

PLUS 14021

Environmental claims: A guide for industry and advertisers

Developed in partnership with



Competition Bureau
Canada

Bureau de la concurrence
Canada

DRAFT



Legal Notice

This document is provided by the Canadian Standards Association (CSA) as a convenience only. The opinions in this document are the opinions of the author(s) and not the opinions of CSA.

Disclaimer and exclusion of liability

This document is provided without any representations, warranties, or conditions of any kind, express or implied, without limitation, implied warranties or conditions concerning this document's fitness for a particular purpose or use, its merchantability, or its non-infringement of any third party's intellectual property rights. CSA does not warrant the accuracy, completeness, or currency of any of the information published in this document. CSA makes no representations or warranties regarding this document's compliance with any applicable statute, rule, or regulation.

IN NO EVENT SHALL CSA, ITS VOLUNTEERS, MEMBERS, SUBSIDIARIES, OR AFFILIATED COMPANIES, OR THEIR EMPLOYEES, DIRECTORS, OR OFFICERS, BE LIABLE FOR ANY DIRECT, INDIRECT, OR INCIDENTAL DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES, HOWSOEVER CAUSED, INCLUDING BUT NOT LIMITED TO SPECIAL OR CONSEQUENTIAL DAMAGES, LOST REVENUE, BUSINESS INTERRUPTION, LOST OR DAMAGED DATA, OR ANY OTHER COMMERCIAL OR ECONOMIC LOSS, WHETHER BASED IN CONTRACT, TORT (INCLUDING NEGLIGENCE), OR ANY OTHER THEORY OF LIABILITY, ARISING OUT OF OR RESULTING FROM ACCESS TO OR POSSESSION OR USE OF THIS DOCUMENT, EVEN IF CSA HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, INJURY, LOSS, COSTS, OR EXPENSES.

In publishing and making this document available, CSDA is not undertaking to render professional or other services for or on behalf of any person or entity or to perform any duty owed by any person or entity to another person or entity. The information in this document is directed to those who have the appropriate degree of experience to use and apply its contents, and CSA accepts no responsibility whatsoever arising in any way from any and all use of or reliance on the information contained in this document.

Intellectual property rights and ownership

As between CSA and the users of this document (whether it be in printed or electronic form), CSA is the owner of all works contained herein that are protected by copyright, all trade-marks (except as otherwise noted to the contrary), and all inventions and trade secrets that may be contained in this document, whether or not such inventions and trade secrets are protected by patents and applications for patents. The unauthorized use, modification, copying, or disclosure of this document may violate laws that protect CSA's intellectual property and may give rise to a right in CSA to seek legal redress for such use, modification, copying, or disclosure. CSA reserves all intellectual property rights in this document.

Use of this document

This document is being provided by CSA for informational and non-commercial use only. If you do not agree with any of the terms and conditions contained in this Legal Notice, you may not use this document. Use of this document constitutes your acceptance of the terms and conditions of this Legal Notice.



DRAFT

CSA Standard

PLUS 14021

***Environmental claims: A guide for industry and
advertisers***



[®]Registered trade-mark of Canadian Standards Association

*Published in Month 200X by Canadian Standards Association
A not-for-profit private sector organization
5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6
1-800-463-6727 • 416-747-4044*

Visit our Online Store at www.ShopCSA.ca

DRAFT

DRAFT

ISBN 1-XXXXX-XXX

Technical Editor: Rita Mezei

© Canadian Standards Association – 2007

All rights reserved. No part of this publication may be reproduced in any form whatsoever without the prior permission of the publisher.

Contents

Preface		vi
1	Introduction	7
1.1	How to use this Guide	7
1.2	The global growth of environmental labelling	8
1.3	History of environmental labelling guidance documents in Canada	8
2	Applicable acts	8
2.1	Competition Act	9
2.2	Consumer Packaging and Labelling Act	10
2.3	Textile Labelling Act	10
3	Overall considerations	10
3.1	Verification	10
3.2	Legislative requirements	10
3.3	Life cycle analysis	11
3.4	Environmental improvement	11
3.5	Objective of ISO 14021	11
4	General requirements for all claims	12
4.1	Basic considerations	12
4.2	Relationship with ISO 14020	12
4.3	Specifics of ISO 14021	12
4.4	Vague and non-specific claims	14
4.5	Claims of "...free"	14
4.6	Claims of sustainability	15
4.7	Use of explanatory statements	15
5	Specific requirements	15
6	Symbols	23
6.1	General	23
6.2	Use of symbols for different environmental claims	23
6.3	Symbol for implementation of an environmental management system	24
6.4	Use of natural objects in symbols	24
6.5	Other information or claims	24
7	The Mobius loop	25
8	Evaluations and claim verification	27
8.1	Responsibilities of the claimant	27
8.2	Selection of evaluation and claim verification methods	27
8.3	Access to information	28
9	Comparative claims	28

DRAFT

10	Details of selected claims defined in ISO 14021	31
10.1	General	31
10.1.1	Selected claims detailed in ISO 14021	31
10.1.2	Claims of "where facilities exist"	31
10.2	Compostable	31
10.2.1	Usage of term	31
10.2.2	Qualifications	32
10.2.3	Evaluation	34
10.3	Degradable	34
10.3.1	Usage of term	34
10.3.2	Qualifications	34
10.3.3	Evaluation	35
10.4	Designed for disassembly	35
10.4.1	Usage of term	35
10.4.2	Qualifications	36
10.4.3	Use of a special process	36
10.4.4	Disassembly tools or methods	37
10.4.5	Evaluation	37
10.5	Extended life product	37
10.5.1	Usage of term	37
10.5.2	Evaluation methodology	38
10.6	Recovered energy	39
10.6.1	Usage of term	39
10.6.2	Qualifications	39
10.7	Recyclable	41
10.7.1	Usage of term	41
10.7.2	Qualifications	41
10.8	Recycled content	43
10.8.1	Usage of terms	43
10.8.2	Qualifications	45
10.8.3	Use of a symbol	45
10.8.4	Evaluation methodology	46
10.9	Reduced energy consumption	46
10.9.1	Usage of term	46
10.9.2	Qualifications and evaluation methodology	47
10.10	Reduced resource use	47
10.10.1	Usage of term	47
10.10.2	Evaluation methodology	49
10.11	Reduced water consumption	49
10.11.1	Usage of term	49
10.11.2	Qualifications	49
10.11.3	Evaluation methodology	50
10.12	Reusable and refillable	50
10.12.1	Usage of terms	50

DRAFT

10.12.2	Qualifications	51
10.12.3	Evaluation methodology	52
10.13	Waste reduction	52
10.13.1	Usage of term	52
10.13.2	Qualifications	53
10.13.3	Evaluation methodology	53

Annexes

Annex A - Environmental labels and declarations and ISO 14000 Series	54
Annex B - Principles for all environmental labels and declarations	56
Annex C - Simplified diagrammatic representation of a recycling system	57

Figures

Figure 1 - Examples of the Mobius loop	26
Figure 2 - Examples of acceptable locations of percentage value when using the Mobius loop to make claims about recycled content	45

DRAFT

Preface

This is the second edition of CSA Special Publication Plus 14021, *Environmental claims: A guide for industry and advertisers*. The first objective of this Guide is to provide the users of ISO¹ Standard 14021, Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling), with a practical guide to the application of the Standard and some practical examples of the use of environmental claims in the Canadian marketplace.

The second objective is to provide assistance to industry and advertisers in complying with certain provisions of the *Competition Act*, the *Consumer Packaging and Labelling Act*, and the *Textile Labelling Act* administered and enforced by the Competition Bureau, an independent law enforcement agency of the Government of Canada that promotes and maintains fair competition in the marketplace. To achieve these objectives, the Bureau has partnered with CSA on this edition to ensure it is offered free of charge to the public and will serve both as an aid to interpreting the ISO 14021 Standard and as a guide to complying with the provisions of the above statutes that prohibit false or misleading representations.

Adherence to the advice contained in this Guide will enhance the provision of meaningful information to consumers, and will assist industry in their obligation to comply with applicable legislation. This guide should not be construed as regulation but will be referenced by the Competition Bureau as a first step when assessing environmental claims.

Month 200X

Notes:

- (1) Use of the singular does not exclude the plural (and vice versa) when the sense allows.
- (2) Although the intended primary application of this Guide is stated in its Introduction, it is important to note that it remains the responsibility of the users of the Guide to judge its suitability for their particular purpose.
- (3) Regulatory enquiries regarding regulatory compliance, should be addressed to the Competition Bureau. Anyone wishing to obtain additional information about the Competition Act, the Consumer Packaging and Labelling Act, and the Textile Labelling Act should contact the Competition Bureau's Information Centre at Information Centre, Competition Bureau Canada, 50 Victoria Street, Gatineau, Quebec K1A 0C9; National Capital Region: 819-997-4282; Toll-free: 1-800-348-5358; TDD (hearing impaired): 1-800-642-3844; Fax: 819-997-0324; Email: compbureau@cb-bc.gc.ca; Website: www.competitionbureau.gc.ca.
- (4) All enquiries regarding this ISO 14021 interpretations should be directed to the Canadian Standards Association, 5060 Spectrum Way, Suite 100, Mississauga, Ontario, Canada L4W 5N6. Requests for interpretation should
 - (a) define the problem, making reference to the specific clause, and, where appropriate, include an illustrative sketch;
 - (b) provide an explanation of circumstances surrounding the actual field condition; and
 - (c) be phrased where possible to permit a specific "yes" or "no" answer.

Committee interpretations are processed in accordance with the CSA Directives and guidelines governing standardization and are published in CSA's periodical, Info Update, which is available on the CSA Web site at www.csa.ca.

¹ International Organization for Standardization

PLUS 14021

Environmental claims: A guide for industry and advertisers

1 Introduction

Canadian consumers are becoming increasingly concerned about the environmental performance of products. For example, consumers are concerned about the resources and energy used to produce products, and about the sustainability of the product design (can it be reused or recycled? is it biodegradable? is it made of recycled materials?) among other issues. This has led to an increased demand for environmental information from consumers, government and industry about products. Industries may choose to communicate environmental benefits through environmental labelling and use advertising vehicles to promote these benefits. There are a wide range of descriptors, logos, vignettes and other representations used to describe or imply environmental claims for consumer products. This means of communicating environmental claims is often called "green marketing".

Environmental claims allow consumers to more easily differentiate between products in the market so consumers can make better purchasing decisions in relation to the environment. In turn, consumer's purchasing power for such products is a market driver for business to invest in more sustainable environmental practices. However, the value of environmental claims rests on the assurance that the information provided is credible, objective, easily identifiable and understood.

Standards play an important role in providing guidance to ensure responsible claims in industry and advertising. Standards for environmental claims benefit consumers, industry, and advertisers by providing a level playing field, consistency in terms and application, as well as providing continual improvement through the maintenance of a standards program that is updated as environmental practices and scientific information evolve. The majority of information contained in this Guide is drawn from the International Standards Organization's ISO 14021 *Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling)*, and will be used for evaluating compliance with Canadian regulations. (Other labelling standards form part of the ISO labelling series. For summaries of these see Annex A of this Guide.)

ISO 14021: *Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling)* was published in 1999. This standard was reaffirmed in 2004 and is scheduled to be reviewed for the next standards development cycle for a new edition in 2008.

ISO 14021 has been translated into several languages in addition to the official languages of ISO (English, French and Russian) and is widely used as a voluntary and regulated standard. In 2000, ISO 14021 was adopted by the Canadian Standards Association (CSA) as CAN/CSA-ISO 14021.

1.1 How to use this Guide

Manufacturers, importers, distributors, retailers or anyone likely to benefit from environmental claims may make such claims. These claims typically deal with one or more environmental aspects of the product (e.g. recycled material content and biodegradability).

This second edition, entitled, *Environmental claims: A guide for industry and advertisers* reflects the most current, internationally accepted information on the use of environmental claims by Canadian industries for consumers.

Industries adhering to this guidance for environmental claims will:

- contribute to a level playing field;
- reduce the risk of communicating misleading environmental claims;

DRAFT

- provide an incentive to improve environmental performance;
- meet the growing consumer demand for products and packaging to have a reduced environmental impact.

This Guide includes text contained in ISO 14021 along with its corresponding ISO clause number. This will help an industry to quickly identify the considerations that must be made for developing claims. ISO statements are followed by or introduced with an explanation for clarification when appropriate. Only essential clauses from ISO 14021 and other ISO claim and environmental labelling standards are contained in this guide. Examples are provided where appropriate to illustrate how a claim may be used to meet ISO requirements.

1.2 The global growth of environmental labelling

The demand for environmental information on consumer products has been growing since the late 1970's. In response, countries developed various schemes and systems for assessing and communicating environmental product information. In 1992, the concept of environmental labelling was endorsed by participating governments at the United Nations Conference on Environment and Development (UNCED) to, "encourage expansion of environmental labelling and other environmentally related product information programmes designed to assist consumers to make informed choices".

