

The Australian Ecolabel Program

Good Environmental Choice Australia Standard

Office Paper Products

Draft Review for public comment and consultation



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Use of This Standard

This voluntary environmental labelling standard may be used by competent environmental assessors to establish product compliance to the Australian Ecolabel Program. Products that are certified with the mark of conformity, the “Good Environmental Choice Label” have been independently tested and demonstrate compliance to the environmental and social performance criteria detailed in this standard. The overall goal of environmental labels and declarations is the communication of verifiable and accurate information, which is not misleading, on environmental aspects of products and services. This encourages the demand for, and supply of, those products and services that cause less stress on the environment, thereby stimulating the potential for market-driven continuous environmental improvement.

This standard identifies environmental, quality, regulatory and social performance criteria that products sold on the Australian market can meet in order to be considered as good “environment practice”. Products that have been certified as complying to this standard may gain greater market recognition and a marketing advantage in government and business procurement programs, as well as broad consumer preference.

This standard can be used by Australian producers to guide their designs for environment programs by using the environmental criteria as key performance benchmarks to reduce the environmental loads of their product. The standard is necessarily restricted in its identification of environmental loads from the product life-cycle. Producers should consider other environmental measures along the product cycle, which are not included in this standard, in their environment program designs for and aim for even higher levels of environmental performance where technically possible.

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CONTENTS

ABSTRACT.....	4
DEFINITIONS.....	4
1 INTRODUCTION.....	6
1.1 PURPOSE.....	6
1.2 BACKGROUND.....	6
2 STANDARD CATEGORY SCOPE.....	7
3 ENVIRONMENTAL PERFORMANCE CRITERIA.....	8
3.1 FITNESS FOR PURPOSE.....	8
3.2 MATERIAL REQUIREMENTS.....	8
3.2.5 ADHESIVES.....	10
3.3 PRODUCTION REQUIREMENTS.....	10
3.4 MANUFACTURING REQUIREMENTS.....	11
3.4.1 WASTE MANAGEMENT AND ENERGY USE.....	11
3.4.2 PACKAGING REQUIREMENTS.....	11
4 COMPLIANCE TO ENVIRONMENTAL REGULATIONS.....	12
5 COMPLIANCE TO LABOUR, ANTI-DISCRIMINATION AND SAFETY REGULATIONS.....	12
6 EVIDENCE OF CONFORMANCE.....	13
6.1 AUDIT METHODOLOGY.....	13
6.2 ASSESSOR COMPETENCY.....	13
6.3 SUITABLE SOURCES.....	13
6.4 LABORATORY TESTING.....	13

GOOD ENVIRONMENTAL CHOICE AUSTRALIA STANDARD

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Abstract

This Standard specifies environmental performance of office paper products for the Australian Ecolabel Program. The Australian Ecolabel Program complies with ISO 14024: "Environmental labels and declarations - Guiding principles" which requires environmental labelling specifications to include criteria that are objective, reasonable and verifiable.

Definitions

Air Dried Tonne (ADT) is defined as a representative tonne of finished product that has stable, consistently reproducible moisture content in air. It is thus a reliable measure of manufacturing output.

AOX refers to absorbable organic halogens.

Broke means machine trim or damaged paper that is pulped and returned to the papermaking process within the mill.

Chemical Oxygen Demand (COD) means the mass of oxygen equivalent to the amount of dichromate consumed by dissolved and suspended matter when a water sample is treated with that oxidant under defined conditions.

CITES is the acronym for the Convention on International Trade of Endangered Species.

Forestry Residues are defined as waste from harvesting operations (including thinnings) and wood processing operations (including saw dust and chipped waste), provided that those operations fulfill the requirements of Section 3.2.1 of this Standard.

GSM means grams per square metre.

ISO means International Organisation for Standardisation.

Label means the Good Environmental Choice Australia Label.

NATA is the National Association of Testing Authorities.

NO_x is a joint chemical abbreviation for nitrogen oxides (NO, N₂O and NO₂). In this document NO_x means total NO and NO₂ measured as NO₂ equivalents.

Pre-Consumer is material diverted from the waste stream during a manufacturing process. Excluded is re-utilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

Recycled Content refers to post-consumer material generated by households, or by commercial, industrial and institutional facilities in their role as end-users of the product, which can no longer be used for its intended purpose. This includes returns of material from the distribution chain. Excluded is pre consumer recycled content and reutilisation of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

Return fibre is fibre collected from the conversion and consumer stages. Purchased broke and broke from own production is defined as new fibre.

