not as yellowing as paper with mechanical pulp.