In 1993, ISO established a technical committee to develop international environmental labelling standards. These standards are intended to incorporate requirements for consistency and accuracy and create fair competition in the marketplace. ISO 14021 is one of a family of international environmental labelling standards (see Annex A of this Guide for a complete listing).

Environmental labelling, based on international standards, is recognized as an effective instrument of environmental policy by the World Trade Organization (WTO) secretariat provided that it does not lead to unfair trade (see WTO web page on environmental labelling: www.wto.org/english/tratop_e/envir_e/envir_backgrnd_e/c3s2_e.htm#are_eco_labels).

1.3 History of environmental labelling guidance documents in Canada

In the late 1980's, the federal Competition Bureau examined the issue of environmental labelling and advertising in consultation with industry, consumers and non-government organizations. This consultation resulted in the formation of a multi-stakeholder working group that developed a guide entitled: *Principles and Guidelines for Environmental Labelling and Advertising* (PGELA) in 1991. This document, combined with a Canadian Standards Association (CSA) standard Z761-93, *Guideline on Environmental Labelling* provided consumers and industry with guidance on the use of environmental labelling and advertising in Canada.

CSA adopted an internationally harmonized ISO standard in 2000, designated CAN/CSA ISO 14021-00 *Environmental labels and declarations - Self declared environmental claims*, and subsequently developed a companion guidance document entitled *ISO 14021 Essentials* in 2000.

In 2001, the Commissioner of Competition, head of the Competition Bureau, requested public comments on a proposal to withdraw PGELA as the document to use as guidance when evaluating environmental claims under the *Competition Act* and the *Consumer Packaging and Labelling Act* and replace it with the guidance provided in CAN/CSA ISO 14021-00. Following the consultation period, the Competition Bureau requested to partner with CSA to create an updated *Essentials* document, free of charge to the public, that would serve both as an aid to interpreting the ISO 14021 standard and to provide guidance on how to comply with the provisions of the *Competition Act*, the *Consumer Packaging and Labelling Act* and the *Textile Labelling Act* that prohibit false and misleading representations.

2 Applicable acts

Application of this document will assist industry and advertiser compliance with the *Competition Act*, the *Consumer Packaging and Labelling Act* and the *Textile Labelling Act*. These laws are administered and enforced by the Competition Bureau. This document is not intended to provide solutions to complex scientific and technological issues related to the environment. Since this Guide is based on the ISO 14021 standard, it is expected that as the standard is updated and

DRAFT

maintained there will be subsequent periodic reviews and updating of the guidance contained herein, based on technology, marketplace needs and enhanced awareness of environmental concerns. This periodic review will include further consultation with a broad range of interests representing consumers, the environment and industry.

Ultimately, the relevant statutes administered by the Competition Bureau will be applied in assessing the appropriateness of an environmental claim. A comprehensive case by case examination of all aspects of representations will form the basis of any enforcement and/or compliance action under the appropriate legislation. This guidance document will be used as a reference for evaluating environmental claims in the application of the *Competition Act*, *Consumer Packaging and Labelling Act* and the *Textiles Labelling Act*. A description of some of these provisions is provided below for information purposes only and should not be taken to be a complete statement of the law.

2.1 *Competition Act*

The *Competition Act* is a federal law governing most business conduct in Canada. It contains both criminal and civil provisions aimed at preventing anti-competitive practices in the marketplace. The Act contains provisions addressing false or misleading representations and deceptive marketing practices in promoting the supply or use of a product (or service) or any business interest.

Criminal regime

False or misleading representations [Subsection 52(1)]

This provision prohibits knowingly or recklessly making, or permitting the making of, a representation to the public, in any form whatever, that is false or misleading in a material respect. Proof that any person was deceived or misled is not necessary in order to establish a contravention of this provision. Subsection 52(4) directs that the general impression conveyed by a representation, as well as its literal meaning, be taken into account when determining whether or not the representation is false or misleading in a material respect.

Civil Regime

False or misleading representations [Paragraph 74.01(1)(a)]

This provision prohibits the making, or the permitting of the making, of a representation to the public, in any form whatever, that is false or misleading in a material respect. Subsection 74.01(6) directs that the general impression conveyed by a representation, as well as its literal meaning, be taken into account when determining whether or not the representation is false or misleading in a material respect.

Performance representations not based on adequate and proper test [Paragraph 74.01(1)(b)]

This provision prohibits the making, or the permitting of the making, of a representation to the public, in any form whatever, about the performance, efficacy or length of life of a product, which is not based on an adequate and proper test. The onus is on the person making the representation to prove that the representation is based on an adequate and proper test. Subsection 74.01(6) directs that the general impression conveyed by a representation, as well as its literal meaning, be taken into account when determining whether or not the representation is false or misleading in a material respect.

Untrue, misleading or unauthorized use of tests and testimonials [Section 74.02]

This provision prohibits the unauthorized use of tests and testimonials, or the distortion of authorized tests and testimonials. The provision also prohibits a person from permitting such representations to be made to the public.

DRAFT

2.2 *Consumer Packaging and Labelling Act*

The *Consumer Packaging and Labelling Act* requires that prepackaged consumer products bear accurate and meaningful labelling information to help consumers make informed purchasing decisions. The Act prohibits the making of false or misleading representations and sets out specifications for mandatory label information such as the product's name, net quantity and dealer identity.

Representations relating to pre-packaged products [Subsection 7(1)]

This provision prohibits the sale, importation or advertisement of a prepackaged product that has a label applied to it that contains false or misleading representations relating to or reasonably regarded as relating to that product.

2.3 *Textile Labelling Act*

The Textile Labelling Act requires that consumer textile articles bear accurate and meaningful labelling information to help consumers make informed purchasing decisions. The Act prohibits the making of false or misleading representations and sets out specifications for mandatory label information such as the generic name of each fibre present and the dealer's full name and postal address or a CA identification number.

Representations relating to consumer textiles articles [Subsection 5(1)]

This provision prohibits the sale, importation or advertisement of a consumer textile article that has a label applied to it that contains false or misleading representations relating to or reasonably regarded as relating to the article.

3 Overall considerations

3.1 Verification

In self-declared environmental claims, the assurance of reliability is essential. It is important that verification is properly conducted to avoid negative market effects such as trade barriers or unfair competition, which can arise from unreliable and deceptive environmental claims.

ISO 14021, Introduction

ISO 14021 emphasizes in its introduction, that while self-declared environmental claims do not require third-party verification of supporting data, the data must be available and accurate. The purpose of voluntary standards is to facilitate interprovincial and international trade; therefore, it is essential that environmental claims following the ISO Standard are verifiable.

3.2 Legislative requirements

This International Standard does not preclude, override, or in any way change, legally required environmental information, claims or labelling, or any other applicable legal requirements.

ISO 14021, Clause 1

Legislative requirements and regulations for labelling and marking must be followed, in addition to any environmental claim that a business may select to use.

DRAFT

3.3 Life cycle analysis

life cycle

consecutive and interlinked stages of a product system, from raw material acquisition or generation of natural resources to final disposal

[ISO 14040:1997]

ISO 14021, Clause 3.1.8

A principle of environmental claims is consideration for the life cycle of the product.

ISO 14021 does not require a full life cycle analysis to be carried out to verify an environmental claim, but it does require consideration of the life cycle of the product. For a complete listing of life cycle considerations, see Clause 5.9 of this Guide.

3.4 Environmental improvement

The overall goal of environmental labels and declarations is, through communication of verifiable, accurate information, that is not misleading, on environmental aspects of products, to encourage demand for and supply of those products that cause less stress on the environment, thereby stimulating the potential for market-driven continual environmental improvement.

ISO 14021, Clause 4

While it is recognized that the use of self-declared claims will not, in itself, do anything to improve the environment, it is hoped that their use will trigger some market-driven improvement. This will only happen if the information is communicated in a way that is accurate and non-deceptive.

3.5 Objective of ISO 14021

ISO 14021 is intended to harmonize the use of terms and symbols that claimants use in making self-declared environmental claims. The anticipated benefits of using this Standard are as follows:

- a) accurate and verifiable environmental claims that are not misleading;
- b) increased potential for market forces to stimulate environmental improvements in production, processes and products;
- c) prevention or minimization of unwarranted claims;
- d) reduction in marketplace confusion;
- e) facilitation of international trade; and
- f) increased opportunity for purchasers, potential purchasers and users of the product to make more informed choices.

ISO 14021, Clause 4

DRAFT

ISO 14021, in conjunction with guidance from the Advertising Standards Canada and operating within the framework of the laws administered by the Competition Bureau, is expected to deliver the anticipated benefits in Canada. Use of the international standard when labelling products for export will help deliver the same benefits in other countries that use the ISO 14021 standard.

4 General requirements for all claims

4.1 Basic considerations

Any statement or symbol that refers to or creates the general impression that it reflects the environmental aspects of any product or service is considered an environmental claim. Environmental claims made about products may take the form of statements, symbols or graphics on product or package labels, or in product literature, technical bulletins, advertising, publicity, telemarketing, as well as digital or electronic media, such as the Internet.

4.2 Relationship with ISO 14020

ISO 14020 is a document covering the general principles of all environmental labels and declarations.

In addition to the requirements of this International Standard, the principles set out in ISO 14020 shall apply. Where this International Standard provides more specific requirements than ISO 14020, such specific requirements shall be followed.

ISO 14021, Clause 5.2

In most cases, ISO 14021 provides more detail than the general explanatory statements supplied in ISO 14020, but some areas that have less relevance to a self-declared claim — such as impacts on innovation and creation of trade barriers — are covered in ISO 14020. ISO 14020 provides useful guidance and general principles to follow for labelling schemes for which International Standards have not yet been developed (see Annex B of this Guide).

4.3 Specifics of ISO 14021

ISO 14021 sets out eighteen specific requirements applicable to self-declared environmental claims listed below.

DRAFT

- a) shall be accurate and not misleading;
- b) shall be substantiated and verified;
- c) shall be relevant to that particular product, and used only in an appropriate context or setting;
- d) shall be presented in a manner that clearly indicates whether the claim applies to the complete product, or only to a product component or packaging, or to an element of a service;
- e) shall be specific as to the environmental aspect or environmental improvement which is claimed;
- f) shall not be restated using different terminology to imply multiple benefits for a single environmental change;
- g) shall be unlikely to result in misinterpretation;
- h) shall be true not only in relation to the final product but also shall take into consideration all relevant aspects of the product life cycle in order to identify the potential for one impact to be increased in the process of decreasing another;
NOTE This does not necessarily mean that a life cycle assessment should be undertaken.
- i) shall be presented in a manner which does not imply that the product is endorsed or certified by an independent third-party organization when it is not;
- j) shall not, either directly or by implication, suggest an environmental improvement which does not exist, nor shall it exaggerate the environmental aspect of the product to which the claim relates;
- k) shall not be made if, despite the claim being literally true, it is likely to be misinterpreted by purchasers or is misleading through the omission of relevant facts;
- l) shall only relate to an environmental aspect that either exists or is likely to be realized, during the life of the product;
- m) shall be presented in a manner that clearly indicates that the environmental claim and explanatory statement should be read together. The explanatory statement shall be of reasonable size and in reasonable proximity to the environmental claim it accompanies;
- n) shall, if a comparative assertion of environmental superiority or improvement is made, be specific and make clear the basis for the comparison. In particular, the environmental claim shall be relevant in terms of how recently any improvement was made;
- o) shall, if based on a pre-existing but previously undisclosed aspect, be presented in a manner that does not lead purchasers, potential purchasers and users of the product to believe that the claim is based on a recent product or process modification;
- p) shall not be made where they are based on the absence of ingredients or features which have never been associated with the product category;
- q) shall be reassessed and updated as necessary to reflect changes in technology, competitive products or other circumstances that could alter the accuracy of the claim; and
- r) shall be relevant to the area where the corresponding environmental impact occurs.
NOTE A process-related claim can be made anywhere, so long as the environmental impact occurs in the area where the production process is located. The size of the area will be determined by the nature of the impact.

ISO 14021, Clause 5.7

DRAFT

The implementation of these requirements are addressed in Clause 5 of this Guide.

4.4 Vague and non-specific claims

An environmental claim that is vague or non-specific or which broadly implies that a product is environmentally beneficial or environmentally benign shall not be used.

ISO 14021, Clause 5.3

The purpose of being clear and specific is to protect consumers from deception. Environmental benefits need to be specific so there will be no misunderstanding. For example:

Preferred

This product has replaced CFCs with an alternative that does less harm to the ozone layer.

Discouraged

This product is ozone-friendly.

4.5 Claims of "...free"

An environmental claim of "... free" shall only be made when the level of the specified substance is no more than that which would be found as an acknowledged trace contaminant or background level.