Sulphur (S) means gaseous emissions of sulphur into the atmosphere, such as sulphur dioxide and reduced sulphur compounds.

1 INTRODUCTION

1.1 Purpose

This Standard seeks to define good environmental performance benchmarks for office paper products. The voluntary environmental labelling standard implemented by Good Environmental Choice Australia (GECA) as part of the Australian ecolabel program specifies environmental performance criteria for a range of office paper products including photocopying and stationary products. This standard stipulates limits for the environmental load of such products throughout the major aspects of their life cycle.

1.2 Background

Paper products have and continue to be the subject of considerable community concern with respect to their impact upon the environment, particularly the sourcing of wood pulp from virgin or unsustainably managed native forests, and production emissions. Consumers are calling for the protection of the Australian environment and insisting for a larger inclusion of Australian collected and recycled fibre in the content of paper products. Where recycled or reclaimed fibre is used it is important the associated water emission and air emission impacts are lower too, so as not to negate the environmental benefits of this fibre source through heavy bleaching and chemical additives.

The manufacture, use and disposal of paper products can result in a significant burden being placed on the environment. Non-biodegradable detergents (surfactants) used in cleaning processes can accumulate and be toxic or otherwise harmful in the environment if discharged. Process effluents can contain high concentrations of natural organic materials which deplete oxygen from receiving waters, adversely impacting plant and animal life. Chlorine-based bleaches and halogenated solvents can accumulate and have toxic effects, if discharged. The inclusion of waxes, plastics or other materials during recycling and manufacturing processes can prevent future recycling of the end product.

Sustainable forestry is essential if the resources of forests are to be harvested in the long term. It is important that forestry is operated in a way that minimises disturbance of natural eco-systems and conserves the bio-diversity of forests. This Standard minimises these environmental problems by establishing a requirement for wood fibre not to be sourced from uncertified Australian native ecosystems, but instead to be predominantly sourced from recycled content or forestry residue.

The specification set in this Standard is intended to produce environmental benefits by encouraging:

- Using wood from sustainable forestry operations;
- Lower discharges of sulphur and nitrogen oxides into air;
- Lower emissions of phosphorus, absorbable organic halogens (AOX) and lower
- Oxygen consuming organic materials (COD);
- Reduced energy consumption in pulp and paper production; and
- Re-use and recycling of waste paper and waste from the production process.

2 STANDARD CATEGORY SCOPE

This standard is applicable to the following categories of paper products:

2.1 Products Supplied in Cut Reams

This category includes cut reams of paper up to 240 GSM, used for Digital printing and photocopying in the office.

2.2 Stationery Paper Products

This category includes envelopes, exercise books, invoice books, posters, etc.

This scope of this standard does not include packaging, carbon paper or plastic envelopes. Sanitary paper products for the office are also excluded from this standard as it is incorporated in the GECA Standard No. 13: Sanitary Paper Products.

How this Standard relates to Australian Standards

This is a voluntary environmental labelling standard only.

All GECA voluntary ecolabelling standards require that products satisfy the relevant Australian or International Standard as a prerequisite for GECA certification.

Australian Standards (AS) typically define “fit-for-purpose” criteria but do not provide assurance of environmental preferability. This Standard seeks to define environmental performance benchmarks above and beyond the AS.

3 ENVIRONMENTAL PERFORMANCE CRITERIA

3.1 Fitness for Purpose

Certified products should be good performers in their intended application. Certain standards of quality and durability are implicit in the Label and the manufacturer must ensure that the product is fit for its intended purpose and:

3.1.1 Applicable Standards

The product meets or exceeds the requirements of the relevant Australian Standard, or the product meets the applicable and accepted standard in its target market if it is to be exported, or

3.1.2 Demonstrated Performance

If there is no relevant Australian Standard, the product can demonstrate sufficient quality by providing testing reports from an independent organisation or case studies from installations demonstrating market suitability and quality.

3.2 Material Requirements

3.2.1 Fibre Source

Post-consumer recycled fibre is exempt from this requirement.

The geographical origin of pre-consumer recycled and virgin fibre material must be documented, allowing confirmation of origin throughout the supply chain.