ISO 14021, Clause 5.4

Claims of "... free" must not be made based on the absence of ingredients that were never in a product or which were only ever present at a background level. It is permissible to make a claim of "...free" where trace amounts of an element exist because the element is ubiquitous in the environment but NOT when any trace amount of the element has been added to the formulation.

Note: *Exporters should check local legislation that may not allow claims of "free".*

Discouraged

A claim of "CFC free" on a pump spray bottle would not be considered appropriate as CFCs are not used as propellants in pump spray bottles.

Discouraged

"Chemical free" claim on organic products where chemicals were never used in the first place.

Preferred

"Lead free" claims for solder in electronics.

DRAFT

4.6 Claims of sustainability

The concepts involved in sustainability are highly complex and still under study. At this time there are no definitive methods for measuring sustainability or confirming its accomplishment. Therefore, no claim of achieving sustainability shall be made.

ISO 14021, Clause 5.5

Sustainability can only be measurable over a very long period. It is therefore very difficult to make a verifiable claim of sustainability at this time. Claims that refer to specific, registered management systems may be acceptable, provided they can be verified.

Preferred

This wood comes from a forest that has a registered sustainable forest management system.

Discouraged

This wood is produced from a sustainable forest.

4.7 Use of explanatory statements

Self-declared environmental claims shall be accompanied by an explanatory statement if the claim alone is likely to result in misunderstanding. An environmental claim shall only be made without an explanatory statement if it is valid in all foreseeable circumstances with no qualifications.

ISO 14021, Clause 5.6

Most self-declared claims will require an explanatory statement, as it can be very difficult to ensure that a claim is valid in all foreseeable circumstances, unless the market for that product is very small and very firmly defined. Any broad claim that is made for a product is unlikely to conform to ISO 14021 without a qualifying statement.

Preferred

This product has been designed to use less raw material than the model we produced last year.

Discouraged

Less material was used in this product.

5 Specific requirements

5.1

All self-declared claims and all explanatory statements are subject to all the requirements of Clause 5.7 of ISO 14021 (see Clause 4.3 of this Guide). The eighteen specific requirements are critical to the proper application of ISO 14021.

DRAFT

5.2

Self-declared environmental claims and any explanatory statements:

shall be accurate and not misleading;

ISO 14021, Clause 5.7 a)

Self-declared environmental claims must refer specifically to the product or service to which they are applied. The accuracy of any claim can be challenged and data may be requested to support the claim.

5.3

Self-declared environmental claims, including any explanatory statement:

shall be substantiated and verified;

ISO 14021, Clause 5.7 b)

ISO 14021 includes verification methodologies for the specific claims defined in the Standard. For other self-declared claims, a hierarchy of test methods is identified in ISO 14020. It is also important that all verification meets the requirements of good laboratory practice or generally accepted accounting principles. Verification material must be available to both the purchaser and a potential purchaser as such material may be required to effect purchasing decisions. It is not necessary to have all data produced or verified by a third party, but it must be accurate and available in a readily understood form.

5.4

Self-declared environmental claims, including any explanatory statement:

shall be relevant to that particular product, and used only in an appropriate context or setting;

ISO 14021, Clause 5.7 c)

Self-declared environmental claims must refer specifically to the product or service to which they are applied. Any environmental claim that does not relate directly to the product or service should not be used as a claim. It is not appropriate to use a declaration of compliance to ISO 14001 as an environmental claim. Use of environmental claims related to ISO 14001 registration should be confirmed with the registrar and/or the Standards Council of Canada.

For more information on ISO 14001 registration, check the ISO website at:
www.iso.org/iso/en/iso9000-14000/certification/publicizing/index.html.

DRAFT

5.5

Self-declared environmental claims, including any explanatory statement:

shall be presented in a manner that clearly indicates whether the claim applies to the complete product, or only to a product component or packaging, or to an element of a service;

ISO 14021, Clause 5.7 d)

It is valid to make an environmental claim for a component of a product, but if that claim is not relevant to the whole product or the product and the package, the claim must clearly identify exactly which parts of the product, package, or service to which it refers.

Example:

If a box of cereal is labelled "XX% recycled package" and the package consists of a paperboard box with a wax paper bag inside holding the cereal, the claim "XX% recycled package" MUST apply to both the box and the bag. If the claim refers only to the box, it should be stated as such.

Example:

An aluminum soft drink can is labelled "XX% recycled." No qualification is necessary for this claim because it is obvious to consumers that the can is recycled - not the contents in the can.

5.6

Self-declared environmental claims, including any explanatory statement:

shall be specific as to the environmental aspect or environmental improvement which is claimed;

ISO 14021, Clause 5.7 e)

It is not sufficient to make vague claims of environmental improvement such as "green" and "environmentally friendly"; any claim must detail the environmental benefit in such a way that it can be verified, if such verification is required by the purchaser (Clause 4.4 of this Guide). For further details, check the requirements for comparative claims in Clause 9 of this Guide.

Preferred

By incorporating XX% of recycled material into the design of our product we have reduced waste at the production phase, compared with our last model. All resource use claims require a comparative statement to qualify the statement, as in the above example.

Discouraged

By incorporating recycled material into our product we have reduced waste.

DRAFT

5.7

Self-declared environmental claims, including any explanatory statement:

shall not be restated using different terminology to imply multiple benefits for a single environmental change;

ISO 14021, Clause 5.7 f)

It is inappropriate for a claim to overstate the environmental benefits of one environmental change. The claim and the explanatory statement need to be precise about any additional benefits and how they relate to the single environmental change. Further, the terminology used should be consistent.

Preferred:

By using 65% recycled content, we are reducing waste at the production phase compared with our last model.

Discouraged:

By using 65% recycled content, we are reducing waste at the production phase. Trees are being saved by the use of recycled wood fibres and therefore the air we breathe is cleaner.

5.8

Self-declared environmental claims, including any explanatory statement:

shall be unlikely to result in misinterpretation;

ISO 14021, Clause 5.7 g)

It is important that a claimant, in making a claim, avoid possible misinterpretation. External review of a proposed claim may be advisable to ensure that this requirement is met. It will not be possible to avoid all cases of misinterpretation but any likely or obvious ambiguities should be avoided. Consideration should also be given to literacy levels in the countries where the product is being sold.

5.9

Self-declared environmental claims, including any explanatory statement:

shall be true not only in relation to the final product but also shall take into consideration all relevant aspects of the product life cycle in order to identify the potential for one impact to be increased in the process of decreasing another;

ISO 14021, Clause 5.7 h)

All environmental claims should consider the entire life cycle of the product to ensure that there is a net environmental benefit although it is not necessary to complete a full life cycle analysis for self-declared claims.

The ISO 14040 series of Standards, details environmental impact considerations from "cradle-to-grave" of a product or service (see Clause 3.3 of this Guide).

DRAFT

Such considerations include:

- design of the product;
- extraction of any raw materials used in the product or process;
- materials (including energy) used in the production process;
- emissions created during production (air, water, solid waste, etc);
- toxicity of these materials and emissions;
- environmental impacts of the distribution system (including packaging and transportation);
- environmental impacts that occur during use of the product or service;
- durability, reusability, and recyclability of the product;
- consumer packaging and its disposal; and
- final disposal of the product.

It is not permissible to shift the environmental burden from one stage of a product's life to another and then make a claim concerning the improved stage without considering whether there is, in fact, a net overall environmental benefit. Environmental claims should be based on best available information in each life cycle phase of the product to assess the net environmental benefit associated with a claim.

Example:

The use of non-ozone-depleting gas for refrigeration may have a negative impact on the energy efficiency of refrigerators. If a claim is made with regards to the use of non-ozone-depleting gas, either the net benefit must be verified or the reduction in efficiency must also be clearly stated.

5.10

Self-declared environmental claims, including any explanatory statement:

shall be presented in a manner which does not imply that the product is endorsed or certified by an independent third-party organization when it is not;

ISO 14021, Clause 5.7 i)

It is common practice for companies or products to receive endorsement from groups, including environmental organizations, in exchange for donations. Such endorsements are related neither to the environmental performance of the company nor the environmental impacts of the product. Care must be taken when displaying such endorsement symbols that their format and/or proximity to an environmental claim does not imply approval of the environmental claim.

5.11

Self-declared environmental claims, including any explanatory statement:

shall not, either directly or by implication, suggest an environmental improvement which does not exist, nor shall it exaggerate the environmental aspect of the product to which the claim relates;

ISO 14021, Clause 5.7 j)

DRAFT

The size of the environmental improvement relative to its impact of any one product must be considered when making claims, in order to avoid exaggeration (also see Clause 5.7 of this Guide).

Example:

A product from a company that has reduced its greenhouse gas emissions should not claim to be solving the problem of global climate change, nor should a recyclable package claim to be solving the problem of waste disposal.

5.12

Self-declared environmental claims, including any explanatory statement:

shall not be made if, despite the claim being literally true, it is likely to be misinterpreted by purchasers or is misleading through the omission of relevant facts;

ISO 14021, Clause 5.7 k)

Example:

Paper, in most cases, may be disposed of in composting systems. However, to label a paper product as compostable without an explanatory statement regarding the conditions under which paper can be added to compost would be misleading.

5.13

Self-declared environmental claims, including any explanatory statement:

shall only relate to an environmental aspect that either exists or is likely to be realized, during the life of the product;

ISO 14021, Clause 5.7 l)

This requirement is particularly relevant when making claims about design for disassembly or compostability of products that require community-composting systems for adequate degradation (see Clauses 10.2 and 10.4 of this Guide).

Example:

Brown bags for garden waste are technically compostable in community systems but if no city in the vicinity where these bags are sold, has, or is planning collection of garden waste and community composting, the claim should not be made as it is unlikely that such collection and composting sites would be established before the current stock of bags is sold.

Example:

Many electronic products that are imported from Asia are designed to be disassembled. However, the systems are not in place in Canada to either take back the products or deal with the waste from consumers disassembling the product. The claim of "designed to be disassembled" should not be made unless it is known that those facilities are likely to be established before the end of the product's useful life.

Another example is related to the "reasonableness" of recycling a particular material.

DRAFT

Example:

Non-packaging related plastics or "engineered plastics" that are part of a product are typically either landfilled or burnt at the end of a products life because it is expensive to separate, ship and sort into the different plastic material types. Making a recycling claim for the materials would not be appropriate unless it became feasible in the marketplace to recycle them.

5.14

Self-declared environmental claims, including any explanatory statement:

shall be presented in a manner that clearly indicates that the environmental claim and explanatory statement should be read together. The explanatory statement shall be of reasonable size and in reasonable proximity to the environmental claim it accompanies;

ISO 14021, Clause 5.7 m)

It is unacceptable, when using ISO 14021, to make a claim and put the explanatory statement in a different location on the product or package. Both the claim and explanation must be of a reasonable size to be easily readable. Colour differences, both in print and in background, should also be designed in such a way as to ensure that the claim and the explanatory statement are clearly connected when read by the purchaser or potential purchaser.

Example:

If a carton has a claim on the front panel that requires an explanatory statement, the explanatory statement may not be on the side or back of the package, even with an asterisk to guide the reader to the other location. The statement must be with the claim.

5.15

Self-declared environmental claims, including any explanatory statement:

shall, if a comparative assertion of environmental superiority or improvement is made, be specific and make clear the basis for the comparison. In particular, the environmental claim shall be relevant in terms of how recently any improvement was made;

ISO 14021, Clause 5.7 n)

Comparative assertions make a factual statement that one product is environmentally superior to another. These claims should be handled with great care. ISO 14021 provides detailed instructions on how to make such assertions and data that will be required for verification. In using a claim not defined in ISO 14021, it is important to consider that comparisons must always be accurate and verifiable. Older versions of the same product can be compared but considerations must be made for the relevance of this claim (see Clause 9 of this Guide).

Preferred

This product uses more recycled material than the same model produced in 1998.

Discouraged

More recycled content.

5.16

Self-declared environmental claims, including any explanatory statement:

DRAFT

shall, if based on a pre-existing but previously undisclosed aspect, be presented in a manner that does not lead purchasers, potential purchasers and users of the product to believe that the claim is based on a recent product or process modification;

ISO 14021, Clause 5.7 o)

When new scientific proof reveals that ingredients in some products are harmful and other products in that product category range have never used those ingredients, it is tempting to make an environmental claim based on the absence of those ingredients. Such a claim must always make it clear that this ingredient has never been present in this product, and must not imply that this is a recent response to the exposure of the harmful aspects of that component.

Example:

Negative environmental impacts have been associated with phosphates contained in many types of household soap. If soaps used for dishes have never contained phosphate, a simple "phosphate-free" claim attached to the dish soap is inappropriate. The claim must make it clear that the dish soap has never contained this ingredient. It must not imply that the phosphate was removed to address the negative environmental impact.