Virgin pulp from sources that are not certified under a recognised certification scheme (e.g. FSC or AS 4708 – 2007 (AFS)) as being sustainably managed shall not originate from:

- a. *Illegal harvesting*
Illegally harvested wood and natural materials are those that are harvested, traded or transported in a way that is in breach with applicable national regulations (eg. regulations addressing CITES species, money laundering, corruption and bribery, and other relevant national regulations).
- b. *Uncertified high conservation value communities*
High Conservation Value communities are those that possess one or more of the following attributes:
 - Communities containing globally, regionally or nationally significant concentrations of biodiversity values (e.g. endemism, endangered species, refugia); and/or large landscape level communities, contained within, or containing the management unit, where viable populations of most if not all naturally occurring species exist in natural patterns of distribution and abundance.
 - Communities that are in [constitute] or contain rare, threatened or endangered ecosystems.
 - Communities fundamental to meeting basic needs of locally indigenous human populations (e.g. subsistence, health) and/or critical to these people's traditional cultural identity (areas of cultural, ecological, economic or religious significance identified in cooperation with such local communities).

For materials sourced from within Australia, please refer to the following:

The EPBC Act List of Threatened Fauna at

<http://www.deh.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl?wanted=fauna>

The EPBC Act List of Threatened Flora at

<http://www.deh.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl?wanted=flora>

The EPBC Act List of Threatened Ecological Communities

<http://www.deh.gov.au/cgi-bin/sprat/public/publiclookupcommunities.pl>

The Australian Heritage Database (for listings of areas of cultural significance) at

<http://www.deh.gov.au/cgi-bin/ahdb/search.pl>

For materials sourced from outside Australia, please refer to credible lists detailing threatened species, threatened communities and areas of cultural significance in the respective countries.

3.2.2 Recycled Content Requirements

Uncoated writing and printing paper must incorporate at least 20% by weight of preferably sourced fibre. Preferable content may include forestry residue that meets the criteria in 3.2.1 or recycled fibre.

3.2.3 Prohibited and Restricted Substances

The following substances must not be used in certified products or their production.

- Halogenated hydrocarbons (including CFC, HCFC and HFC)
- Alkylphenol ethoxylates (APE), their derivatives (APDs), or linear alkylbenzene sulphonates (LAS)
- Phthalates
- Acrylamide
- Optical brighteners
- EDTA or its derivatives

The following dyes shall not be used in certified products:

4- aminodiphenyl benzidine	3,3 dimethyl- 4,4 diaminodiphenylmethane
4-chloro-o-toluidine	p-cresidine
2-naphtylamine	4,4 methylene-bis-(2-chloroaniline)
o-aminoazotoluene	4,4-oxidianiline
2-amino-4-nitrotoluene	4,4 – thiodianiline
4-chloroaniline	o-toluidine
2,4 – diaminoanisole	2,4-toluenediamine
4,4 – diaminodiphenylmethane	2,4-diaminotoluene
3,3 – dichlorobenzidine	2,4,5 –trimethylaniline
3,3 – dimethoxybenzidine	o-anisidine
3,3 – dimethylbenzidine	4-aminoazobenzene

Solvents used to clean production equipment must not contain ozone depleting substances as listed in Annex A, B or C of the Montreal Protocol, or subsequent amendments.

Envelopes or other products with a printed surface area $\geq 10\%$ must comply with the GECA Printers and Printed Materials Standard.

Envelope window material used in envelopes must not inhibit the pre-treatment or recycling of return fibre. Window material also must not contain chlorine based substances.

GECA Certified products must not contain chemical compounds that have been identified by the Australian Department of Environment as a Priority Existing Chemical (PEC) still under investigation or are prioritised for research by the EU as endocrine disruptors.

Active components in biocides or biostatic agents used to counter slime-forming organisms in circulation water systems containing fibres shall not be potentially bio-accumulative.

At least 95% by weight of active ingoing components in foam inhibitors used in the production of pulp and paper must be readily biodegradable in accordance with OECD test method No. 301 A-F or ultimately biodegradable in accordance with OECD test method No. 302 A-C or equivalent test methods.

The manufacturer must not use elemental chlorine in bleaching agents at any stage in the production of virgin fibre, or in the processing of recycled fibre: Likewise bleaching agents must not produce elemental halogens in-situ, including NaCl.

3.2.3.1 Heavy Metals

No dyes or pigments shall be used that contain lead, copper, nickel, aluminium, cadmium or chromium VI as constituent parts. However copper phthalocyanine dyes or pigments are acceptable.