5.17

Self-declared environmental claims, including any explanatory statement:

shall not be made where they are based on the absence of ingredients or features which have never been associated with the product category;

ISO 14021, Clause 5.7 p)

This requirement prohibits the use of a claim where a feature or ingredient now identified as harmful is not and never has been used in a product or any of its competitor products in that product category. The requirement differs from the restriction discussed in Clause 5.16 of this Guide in that it deals with claims for ingredients and features not normally used in any similar type of product.

Example:

Hair spray in pump spray bottles have never required CFCs to make them function, nor had they been used in this product category. Claims that these are "CFC-free spray bottles" are not permitted by ISO 14021.

5.18

Self-declared environmental claims, including any explanatory statement:

shall be reassessed and updated as necessary to reflect changes in technology, competitive products or other circumstances that could alter the accuracy of the claim;

ISO 14021, Clause 5.7 q)

DRAFT

The application of ISO 14021 results in many comparative claims. Comparative claims must convey accurate and verifiable information against the most recent data available (see Clause 9 of this Guide).

5.19

Self-declared environmental claims, including any explanatory statement:

shall be relevant to the area where the corresponding environmental impact occurs.

ISO 14021, Clause 5.7 r)

This ISO Clause requires that life cycle impacts of the product be considered in the area in which the impact will occur. The requirement is particularly important when producing products for export. For example, process-related claims and resulting environmental impacts must be made in relation to the areas in which the production facility is located. Claims that concern the "use" or "fuel disposal" phase of the product life cycle must be made in relation to the areas in which the product will be sold.

Disposal claims such as "recyclable" and "refillable" require facilities to be available in the area where the product is to be sold. Collaboration between the manufacturer and distributor to ensure such services exist will help limit inappropriate claims (see Clauses 10.7 and 10.12 of this Guide).

6 Symbols

6.1 General

When a self-declared environmental claim is made, the use of a symbol is optional.

Symbols used to make an environmental claim should be simple, easily reproducible and capable of being positioned and sized to suit the product to which the symbol is likely to be applied.

ISO 14021, Clauses 5.8.1 and 5.8.2

ISO 14021 considers the general use of symbols with environmental claims. The use of symbols with environmental claims is optional, but if they are used, they must not impede the ability of a claim to meet all the requirements outlined in Clause 5 of this Guide. In addition to the general requirements discussed in Clause 5 there are some specific instructions for the use of symbols. The only specific symbol addressed in ISO 14021 is the Mobius loop.

6.2 Use of symbols for different environmental claims

Symbols used for one type of environmental claim should be easily distinguishable from other symbols, including symbols for other environmental claims.

ISO 14021, Clause 5.8.3

DRAFT

A symbol used with any self-declared claim may only refer to one claim. If more than one environmental claim is made, using symbols, each claim (including its respective symbol) shall be clearly separated. If both claims use symbols these symbols shall be clearly distinguishable from each other. This applies to all symbols intended to give an environmental message, whether it be the Mobius loop, a new symbol widely used in a country or a specifically designed symbol for a product.

6.3 Symbol for implementation of an environmental management system

A symbol used to express implementation of an environmental management system shall not be used in such a way that it could be misunderstood as an environmental symbol indicating the environmental aspects of a product.

ISO 14021, Clause 5.8.4

This requirement is also addressed in Clause 5.4 of this Guide. Some registrars award a symbol to companies that are registered to ISO 14001. If a registrar awards a symbol for 14001, it cannot be used as an environmental claim. Always check with either your registrar and/or the Standards Council of Canada for use of ISO 14001 registrations in any public communication.

Details on the use of management system registration/certification can be found on the ISO web site at www.iso.org/iso/en/iso9000-14000/certification/publicizing/index.html.

6.4 Use of natural objects in symbols

Natural objects shall be used only if there is a direct and verifiable link between the object and the benefit claimed.

ISO 14021, Clause 5.8.5

Natural objects such as fish and trees have frequently been used as symbols to accompany vague environmental claims such as "earth-friendly". ISO 14021 prohibits that type of usage. There needs to be a clear connection between the product and the symbol.

Examples:

A tree symbol is acceptable for a wood product claiming to be made from wood produced in a forest with a certified sustainable management system since there is a direct link between the claim and the natural object used in the symbol. However, a fish symbol on a can of lead free paint is not acceptable as there is no direct link between the removal of lead from paint and the marine environment.

6.5 Other information or claims

Words, numbers or symbols may be used in addition to environmental symbols to communicate information such as material identification, disposal instructions or hazard warnings.

ISO 14021, Clause 5.9.1

DRAFT

Use of an environmental claim does not preclude the necessity to identify anything hazardous, nor does it prevent the identification of materials for recycling systems. The difference between the environmental claims and material identification symbols shall be made obvious to the purchaser.

Words, numbers or symbols used for non-environmental claim purposes shall not be used in a manner that is likely to be misunderstood as making an environmental claim.

ISO 14021, Clause 5.9.2

ISO 14021 requires that symbols and codes used for purposes other than environmental claims (such as environmental information for sorting materials or product identification codes) should not be used to imply any environmental benefit. The environmental claim should be made obvious and should be distinctive to the consumer from any other codes or symbols.

Example:

A nationally marketed yogurt container displays the Canadian Plastics Industry Association material identification code on the front label of the container, near the product name and logo. In this case, the manufacturer's prominent use of the code could be mistaken for a recyclable claim. However, if the code was placed in a less visible location, it would not be mistaken for a claim.

7 The Mobius loop

The selection of specific symbols for this International Standard is based on their existing wide use or recognition. This should not be taken to imply that environmental claims represented by these symbols are superior to other environmental claims. Only the Mobius loop is included at present. Other specific symbols which are not provided for in this International Standard will be introduced at an appropriate time.

ISO 14021, Clause 5.10.1

ISO 14021 based the selection of specific symbols on those that are currently widely used and recognized. During the development of the ISO 14021 standards, the only widely recognized symbol was the Mobius loop, and most consumers only understand this symbol as having "something to do with recycling". For this reason, ISO 14021 only deals specifically with the Mobius loop. As new symbols are used they will be considered in the regular reviews to the ISO 14021 Standard.

There are many advantages to using the same symbol to identify the same environmental aspect on competing products, and it is hoped that manufacturers will adopt a consistent approach and not discourage the use of the same symbol. However, care must be taken not to infringe on intellectual rights by the use of a registered design.

DRAFT

The Mobius loop is a symbol in the shape of three twisted chasing arrows forming a triangle. Whenever it is used to make an environmental claim, the design shall meet the graphical requirements for ISO 7000, Symbol No. 1135. There should, however, be enough contrast so that the symbol is clear and distinguishable. Some examples of the form of the Mobius loop are provided in Figure 1. Clause 7 provides detailed requirements concerning the use and applicability of the Mobius loop.

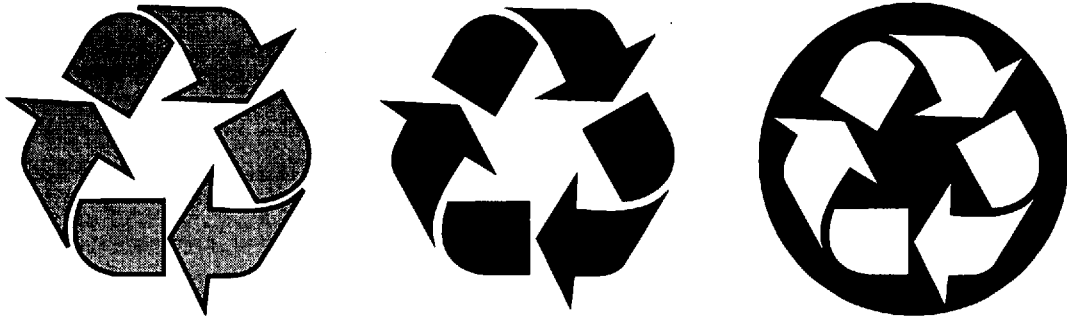
The Mobius loop may apply to the product or the packaging. If there is any potential for confusion about whether it applies to the product or the packaging, the symbol shall be accompanied by an explanatory statement.

If a symbol is used for claims of recyclable or recycled content, then that symbol shall be the Mobius loop subject to the requirements of 7.7 and 7.8.

The Mobius loop shall only be used for claims of recycled content and recyclable, as described in 7.7 and 7.8.

ISO 14021 Clause 5.10.2

Figure 1 - Examples of the Mobius loop



Any three versions of the Mobius loop shown above can be used to mean either recycled content or recyclability of the product, provided all the specifications of those two claims are met, as described in Clause 5 of this Guide. When using the mobius loop for a claim of "recycled content" it is necessary to identify the percentage of recycled content in addition to using the symbol in order to avoid confusion with the recyclability of a product.

If an explanatory statement is used with the Mobius loop symbol, it must be positioned near the symbol to be clear that the statement and symbol should be read together. The ISO 7000, a document on graphical symbols contains specifications for the Mobius loop, symbol No. 1135.

The Mobius loop shall only be used for claims of recycled content and recyclable, as described in 7.7 and 7.8.

ISO 14021, Clause 5.10.2.4

DRAFT

According to ISO 14021, the Mobius loop symbol is only to be used for two specific claims: “recyclable” and “recycled” content. These claims are defined in detail in Clauses 7.7 and 7.8 of ISO 14021 and in Clauses 10.7 and 10.8 of this Guide.

Note: *Export products should comply with any additional regional requirements in their intended market.*

The Mobius loop has been widely used in a variety of ways. Some claims made simply to denote participation in an environmental program such as campus recycling programs or encouraging no-littering in areas are considered inappropriate.

8 Evaluations and claim verification

8.1 Responsibilities of the claimant

The claimant shall be responsible for evaluation and provision of data necessary for the verification of self-declared environmental claims.

ISO 14021, Clause 6.1

The intended purpose of self-declared environmental claims is to allow organizations and companies to make claims without the requirement to hire a third party to award a seal or logo. However, this does not lessen the responsibility of the manufacturer and/or distributor to be able to support the claim with accurate data.

Because the claims covered by ISO 14021 are self-declared, it is the sole responsibility of the claimant to produce and provide the data necessary to support the claim being made. While not a requirement, the claimant may choose to have outside agencies produce or verify this data.

Prior to making the claim, evaluation measures shall be implemented to achieve reliable and reproducible results necessary to verify the claim.

ISO 14021, Clause 6.2.1

Although claimants are responsible for producing their own supporting data, the data must be produced using accepted methods to enable purchasers and potential purchasers to verify the claim.

8.2 Selection of evaluation and claim verification methods

Methods for evaluation and claim verification shall follow, in order of preference, International Standards, recognized standards that have international acceptability (these may include regional or national standards) or industry or trade methods which have been subjected to peer review. If there are no methods already in existence, a claimant may develop a method, provided it meets the other requirements of clause 6 and is available for peer review.

ISO 14021, Clause 6.4

The Bibliography of ISO 14021 may be helpful in meeting this requirement. It lists several widely acceptable tests for verifying some of the claims defined in ISO 14021.

DRAFT

Some of the claims that are defined in ISO 14021 cannot be supported by scientific testing and will require detailed inventory data to verify their accuracy.

8.3 Access to information

A self-declared environmental claim shall only be considered verifiable if such verification can be made without access to confidential business information. Claims shall not be used if they can only be verified by confidential business information.

ISO 14021, Clause 6.5.1

A claim that depends on confidential information for its verification will require third party audits to confirm that the data presented supports its validity.

ISO 14021 details the minimum information that is required to document a claim:

- a) identification of the standard or method used;
- b) documentary evidence, if verification of the claim cannot be made by testing the finished product;
- c) test results, where these are necessary for claim verification;
- d) if testing is carried out by an independent party, the name and address of the independent party;
- e) evidence that the claim conforms to the requirements of 5.7 h) and 5.7 r);
- f) if the self-declared environmental claim involves a comparison with other products, then a description of the methods used, the results of any tests of those products, and any assumptions made shall be clearly stated;
- g) evidence that the claimant's evaluation gives assurance of the continuing accuracy of the self-declared environmental claim during the period over which the product is on the market, and for a reasonable period thereafter, taking into account the life of the product.

ISO 14021, Clause 6.5.3

Information to verify a claim may be voluntarily released at point of sale or disclosed upon request. This information must be available in a format that is reasonably accessible to the purchaser, and barriers must not be created to make it difficult for purchasers to have access to this information.

9 Comparative claims

Comparative claims have the greatest potential to mislead purchasers and therefore they need to be approached with special care.

Comparative claims require the most rigorous evaluation and the most explicit description of the evaluation in the explanatory statement. Comparative claims always require an explanatory statement, to identify the benchmark against which they have been evaluated.

DRAFT

Comparative claims shall be evaluated against one or more of the following:

- a) an organization's own prior process;
- b) an organization's own prior product;
- c) another organization's process; or
- d) another organization's product.

The comparison shall only be made:

- using a published standard or recognized test method (as set out in 6.4); and
- against comparable products serving similar functions, supplied by the same or another producer, currently or recently in the same marketplace.

ISO 14021, Clause 6.3.1

This is the verification required to ensure that a self-declared claim meets the requirements of Clause 5.7 n) of ISO 14021.

It is also possible to make a comparative claim based on a particular aspect of the product's life cycle. This would normally be done when making a comparison with an organization's own prior product or process.

Comparative claims involving the environmental aspects of the product's life cycle shall be:

- a) quantified and calculated using the same units of measurement;
- b) based on the same functional unit; and
- c) calculated over an appropriate time interval, typically twelve months.

ISO 14021, Clause 6.3.2

These comparisons may be expressed as percentages or as absolute values, but improvements related to a product and its packaging must be verified separately.

DRAFT

Comparative claims may be based on:

- a) percentages, in which case they should be expressed as absolute differences; or

NOTE The following example is provided to clarify how relative measurements could be handled:

For a change from 10 % to 15 % recycled content, the absolute difference is 15 % - 10 % = 5 %, in which case, a claim of an additional 5 % recycled content could be made; however, a claim of 50 % increase, while accurate, could be misleading.

- b) absolute (measured) values, in which case they should be expressed as relative improvements.

NOTE The following example is provided to clarify how absolute measurements could be handled:

For an improvement that results in a product lasting 15 months instead of the previous 10 months, the relative difference is

$$\frac{15 \text{ months} - 10 \text{ months}}{10 \text{ months}} \times 100 = 50\%$$

in which case, a claim of 50 % longer life could be made. If one of the values is nil, the absolute difference should be used.

As there is a high risk of confusing an absolute claim with a relative claim, the claim should be worded to be clear that it is a claim of absolute difference and not a claim of relative difference.

ISO 14021, Clauses 6.3.3 and 6.3.4

Comparisons should only be made for products that have similar functions and marketplace availability.

Example:

A statement such as, "This product uses less energy" requires more clarification. You must be precise about the extent of the improvement and the basis for the comparison. "This product uses 20% less energy than our previous model" is an appropriate way to make such a claim.

Improvements related to a product and its packaging shall be stated separately and shall not be aggregated.

ISO 14021, Clause 6.3.5

ISO 14021 provides sample equations to assist in the calculation of comparative claims. In using comparative claims, great care must be taken not to use percentages in cases where an absolute value would be more accurate, and vice versa.

DRAFT

10 Details of selected claims defined in ISO 14021

10.1 General

ISO 14021 details the usage of twelve claims deemed most commonly found in the marketplace at the time of the Standard's development. Manufacturers and/or distributors are not precluded from making other self-declared environmental claims, if such claims meet the requirements of Clause 5.7 of ISO 14021 and the general principles set out in ISO 14020.

The environmental terms that are dealt with in this Clause are arranged in alphabetical order in English. There is no hierarchical order for these claims. These claims may be applied to any part of the product life cycle — manufacture, distribution, usage, and recovery and disposal — as appropriate.

10.1.1 Selected claims detailed in ISO 14021

Detailed instructions are provided on the following terms, numbered according to their sequence in ISO 14021:

- 7.2 Compostable
- 7.3 Degradable
- 7.4 Designed for disassembly
- 7.5 Extended life product
- 7.6 Recovered energy
- 7.7 Recyclable
- 7.8 Recycled content
- 7.9 Reduced energy consumption
- 7.10 Reduced resource use
- 7.11 Reduced water consumption
- 7.12 Reusable and refillable
- 7.13 Waste reduction

ISO 14021, Clause 7.1.2

DRAFT

10.1.2 Claims of "where facilities exist"

Claims of compostable, degradable, designed for disassembly, recyclable, reusable and refillable may not be met by all facilities collecting materials and therefore the product claim for collection and processing should be made clear.

For claims of compostable and designed for disassembly, facilities will sometimes be required in order to make the claim. For claims of recyclable and reusable and refillable, systems and facilities will always be required. Further, systems or facilities must be conveniently available to a reasonable portion of purchasers and potential purchasers in the area which product is to be sold.

It is not considered adequate to state "where facilities exist" after a claim which is dependent on the existence of such facilities. It will be important to get information on availability from municipalities or distributors before making this claim, especially on products that may be exported to countries that have incorporated the 14021 standard into their regulations.

10.2 Compostable

10.2.1 Usage of term

"Compostable" claims would be appropriate on products or packages that will break down, or become part of usable compost (for example, soil-conditioning material or mulch), in a safe,

timely manner. For composting, a "timely manner" is approximately the same time it takes for composting organic compounds like leaves, grass, and food.

Specific qualifications are outlined in ISO 14021 for the appropriate use of a compostable claim. Each refers to the effect that a product may have on the compost quality.

A characteristic of a product, packaging or associated component that allows it to biodegrade, generating a relatively homogeneous and stable humus-like substance.

ISO 14021, Clause 7.2.1

A compostable claim may not be made on any material that:

- a) negatively affects the overall value of the compost as a soil amendment;
- b) releases substances in concentrations harmful to the environment at any point during decomposition or subsequent use; or
- c) significantly reduces the rate of composting in those systems in which the product or component is likely to be composted.

ISO 14021, Clause 7.2.2.1

10.2.2 Qualifications

All compostable claims require an explanatory statement to make it clear whether a home composter or municipal composting facility is required.

All compostability claims shall be clearly qualified as follows.

- a) The claim shall specify whether the type of composting facility or process in which the identified component is compostable is a home-composting facility or an on-site or central composting facility, unless the product is compostable in all types of composting facilities, in which case no qualification is necessary.
- b) If the entire product is not compostable, the claim shall identify specifically which components are compostable. If the user of the product is required to separate those components, clear direction on how to do so shall be provided.
- c) If problems or risks are associated with introducing the product into either a home-composting facility or on-site or central composting facilities, then the claim shall identify which of these types of facility are capable of composting the product.

ISO 14021, Clause 7.2.2.2

The qualifying statement should also clearly state whether the whole product or only components are compostable. If the product has to be disassembled in order to compost components, clear instructions should be given on separating those components (see Clause 10.4 of this Guide).

If there are significant risks associated with putting the product or components in the wrong composting stream, these should be identified.

Example:

The pulp in a disposable diaper may be compostable in certain circumstances. The compostability claim should read, "This product can be put into municipal composting programs, provided the plastic layers are removed. The product should be rinsed in the toilet

DRAFT

before it is separated for composting, as the human waste could produce ingredients that are incompatible with a municipal composting process".

A product claiming to be compostable in a home composter must meet specific requirements:

If a compostability claim refers to home composting, the following additional requirements shall apply.

- a) If significant preparation or product modification is necessary to ensure satisfactory compostability, or if significant additional treatment of the finished compost is required as a direct result of the composting product or component, the compostability claim shall not be made
- b) If home composting of the product or component would require materials, equipment (other than a composting unit) or specialized skills that are unlikely to be available in most households, the claim of home compostability shall not be made.

ISO 14021, Clause 7.2.2.3

If a compostability claim is made for a product that is not suitable for home composting, the manufacturer should be able to verify that suitable facilities are conveniently available to a reasonable portion of the population in the marketplace in which the product is to be sold. If these facilities are not conveniently available to a reasonable percentage of the population in the area in which the product is marketed, the claim shall identify the limited extent of the facilities. This qualification must be specific.

Preferred

This package is compostable in municipal composting programs in Southern Ontario only.

Discouraged

This package is compostable where municipal facilities exist.

As composting involves biodegradation, some of the tests listed for "degradability" in the Bibliography of ISO 14021 may prove helpful in verification of compostability claims.

If a compostability claim is dependent on processes or facilities other than home composters, then the following shall apply.

- a) Such facilities for the purpose of composting the product or packaging shall be conveniently available to a reasonable proportion of purchasers, potential purchasers and users where the packaging or product is sold.
- b) If such facilities are not conveniently available to a reasonable proportion of purchasers, potential purchasers and users of the product, explanatory statements shall be used which are adequate to convey the limited availability of these facilities.
- c) General qualifications, such as "Compostable where facilities exist", which do not convey the limited availability of facilities are not adequate.

ISO 14021, Clause 7.2.2.4

Whether or not a claim is appropriate is dependent on the availability of systems or facilities to enable the environmental benefits suggested by the claim to be realized (see Clause 10.1.2 of this Guide).

DRAFT

Example:

Compostability: Special leaf bags designed to degrade with the leaves they contain could be identified as "Compostable in municipal facilities in the Greater Vancouver area"

Unless the product is compostable in any facility under any conditions, the claim requires an explanatory statement. It must be clear to the purchaser the type of facility in which the product can be composted (home or community), whether all or part of the product is compostable and if there are any risks to composting this product. If a product is identified as being suitable for composting at home, the claim must identify the necessary treatment and preparation. If this product requires the use of materials or equipment not normally found in a home, the claim should not be made.

10.2.3 Evaluation

See Clause 8 of this Guide and Clause 6 of ISO 14021, for further information.

10.3 Degradable**10.3.1 Usage of term**

The term "degradable" refers to all types of degradability, such as photodegradability and biodegradability.

A characteristic of a product or packaging that, with respect to specific conditions, allows it to break down to a specific extent within a given time.

NOTE Degradability is a function of susceptibility to changes in chemical structure. Consequent changes in physical and mechanical properties lead to the disintegration of the product or material.

ISO 14021, Clause 7.3.1

10.3.2 Qualifications

The following qualifications refer to all types of degradation, including for instance biodegradation and photodegradation.

- a) Claims of degradability shall only be made in relation to a specific test method that includes maximum level of degradation and test duration, and shall be relevant to the circumstances in which the product or packaging is likely to be disposed.
- b) A degradable claim shall not be made for a product or packaging, or component of a product or packaging, that releases substances in concentrations harmful to the environment.

ISO 14021, Clause 7.3.2.1

All degradability claims must be made against a specific test method including maximum level of degradation and test duration that is appropriate to the circumstances in which the material is likely to be disposed. For example, the plastics industry characteristically uses ASTM 6400 as the standard against which to test products for degradability.

In landfills, where most garbage is taken, materials degrade very slowly, if at all. This is because modern landfills are designed, according to law, to keep out sunlight, air and moisture.

DRAFT

This helps prevent pollutants from the garbage from getting into the air and drinking water, and slows the decomposition of the trash.

Example:

Materials like paper take decades to decompose in a landfill; it is difficult to substantiate a claim that a product normally disposed of in a landfill is "degradable".

Example:

Biodegradable claims for products that go down the drain, like detergents and shampoos, must be substantiated to prove that the product will degrade in a wastewater treatment system.

Example:

Nursery pots made of peat moss or other similar types of planters may be labelled "biodegradable" if, when the planter and tree are planted in the ground, the planter quickly disintegrates and biodegrades, allowing the roots of the tree to reach the surrounding earth. This unqualified claim is not deceptive.

If substances that are harmful to the environment are released during the degradation process, the "degradable" claim should not be made. See the bibliography in ISO 14021 for a listing of appropriate tests for degradability.

10.3.3 Evaluation

See Clause 8 of this Guide and Clause 6 of ISO 14021, for further information.

10.4 Designed for disassembly

10.4.1 Usage of term

A characteristic of a product's design that enables the product to be taken apart at the end of its useful life in such a way that allows components and parts to be reused, recycled, recovered for energy or, in some other way, diverted from the waste stream.

ISO 14021, Clause 7.4.1

This claim must reflect a specific design decision. It is also critical that there are facilities available to process the components and parts of the product after it has been disassembled (see Clause 10.1.2 of this Guide).

An explanatory statement must always accompany a claim that a product is "designed for disassembly". This statement should specify the way in which various components or parts can be processed. Where components or parts are identified with another claim, such as recyclable, all the requirements of that claim must also be met.

DRAFT

10.4.2 Qualifications

A claim of designed for disassembly shall be accompanied by an explanatory statement that specifies the components or parts to be reused, recycled, recovered for energy or, in some other way, diverted from the waste stream.

If a claim of designed for disassembly accompanies another claim, such as a claim of recyclable, the relevant requirements applying to the other claim shall also be followed.

All claims that a product is designed for disassembly shall specify whether the disassembly is to be done by the purchaser or user, or whether it is to be returned for disassembly by specialists.

ISO 14021, Clauses 7.4.2.1 to 7.4.2.3

If the product requires specialists to perform the disassembly, the collection or drop-off facilities must be conveniently available to a reasonable portion of purchasers in the area where the product is to be sold (see Clause 10.1.2 of this Guide). This requirement is similar to refillability and recyclability claims. General qualifications on the limited nature of such facilities are not permissible.