The concentration of ionic impurities in the dyes used in manufacturing must not exceed the following limits:

Silver	100 ppm	Mercury	4 ppm
Arsenic	50 ppm	Manganese	1 000 ppm
Barium	100 ppm	Nickel	200 ppm
Cadmium	20 ppm	Lead	100 ppm
Cobalt	500 ppm	Selenium	20 ppm
Chromium	100 ppm	Antimony	50 ppm
Copper	250 ppm	Tin	250 ppm
Iron	2 500 ppm	Zinc	1 500 ppm

3.2.4 Additives

Certified products must not contain additives assigned any of the following risk phrases (or combinations thereof) in accordance with EU Directive 67/548/EEC:

R45 May cause cancer
 R46 May cause heritable genetic damage
 R49 May cause cancer by inhalation
 R50: Very toxic to aquatic organisms
 R51: Toxic to aquatic organisms
 R52: Harmful to aquatic organisms
 R53: May cause long-term adverse effects in the aquatic environment
 R56: Toxic to soil organisms
 R58: May cause long-term adverse effects in the environment

3.2.5 Adhesives

Adhesives must be certified by the Good Environmental Choice Australia Label or carry another ISO 14 024 compliant, GEN-member ecolabel acceptable to GECA, or satisfy the requirements of GECA Standard No. 1: Adhesives.

3.3 Production Requirements

3.3.1 Water Emissions

Water emission limits apply to all paper production regardless of fibre source (e.g. virgin or recycled).

Total discharges to water shall be calculated as the sum of the discharges from the pulp and the paper production stages and shall not exceed the following values:

- 30kg chemical oxygen demand (COD) per tonne (ADT) of chemical pulp raw material and 12kg COD per ADT for return fibre. COD shall be measured in accordance with ISO 6060 or equivalent standard.
- 0.050kg phosphorous (P) per ADT of chemical pulp raw material and 0.010kg P per ADT of return fibre.
- Total absorbable organic halogens (AOX) (as chlorine) discharged from each pulp manufacturing site shall not exceed 0.40 kg/tonne of paper produced.

3.3.2 Air Emission Requirements

Total emissions to air must be calculated as the sum of the emissions from the pulp and the paper production stages and shall not exceed:

- 1 kg sulphur compounds (S) per ADT produced. The calculation for S compounds shall include:
 - All S emissions which occur during the production of electricity for the manufacturing process. (Emissions related to heat energy generated from oil, coal and external fuels with known S content can be calculated instead of measured and then taken into account);
 - Include recovery boilers, lime kilns, steam boilers and destructor furnaces for strong smelling gases;
 - Diffuse emissions;
 - Reported emission values shall include both oxidized and reduced S emissions (dimethyl sulphide, methyl mercaptan, hydrogen sulphide and the like).
- 3.0 kg nitrogen oxides (NO_x, as NO₂ equivalents) per ADT. The emissions related to the production of electricity need not be accounted for.
- 1500 kg carbon dioxide from non renewable sources per ADT produced using chemical pulp raw material and 1700 kg carbon dioxide from non renewable sources per ton of paper produced using return fibre, including emissions from the production of electricity (whether on-site or off-site). Factors to determine carbon dioxide contributions of different fuel types shall be in accordance with the National Greenhouse Gas Inventory of the Australian Greenhouse Office.

3.3.3 Surfactants

When surfactants are used in the manufacturing process, such as for the de-inking of recycled paper input, where quantities ≥ 100 g/ADT (summed over all the surfactants used in all the different formulations used in de-inking return fibres), each surfactant must be readily biodegradable in accordance with OECD test method No. 301 A-F or equivalent test methods. Where such surfactants are used in quantities < 100 g/ADT, each surfactant must be readily biodegradable or ultimately biodegradable in accordance with OECD test method No. 302 A-C or equivalent test methods.

3.4 Manufacturing Requirements

3.4.1 Waste Management and Energy Use

The manufacturer must have effective policies and procedures to minimise waste, including measures to recycle waste materials from the production process.

The manufacturer must have a contract with a registered hazardous waste contractor for the environmentally responsible disposal of any hazardous waste produced during the production process.

The applicant is requested, on a voluntary basis, to provide information on energy and water use during the manufacturing process. Data gathered during the implementation of this version of the Standard will be used to draft energy use criteria in future versions of the Standard.

Certified product must not be impregnated, coated or otherwise treated in a manner which would prevent recycling in Australia or in the country where the product is used.

3.4.2 Packaging

Chlorinated or halogenated plastics must not be used in product packaging.

Packaging must not contain lead, tin, arsenic, cadmium, mercury or chromium VI or their compounds.

Used packaging must be able to be recycled by local recycling systems.