Preferred

This product has been designed to be disassembled into parts that can be recycled. This can be done at our outlets in Montreal, Toronto, or Vancouver.

Discouraged

Product can be disassembled where facilities exist.

10.4.3 Use of a special process

If a special process is required to disassemble the product, then the following shall apply.

- a) Collection or drop-off facilities shall be available to a reasonable proportion of purchasers, potential purchasers and users of the product where the product is sold.
- b) If such facilities are not conveniently available to a reasonable proportion of purchasers, potential purchasers and users of the product, explanatory statements shall be used which are adequate to convey the limited availability of these facilities.
- c) General qualifications, such as "Can be disassembled where facilities exist", which do not convey the limited availability of facilities are not adequate.

ISO 14021, Clause 7.4.2.4

The appropriateness of claims designed for disassembly may be dependant on the availability of facilities (see Clause 10.1.2 of this Guide).

Example:

A claim on a television set that states "this product has been designed to be disassembled into parts that can be recycled at our outlets in Montreal, Toronto, or Vancouver", would be acceptable.

DRAFT

Each component or part of the product must be clearly identified as to the disposal method that should be used, and any claims that a part is recyclable or reusable must meet all the requirements for such claims (see Clauses 10.7 and 10.12 of this Guide).

10.4.4 Disassembly tools or methods

Products designed for disassembly by the purchaser, potential purchaser or user of the product shall have accompanying information on disassembly tools and methods used.

A claim that a product is designed to be disassembled by the purchaser, potential purchaser or user of the product shall only be made if:

- a) specialized tools or expertise are not required; and
- b) clear information on the method of disassembly and reuse, recycling, recovery or disposal of the parts is provided.

NOTE Further guidance on provision of consumer information is given in ISO/IEC² Guide 14.

ISO 14021, Clauses 7.4.2.5 and 7.4.2.6

A claim is not appropriate unless conditions (a) and (b) above are met. Instructions for disassembly and information on equipment and facilities must be available to purchasers. If the product is to be disassembled by the purchaser, the instructions must be clear and must identify the tools required (if any are required). The following documents may be helpful in preparing instructions:

ISO Guide 37, Instructions for Use (see www.iso.com)

CSA Special Publication PLUS 9901, Some Assembly Required — A CSA Guide to Writing Instruction Manuals (see www.csa.ca).

10.4.5 Evaluation

See Clause 8 of this Guide and Clause 6 of ISO 14021, for further information.

10.5 Extended life product

10.5.1 Usage of term

A product designed to provide prolonged use, based on either improved durability or an upgradability feature that results in reduced resource use or reduced waste.

ISO 14021, Clause 7.5.1

Although this claim is related to the "use" phase of the product life cycle, it is dependent on a change in the "design phase". To make this claim, a manufacturer must have made a specific design change for the purpose of improving the durability of a product.

An extended life claim is a comparative claim and must conform to Clause 9 of this Guide, as well as the specific requirements for comparative claims. All extended life claims will require

² International Electrotechnical Commission

an explanatory statement to clarify for the user the product with which they are being compared.

All claims regarding extended life shall be qualified. As extended life claims are comparative claims, the requirements of 6.3 shall be met.

Where a claim of extended life is based upon an upgradability feature, specific information on how to achieve the required upgrade shall be provided. An infrastructure to enable upgrading shall be available.

ISO 14021, Clauses 7.5.2.1 and 7.5.2.2

If the upgrade requires specialized tools, equipment or expertise, the infrastructure must be in place to enable consumers to access this service and this must be reflected in the claim in accordance with Clause 10.1.2 of this Guide.

It is permissible to provide the end user with full information on the environmental benefits of a product, provided data is available to support the additional information.

Example:

"Extended life product – this light bulb will last 50% longer than the comparable bulb produced by our competitors. By redesigning this product to have an extended life while you use it, we have also been able to reduce the amount of resources used by reducing the demand for new light bulbs and the amount of waste created as fewer light bulbs will now enter the waste stream".

Extended life claims that are based on the improved durability of the product shall state the extended life period or the percentage improvement and the measured value (e.g. repetitive number of operations before breakage) or reasoning that supports the claim.

ISO 14021, Clause 7.5.2.3

Extensive records and test data will be required to support this claim. If an industry that produces products is considering such a claim, documentation of the durability of the product must be maintained.

10.5.2 Evaluation methodology

An extended life claim must not only be by identification of the product with which the comparison is being made, but also with the feature that extends the life of the product. Point of sale information or bulletins must make it clear to the purchaser how the extended life component of the product can be obtained and installed.

Example:

"This is an extended life computer and will last twice as long as our last model" is an inappropriate claim, despite having the necessary qualifying statement for a comparative claim. This claim requires further information such as: "You can take the hard drive into any of our facilities in the Greater Vancouver area to have the upgrade that extends the life of the computer".

Example:

Electronic components frequently become outdated. Products can be made modular so that upgrade features can be added as needed. Products such as this may make a claim as follows: "This product is designed to have a life that is 50% longer than last years' model. Upgrade

DRAFT

modules that extend the service life of this product are available from local retailers. The locations of stores offering this service can be obtained by calling 1-800-XXX-XXXX.

10.6 Recovered energy

10.6.1 Usage of term

A characteristic of a product that has been made using energy recovered from material or energy that would have been disposed of as waste but instead has been collected through managed processes.

NOTE In this context, the product can be the recovered energy itself.

ISO 14021, Clause 7.6.1

Many plants have begun co-generation programs in which waste materials and waste energy are recovered and used to generate energy for operation of the plant. Also, many utilities in Canada now sell "green" power.

10.6.2 Qualifications

In order for a claim to be made that a product has been manufactured using recovered energy, the energy used shall meet the following qualifications and shall be evaluated in accordance with 7.6.3.

- a) Energy recovery from waste materials refers to the collection and conversion of waste material into useful energy. This includes any collection and conversion of waste materials from industry, home, business or public service facilities.
- b) Before a claim of recovered energy can be made, the claimant shall ensure that adverse effects on the environment resulting from this activity are managed and controlled.
- c) The type and quantity of waste that has been used for recovery shall be stated.

ISO 14021, Clause 7.6.2

If a claim is to be made that a product has been produced using recovered energy, the energy produced must meet qualifications a), b) and c) above.

DRAFT

Evaluation shall be undertaken in accordance with clause 6. In addition, evaluation of recovered energy shall be calculated using the following method:

- a) The claim shall only be made if $R > E + P$.
- b) A claim of net recovered energy shall be expressed as follows:

$$\text{Net recovered energy (\%)} = \frac{(R - E)}{(R - E) + P} \times 100$$

where

- P is the amount of energy from primary sources used in the manufacturing process to produce the product;
- R is the amount of energy resulting from the energy recovery process;
- E is the amount of energy from primary sources used in the energy recovery process to recover or extract the recovered energy.

ISO 14021, Clause 7.6.3

Note: ISO 14021 correction at 7.6.3(a). The document should read: $R - E > 0$.

The equation to be used in calculating recovered energy in order to validate and substantiate this claim is detailed in ISO 14021 Clause 7.6.3 above. The claim shall only be made if there is a net environmental benefit demonstrated when the amount of energy resulting from the energy recovery process is greater than the amount of energy from primary resources used in the recovery process.

Adverse effects on the environment resulting from the production of energy from waste shall be managed and controlled before a claim of "recovered energy" can be made to ensure the claim reflects a net environmental benefit over a product's life cycle.

Recovered energy claims are designed for products produced with energy from waste or recovered energy. For example, methane gas can be recovered from the off gassing of landfill and stored as energy.

Example:

Energy produced from agricultural waste may qualify provided that the energy used to transport and process the waste does not exceed the energy produced from waste.

Example:

Many forest product companies use their waste biomass to generate energy that helps to operate their plants. Wood products from such a plant could carry a claim that they are "processed using 20% recovered energy generated from X tonnes per annum of waste biomass".

DRAFT

10.7 Recyclable

10.7.1 Usage of term

A characteristic of a product, packaging or associated component that can be diverted from the waste stream through available processes and programmes and can be collected, processed and returned to use in the form of raw materials or products.

NOTE Material recycling is only one of a number of waste-prevention strategies. The choice of a particular strategy will depend on circumstances and account should be taken of differing regional impacts in making this choice.

ISO 14021, Clause 7.7.1

It is not adequate just to have municipal or industry collection systems to make a claim of "recyclable" — there must also be facilities to process the collected materials and reuse them as an input to another product that can be marketed and used (see Clause 10.2.1 of this Guide).

When making a recycling claim, environmental impacts resulting from recycling products should be considered including collection, transport, processing, proximity to recycling facilities, type of material, including weight (see Clause 5.9 of this Guide).

10.7.2 Qualifications

If collection or drop-off facilities for the purpose of recycling the product or packaging are not conveniently available to a reasonable proportion of purchasers, potential purchasers and users of the product in the area where the product is sold, then the following shall apply.

- a) A qualified claim of recyclability shall be used.
- b) The qualified claim shall adequately convey the limited availability of collection facilities.
- c) Generalized qualifications, such as "Recyclable where facilities exist", which do not convey the limited availability of collection facilities are not adequate.

ISO 14021, Clause 7.7.2

Recycling programs are in place in most major Canadian cities. These programs do not all accept the same products. Local recycling programs can make consumers aware of the materials they will take back for processing and a general recyclable claim can be used as a disposal instruction on products. However, claims of recyclability should be qualified to indicate the limitation of facilities.

Preferred

This container is recyclable through the Blue Box program in Southern Ontario and at recycling depots in Winnipeg and Edmonton.

Discouraged

Recyclable where facilities exist.

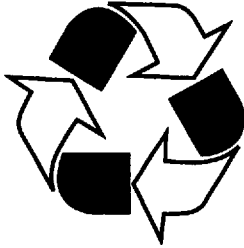
Example:

When a recyclable claim is made, you may use the Mobius loop symbol with or without words. However, a Mobius loop without any qualifying statement would be inappropriate if

DRAFT

infrastructure to collect, process and re-manufacture the material is not conveniently available to a reasonable proportion of purchasers (see Clause 10.1.2 of this Guide).

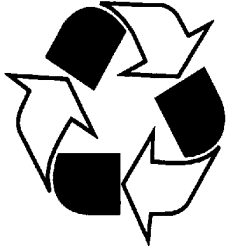
Example:



Recyclable at any XXX facility in Canada.

Material identification may be included in the explanatory statement.

Example:



This polyethylene (PETE) bottle can be recycled in blue box programmes in Montreal and Toronto

Some businesses or sectors with established private recycling programs can make "recyclable" claims for the products they recycle, provided the program is conveniently available to a reasonable proportion of purchasers where the products are sold. Otherwise, the "recyclable" claim must be qualified to indicate the availability of the recycling program in the specific locations where recycling programs are offered.

Example:

Used motor oil may be recyclable through retailers and dealers in participating locations. The manufacturer recycles it for resale. It is labelled "recyclable" when originally purchased and "recycled" when re-refined and re-sold. This claim is acceptable, even though the oil is not recyclable through conventional municipal recycling programs but is recyclable at participating stores in locations identified.

Example:

If a manufacturer of toner cartridges for laser printers establishes a recycling program to recover its cartridges exclusively through its nationwide dealership network and the company advertises its cartridges nationally as "Recyclable — Contact your local dealer for details", the "recyclable" claim should be qualified to indicate the limited availability of recycling locations. An example is: "Dealers in major metropolitan areas accept toner cartridges".

DRAFT

10.8 Recycled content

10.8.1 Usage of terms

Recycled content and its associated terms shall be interpreted as follows:

a) Recycled content

Proportion, by mass, of recycled material in a product or packaging. Only pre-consumer and post-consumer materials shall be considered as recycled content, consistent with the following usage of terms.

1) Pre-consumer material

Material diverted from the waste stream during a manufacturing process. Excluded is reutilization of materials such as rework, regrind or scrap generated in a process and capable of being reclaimed within the same process that generated it.

ISO 14021, Clause 7.8.1.1 a)

The requirement above is designed to limit the claim to material that has actually left the plant and been deliberately collected and reintroduced into the process. Industrial scrap, rework, and regrind, which are collected in-plant and re-circulated through the production process, may not carry a “recycled” claim.

Example:

If rubber shavings from the floor of a tire manufacturer were put into the beginning of the molding process and immediately reintroduced to the process, a claim of recycled content on the finished tires would not be appropriate as this material is considered to be “industrial scrap”.

Example:

If cuttings from a cardboard box manufacturer were collected and returned to the off-site producer of the sheet cardboard for re-inclusion in the process of producing cardboard, it would be considered pre-consumer material, and a “recycled content” claim would be appropriate.

2) Post-consumer material

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.

ISO 14021, Clause 7.8.1.1 a)

Example:

A paper mill cannot make claims for end rolls reintroduced to the process on-site. However, it can collect the office paper used in running the operation — material for which the mill operation is the end user — and count this as “post-consumer” recycled content.

DRAFT

Example:

Overruns of newspapers collected from retail distributors and returned to the paper mill can be counted as "post-consumer recycled content", although they never actually reached the intended end-user.

The claimant may identify whether recycled content is pre- or post-consumer material but it is not required. Pre-and post consumer content can be aggregated to provide the final percentage of recycled content or identified separately.

Example:

If a ream of notebook paper is composed of 20% by weight of post consumer paper, and 30% by weight of pre-consumer paper (generated after completion of the paper-making process, diverted from the solid waste stream, and that would not normally have been reused in the original manufacturing process), the marketer of the notebook paper may claim that the product "contains 50% recycled fibre," or identify the specific pre-consumer and/or post-consumer content by stating that the product "contains 50% total recycled fibre, including 20% post-consumer material.

b) Recycled material

Material that has been reprocessed from recovered [reclaimed] material by means of a manufacturing process and made into a final product or into a component for incorporation into a product.

c) Recovered [reclaimed] material

Material that would have otherwise been disposed of as waste or used for energy recovery, but has instead been collected and recovered [reclaimed] as a material input, in lieu of new primary material, for a recycling or a manufacturing process.

NOTE 1 A diagrammatic representation of a material recycling system is given in annex A.

NOTE 2 For the purposes of this International Standard, the expressions "recovered material" and "reclaimed material" are treated as synonyms; however, it is recognized that, in some countries, one or other of these expressions may be preferred for this application.

Material recycling is only one of a number of waste-prevention strategies. The choice of a particular strategy will depend on circumstances and account should be taken of differing regional impacts in making this choice. Consideration shall be given to the fact that a higher percentage of recycled content does not necessarily imply a lower environmental impact. Because of this, the recycled content claim, in particular, should be used with discretion.

NOTE Attention is drawn to the requirements of 5.7 h).

ISO 14021, Clauses 7.8.1.1 b) and c) and 7.8.1.2

DRAFT

10.8.2 Qualifications

The percentages of recycled content can be expressed as a written statement or as a numerical percentage in the Mobius loop symbol.

Where a claim of recycled content is made, the percentage of recycled material shall be stated.

The percentage recycled content for products and packaging shall be separately stated and shall not be aggregated.

ISO 14021, Clauses 7.8.2.1 and 7.8.2.2

10.8.3 Use of a symbol

When a claim of recycled content is made, the use of a symbol is optional.

If a symbol is used for a recycled content claim, it shall be the Mobius loop accompanied by a percentage value stated as "X %", where X is the recycled content expressed as a whole number calculated in accordance with 7.8.4. The percentage value shall be located either inside the Mobius loop or outside and immediately adjacent to the Mobius loop. Examples of acceptable locations of the percentage value are shown in Figure 2. The Mobius loop with a percentage value, stated as "X %", shall be taken to be a recycled content claim.

If the percentage recycled content is variable, it may be expressed with statements such as "at least X %", or "greater than X %".

The use of an explanatory statement is optional, subject to 5.6.

Where a symbol is used it may be accompanied by material identification.

ISO 14021, Clause 7.8.3

DRAFT

Figure 2 - Examples of acceptable locations of percentage value when using the Mobius loop to make claims about recycled content



10.8.4 Evaluation methodology

Evaluation shall be undertaken in accordance with clause 6. In addition, recycled content shall be expressed quantitatively as a percentage, calculated as shown below. As there are no methods available for directly measuring recycled content in a product or packaging, the mass of material obtained from the recycling process, after accounting for losses and other diversions, shall be used.

$$X(\%) = \frac{A}{P} \times 100$$

where

- X is the recycled content, expressed as a percentage;
- A is the mass of recycled material;
- P is the mass of product.

ISO 14021, Clause 7.8.4.1

It is usually difficult to analyze a product in order to assess the percentage of recycled content. Therefore, the evaluation must be made by using the inventory data for the process. The percentage of recycled content should be calculated using the above noted formula. The manufacturer must be prepared to verify the source and the quantity of recycled material with purchasing documentation and other available inventory records.

The Bibliography of ISO 14021 identifies several acceptable tests for the verification of recycled content.

If the percentage of recycled content is variable, it may be expressed with statements such as "at least x percent" or "greater than x percent" recycled content.

Example:

If the seller of paper greeting cards buys paper stock from several sources, the amount of recycled fibre in the stock varies but the cards are labelled as containing about 50% recycled fibre. The claim is appropriate because the 50% figure is based on the lowest amount of recycled material in any month of the rolling annual average. A simplified diagrammatic representation of a recycling system is provided in Annex C of this Guide.

10.9 Reduced energy consumption

10.9.1 Usage of term

Reduction in the amount of energy associated with the use of a product performing the function for which it was conceived when compared with the energy used by other products performing an equivalent function.

NOTE Claims of reduced energy consumption are commonly expressed as energy-efficient, energy-conserving or energy-saving.

ISO 14021, Clause 7.9.1

DRAFT

10.9.2 Qualifications and evaluation methodology

A claim of reduced energy consumption is a comparative claim and must always be accompanied by an explanatory statement (see Clause 9 of this Guide). The amount of energy to be saved should be expressed as a percentage or an absolute value, calculated according to the methods provided in the ISO 14021 standard.

Example:

Comparing the energy use of transportation methods, such as a bicycle with an airplane is not reasonable as they do not perform equivalent functions. A claim that a bicycle saves energy when compared with an airplane would be considered misleading.

All claims regarding reduced energy consumption shall be qualified. As reduced energy consumption is a comparative claim, the requirements of 6.3 shall be met.

Claims for reduced energy consumption shall be based on the reduction in energy consumption in the use of products and delivery of services. It shall not include reduction of energy in the processes used to manufacture the product.

Evaluation shall be undertaken in accordance with clause 6. In addition, reduced energy consumption shall be measured in accordance with established standards and methods for each product, and the average value should be calculated by statistical processing. The selection of methods shall be in accordance with 6.4.

ISO 14021, Clauses 7.9.2 and 7.9.3

Example:

A four-slice toaster should be compared with another four-slice toaster, not with a two-slice toaster, unless the verification data compares the two slice toaster making 4 slices of toast and the explanatory statement clearly identifies that it was the function of making 4 slices of toast that was compared.

Claims of “reduced energy” consumption are often expressed as “energy-efficient”, “energy-conserving” or “energy-saving”. Whichever term is used, the same rules apply.

“Reduced energy consumption” relates solely to the “use” phase of the life cycle of the product. It cannot be used to refer to reduced energy use in the “production” phase; a reduction at that phase of the life cycle requires a “reduced resource use” claim.

While there are no International Standards for measuring energy efficiency, Canadian programs, as described in the Energy Efficiency Act and administered by Natural Resources Canada, are well-established, and may be helpful in establishing verification data.

10.10 Reduced resource use

10.10.1 Usage of term

A reduction in the amount of material, energy or water used to produce or distribute a product or packaging or specified associated component.

ISO 14021, Clause 7.10.1

DRAFT

This claim refers to raw materials as well as energy and water. Because this is a comparative claim, all reduced resource claims must be presented in terms of reduction percentage and qualified. Clause 9 of this Guide and Clauses 5.7 (n) and 6.3 of ISO 14021 detail the requirements for comparative claims.

In addition to satisfying the requirements for comparative claims, reduced resource use claims must also state the type of resource in the explanatory statement.

Resources include energy and water resources in addition to raw materials.

All claims regarding reduced resource use shall be qualified.

Reductions in resource use for products and packaging shall be separately stated and shall not be aggregated.

Reduced resource use claims shall be expressed in terms of reduction percentage (%). As reduced resource use is a comparative claim, the requirements of 6.3 shall be met.

If reduced resource use claims are made, the type of resource shall be stated in an explanatory statement.

If an increase in consumption of other resources occurs as a result of the claimed reduction of resource use, the increased resource and percentage shall be stated in an explanatory statement.

ISO 14021, Clauses 7.10.2.1 to 7.10.2.6

Clause 5.7 (h) of ISO 14021 should receive special attention when making resource use claims, so that all the environmental impacts throughout the product life cycle are taken into consideration. This should ensure that the claim reflects a net environmental benefit and that it will meet the requirements as found in Clause 5.7(a) of ISO 14021.

Example:

A new process may enable an appliance to be made from thinner and lighter sheets of steel, but the production of these thinner sheets raises the process requirement for energy. In this case, the claim must state that "This product has reduced its use of steel by X% for a net environmental benefit, although energy used in production was increased by Y%".

When a resource reduction has been achieved, for an initial twelve-month period, a claim may be based on an estimated calculation of reduced resource based on the design or distribution of products or production process.

A change in resource use shall be expressed separately for each resource.

ISO 14021, Clauses 7.10.2.7 and 7.10.2.8

"Reduced resource use" is a claim that cannot be verified by testing the end product. Inventory data must be available to support any "reduced resource use" claim made.

DRAFT

10.10.2 Evaluation methodology

Evaluation shall be undertaken in accordance with clause 6. In addition, except as allowed for in 7.10.2.7, the consumed resource per production unit shall be obtained by dividing the gross input of resources during a twelve-month period by the gross production in the same twelve-month period. Reduced resource use rate percentage ($U\%$) shall be obtained by the following formula.

$$U\% = \frac{(I-N)}{I} \times 100$$

Where

U is the reduced resource use per production unit, expressed as a percentage;

I is the initial resource use, expressed as consumed resource per production unit;

N is the new resource use, expressed as consumed resource per production unit.

ISO 14021, Clause, 7.10.3

This formula must be applied to each resource used in the "production" phase of the life cycle and to each increase or decrease identified in the explanatory statement. Other life cycle impacts must also be considered before determining whether a valid claim can be made.

The Bibliography of ISO 14021 identifies several tests that are acceptable for the verification of reduced resource use claims.

10.11 Reduced water consumption

10.11.1 Usage of term

Reduction in the consumption of water associated with the use of a product performing the function for which it was conceived when compared with the amount of water used by other products performing an equivalent function.

NOTE Claims of reduced water usage are commonly expressed as water-efficient, water-conserving or water-saving.

ISO 14021, Clause 7.11.1

10.11.2 Qualifications

All claims regarding water efficiency or reduction shall be qualified. As reduced water consumption is a comparative claim, the requirements of 6.3 shall be met.

Claims for reduced water consumption shall be based on the reduction in water consumption in the use of the product. It shall not include reduction of water in manufacturing processes of the product.

ISO 14021, Clauses 7.11.2.1 and 7.11.2.2

DRAFT

10.11.3 Evaluation methodology

Evaluation shall be undertaken in accordance with clause 6. In addition, water consumption shall be measured in accordance with established standards and methods for each product, and the average value should be calculated by statistical processing. The selection of methods shall be in accordance with 6.4.

ISO 14021, Clause 7.11.3

These are comparative claims and require an explanatory statement. Claims of reduced water consumption are applicable to the use phase of the life cycle of a product. Claims of reduced water usage are often expressed as "water-efficient", "water-conserving" or "water-saving". Whichever term is used to make the claim, the requirements of this Clause apply.

Example:

A plumbing supply company may make a claim that, "Our low-flow shower head uses less water per 15-minute shower than that produced by our competitors".

Reduced water consumption in the material extraction or production phase is covered under claims of "reduced resource use".

10.12 Reusable and refillable

10.12.1 Usage of terms

10.12.1.1 Reusable

A characteristic of a product or packaging that has been conceived and designed to accomplish within its life cycle a certain number of trips, rotations or uses for the same purpose for which it was conceived.

ISO 14021, Clause 7.12.1.1

This claim deals primarily with the "product disposal" phase of the life cycle. Claims that deal with this phase are the most common in Canada at this time.

A product that claims to be reusable must have been designed specifically with the intent that it shall be reusable.

Example:

Many rigid plastic food containers are identified as "microwaveable" and/or "dishwasher safe" as it is assumed that consumers will reuse these containers for their own purposes. A claim of "reusable" or "refillable" on these containers would be inappropriate as they are not designed to be reused for their original purpose.

DRAFT

10.12.1.2 Refillable

A characteristic of a product or packaging that can be filled with the same or similar product more than once, in its original form and without additional processing except for specified requirements such as cleaning or washing.

ISO 14021, Clause 7.12.1.2

The design of products that claim to be refillable and/or reusable must be such that they can be reused for their original purpose.

Example:

An unqualified claim of "refillable" could be made if the manufacturer sells a concentrated refill for the detergent bottle in all locations where the original bottle is sold.

Example:

Lidded hard plastic containers marked "refillable" for baby wipes can be replenished with baby wipes sold in foil packages provided both the rigid boxes and the foil refills are available in all locations where the product is sold.