4 COMPLIANCE TO ENVIRONMENTAL REGULATIONS

The applicant is required to comply with relevant environmental legislation and government orders at the Local, State, and Commonwealth levels, if these have been issued. An applicant's compliance with these criteria may be established by undertaking a series of random checks; and/or by gathering samples of applicant operational procedures and documents from approved assessors as evidence to support compliance during the verification. Where an applicant is from an overseas jurisdiction, that jurisdiction's environmental regulations apply. Where the applicant is subject to a guilty verdict by a legally constituted court in the last 24 months on the basis of a breach of any environmental legislation or permits, there must be evidence of corrective action.

5 COMPLIANCE TO LABOUR, ANTI-DISCRIMINATION AND SAFETY REGULATIONS

An applicant shall demonstrate that all employees are covered by a Federal or State award or a certified industrial agreement or a registered workplace agreement as determined by the Industrial Relations Commission, the Employment Advocate or a State or Territory Workplace Relations Agency or a workplace agreement in compliance with Workplace Relations Act 1996 Part 7 – The Australian Fair Pay and Conditions Standard.

An applicant shall demonstrate general compliance to the terms of State or Territory Legislation concerning Occupational, Health and Safety and/or the *Commonwealth Safety, Rehabilitation and Compensation Act 1988*, where applicable. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by an Australian Court within the last 24 months, on the basis of a breach of State, Territory or Commonwealth Occupational, Health and Safety Legislation, there must be evidence of corrective action.

The applicant shall demonstrate general compliance to the requirements of the Racial Discrimination Act 1975, Sex Discrimination Act 1984, Disability Discrimination Act 1992, Equal Opportunity for Women in the Workplace Act 1999, and complementary State Legislation. Applicants cannot be in the list of 'named' or non-compliant employers under the Equal Opportunity for Women in the Workplace Act 1999. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by an Australian Court in the last 24 months on the basis of a breach of these Acts, there must be evidence of corrective action.

Where an applicant is from an overseas jurisdiction, the applicant shall demonstrate general compliance to that jurisdiction's anti-discrimination, occupational health and safety, and workers' compensations regulations. Where the applicant is subject to a breach order by a government agency, or a guilty verdict by a legal court in their respective country within the last 24 months on the basis of a the breach of anti-discrimination, occupational health and safety, and workers' compensation regulations, there must be evidence of corrective action.

An applicant's compliance with these criteria may be established by undertaking a series of random checks; gathering samples of applicant operational procedures and documents from approved assessors; and/or by providing a self-declaration document signed by an executive officer of the applicant organisation as evidence to support compliance during verification.

6 EVIDENCE OF CONFORMANCE

6.1 Audit Methodology

Conformance with this standard shall be demonstrated by undertaking an assessment under the above criteria by an approved assessor, following the certification and verification procedures detailed in the Good Environmental Choice Australia Ltd Documented Quality Management System, which generally follows the environmental auditing requirements of ISO 19 011.

6.2 Assessor Competency

The Australian Ecolabel Program classifies approved assessors as:

- a. Assessors registered by Good Environmental Choice Australia Ltd as environmental professionals that hold expertise relevant for an assessment, and who have undertaken training in the procedures of the Australian Ecolabel Program; or
- b. Environmental auditors accredited with the RABQSA.

6.3 Suitable Sources

Audit evidence should be of such a quality and quantity that competent environmental auditors, working independently of each other, will reach similar audit findings from evaluation of the same audit evidence against the same audit criteria.

Suitable sources of information to establish compliance may be, but are not limited to:

- a. Technical specification of the product.
- b. Obvious characteristics of the product under examination.
- c. Scientific test results and reports.
- d. Environmental management system and audit reports and results.
- e. Life-cycle assessment of each stage of the product life-cycle via a physical audit and examination.
- f. Life-cycle assessment via scientific testing.
- g. A statement of confirmation by an executive officer.
- h. An assessment of company or government records.
- i. Other material that can be considered objective evidence.

6.4 Laboratory Testing

New testing shall be undertaken by a laboratory accredited by the National Association of Testing Authorities (NATA), or an ISO 17 025 registered laboratory, or a similarly independent accreditation agent who can conduct the relevant tests and/or provide documentation detailing environmental performance against the criteria of this standard. The test results should be presented on NATA-endorsed reports or from a laboratory acceptable to Good Environmental Choice Australia Ltd.

If test results or environmental auditing results are not available, and/or there is insufficient data to establish full conformance with the criteria required by this standard, then certification cannot be awarded.