10.12.2 Qualifications

A claim that a product or packaging is reusable or refillable shall be made only where:

- a) a programme exists for collecting the used product or packaging and reusing or refilling it; or
- b) facilities or products exist that allow the purchaser to reuse or refill the product or package.

ISO 14021, Clause 7.12.2.2

A reusable or refillable claim can only be valid if the systems (i.e., programmes for collection) or products (i.e., refillables) are in place to allow for the reuse or refilling to occur. Otherwise, the claim is not valid.

Example:

Beer bottles are sold under a deposit/return system that returns them to the producer for cleaning and refilling. These products can carry an unqualified claim of reusable/refillable as this system is almost universally available in Canada.

Example:

Some grocery stores have a system in place that allows consumers to refill special plastic soft drink bottles on site. These products can carry a reusable/refillable claim provided that the explanatory statement identifies facilities where the bottles can be refilled. A claim of "refillable in your local grocery store" would be considered misleading. The claim should read, "Refillable in all Penners Grocery Stores in Manitoba, Saskatchewan and Alberta".

Example:

Some cosmetics are sold in refillable bottles. The retail stores that sell these products have in-house systems for refilling containers that customers bring back when they are empty. These containers can be claimed to be reusable or refillable but must have an explanatory

DRAFT

statement to inform consumers about the system. For example the label might say; "This is a refillable container. To have this container refilled, bring it in to any ABC Cosmetics in Canada."

Facilities for servicing refillable products must be conveniently available to a reasonable portion of purchasers or potential purchasers in the area in which the product is sold (see Clause 10.1.2 of this Guide). Where these facilities are not conveniently available, the claim must be qualified to adequately convey the limited availability of collection programs or facilities. It is understood that not all end users will take advantage of the reusable/refillable characteristic of these containers.

10.12.3 Evaluation methodology

Evaluation shall be undertaken in accordance with clause 6. In addition, the information referred to in 6.5 shall include evidence of the following.

- a) The product for which the claim is being made is being refilled or reused.
- b) That reuse or refilling facilities are available to accommodate the product for which the claim is being made.
- c) The facilities required to reuse or refill the product are conveniently available to a reasonable proportion of the purchasers, potential purchasers and users of the product.

ISO 14021, Clause 7.12.3

This evaluation will require the collection of statistical data and reports from those supplying the refill service. Suppliers including manufacturers, retailers and distributors may need to be contacted for the collection of data to verify the claim.

10.13 Waste reduction

10.13.1 Usage of term

Reduction in the quantity (mass) of material entering the waste stream as a result of a change in the product, process or packaging.

NOTE Waste may include discharges to air and water as well as solid waste from manufacturing or treatment processes.

ISO 14021, Clause 7.13.1

This claim can be made whenever a change in the product, process, or packaging effects a reduction in waste at any stage of the life cycle — production, distribution, use, or disposal. Consideration should be given to Clause 5.7 (h) of ISO 14021 to ensure that, in reducing waste, the environmental burden is not increased in another phase of the life cycle (see Clause 5.9 of this Guide).

Waste reduction claims may include waste discharged into air and water, as well as solid waste. It can also include the waste generated in the treatment of any other waste. This claim can be made if there is a reduction in the water content of solid waste or if there is a reduction in the mass of waste due to a waste treatment process.

DRAFT

Example:

Companies involved in electroplating have designed innovative ways to recover metals from the solvents used in the plating process. This creates a measurable reduction in both the volume and toxicity of the waste. A claim of reduced waste could be made by the electroplating organization. The recovered metals could be used by another organization, which could then make a claim of recycled content.

10.13.2 Qualifications

Calculations of process waste reduction shall not include in-process re-utilization of materials such as rework, regrind or scrap materials generated within the process and capable of being reused within the same process that generated it.

ISO 14021, Clause 7.13.2.4

This restriction is similar to the one placed on claims about recycled content.

Waste generators who transfer wastes to other users that intend to utilize the waste for a constructive purpose, other than to put it into the waste stream, may make a claim of waste reduction.

ISO 14021, Clause 7.13.2.5

Example:

Many cities now have waste exchanges that collect solid waste from some organizations and sell it as a useful input to another organization for a different process. If waste is sold or transferred to such a waste exchange, the claim of waste reduction can be made.

Example:

Newspaper printers may return the ends of paper rolls and overruns or errors to the mill from which they buy their paper. A claim of “reduced waste” would be appropriate on these publications.

“Waste reduction” is a comparative claim and should meet all the requirements for making comparative claims, as outlined in Clause 9 of this Guide.

10.13.3 Evaluation methodology

Evaluation shall be undertaken in accordance with Clause 6. In addition, reduced waste amount may be calculated from material balance sheets, as well as from the actual measurement of waste.

ISO 14021, Clause 7.13.3

This data must be available to provide verification of the claim for purchasers, should it be requested.

DRAFT

Annex A

Environmental labels and declarations and ISO 14000 Series

(1) ISO 14000 overview

ISO 14001 and 14004 are the Standards for environmental management systems. The other documents in the ISO 14000 series are tools designed to assist businesses with measuring and communicating their efforts to minimize their environmental impacts.

Documents in the ISO 14030 series deal with issues of environmental performance evaluation, indicators, and reporting. The same information may be required for environmental reports and for verification of environmental claims.

ISO 14040 series deal with the product life cycle; they cover the guiding principles of life cycle analysis, inventory, impact assessment, interpretation, and some sample applications. Credible environmental labelling is dependent on an understanding of the life cycle of a product; consequently, the linkages between the 14020 and 14040 Standards are very important.

ISO and IEC guides are also available to help those developing technical standards to consider the environmental aspects of products. One such guide is ISO Guide 64.

(2) The ISO 14020 series on environmental labels and declarations

ISO 14020: Environmental labels and declarations — General Principles

- Outlines nine basic principles that are applicable to all types of environmental labels and declarations
- Specific requirements are not set out in this document

ISO 14021: Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling)

- Defines commonly used environmental claims; establishes use guidelines for the Mobius loop markings; and suggests methodologies for tests that can be used to verify these claims.

ISO 14024: Environmental labels and declarations — Type I environmental labelling — Principles and procedures

- Establishes procedures to establish and operate a Type I, or "ecologo", program. Type I programs employ a third-party certification process to verify product or service compliance with a pre-selected set of criteria.
- Provides guidance on developing criteria, compliance, systems and operating procedures for third-party verifiers for awarding ecologos.

ISO/FDIS³ 14025: Environmental labels and declarations — Type III environmental declarations — Planned publication 2006

- Specifies a format for reporting quantifiable life cycle data (environmental loads, such as energy used, emissions generated, etc.)

³ Final Draft International Standard

- Describes business to business declarations and labels, which require independent verification of the data only, not third party certification. Business to consumer declarations require third party certification.

DRAFT

Annex B

Principles for all environmental labels and declarations

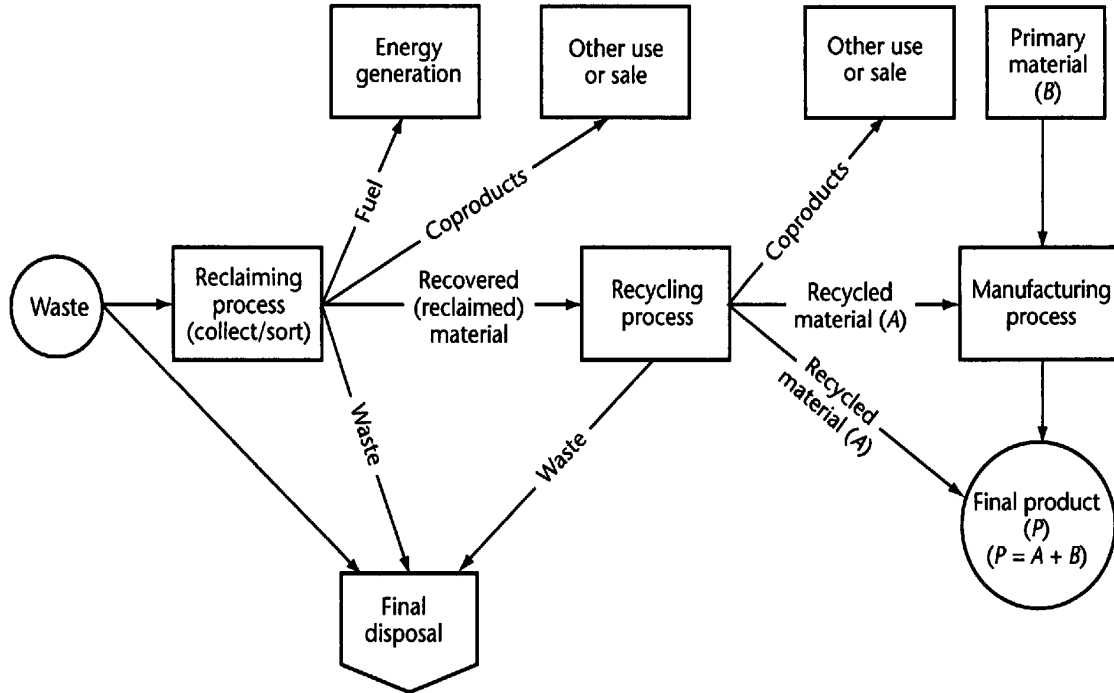
These principles are from ISO 14020 — the official document, "CAN/CSA-ISO 14020-99" has detailed explanations relating to each of these principles. Following the relevant principles is a pre-requisite to all the other standards in the 14020 series.

- (1) Environmental labels and declarations shall be accurate, verifiable, relevant and not misleading.
- (2) Procedures and requirements for environmental labels and declarations shall not be prepared, adopted or applied with a view to, or with the effect of creating unnecessary obstacles to international trade.
- (3) Environmental labels and declarations shall be based on scientific methodology that is sufficiently thorough and comprehensive to support the claim and that produces results that are accurate and reproducible.
- (4) Information concerning the procedure, methodology and any criteria used to support environmental labels and declarations shall be available and provided upon request to all interested parties.
- (5) The development of environmental labels and declarations shall take into consideration all relevant aspects of the life cycle of the product.
- (6) Environmental labels and declarations shall not inhibit innovation which maintains or has the potential to improve environmental performance.
- (7) Any administrative requirements of information demands related to environmental labels and declarations shall be limited to those necessary to establish conformance with applicable criteria and standards of the labels and declarations.
- (8) The process of developing environmental labels and declarations should include an open, participatory consultation with interested parties. Reasonable efforts should be made to achieve a consensus throughout the process.
- (9) Information on the environmental aspects of products and services relevant to an environmental label or declaration shall be available to purchasers and potential purchasers from the party making the environmental label or declaration.

DRAFT

Annex C

Simplified diagrammatic representation of a recycling system



Recycled content of product (X%) = $(A/P) \times 100$

Some recovered (reclaimed) materials may go directly to a manufacturing process, which includes the recycling process, without having a separate operation called the "Recycling process", in the system. When this is done, coproducts and waste are still likely to be generated in that manufacturing process. These coproducts and waste shall be accounted for when determining the mass of recycled material to be used in the formula for calculating recycled content.

NOTE This diagram represents a simplified example of a recycling system and is intended to provide information for clarity on recycled content calculations. For more complete examples refer to ISO/TR⁴ 14049, *Environmental management — Life cycle assessment — Examples for the application of ISO 14041*.

⁴ Technical Report

Proposition de modification

N'hésitez pas à nous faire part de vos suggestions et de vos commentaires. Pour proposer des modifications aux normes et à d'autres publications CSA, prière de fournir les renseignements demandés ci-dessous et de formuler les propositions sur une feuille séparée. Il est recommandé d'inclure

- le numéro de la norme/publication
- le numéro de l'article, du tableau ou de la figure visé
- la formulation proposée
- la raison de cette modification.

Nom/Name : _____

Affiliation : _____

Adresse/Address : _____

Ville/City : _____

État/Province/State : _____

Pays/Country : _____ **Code postal/Postal/Zip code :** _____

Téléphone/Telephone : _____ **Télécopieur/Fax :** _____

Date : _____

J'accepte que la CSA conserve et utilise les renseignements ci-dessus afin de faciliter la réception de mes suggestions et commentaires.

Consultez la politique CSA en matière de confidentialité à www.csagroup.org/legal pour savoir comment nous protégeons vos renseignements personnels.

Proposal for change

CSA welcomes your suggestions and comments. To submit your proposals for changes to CSA Standards and other CSA publications, please supply the information requested below and attach your proposal for change on a separate page(s). Be sure to include the

- Standard/publication number
- relevant Clause, Table, and/or Figure number(s)
- wording of the proposed change
- rationale for the change.

I consent to CSA collecting and using the above information to facilitate the collection of my suggestions and comments.

Visit CSA's policy on privacy at www.csagroup.org/legal to find out how we protect your personal information.

DRAFT

DRAFT



ISBN 1-XXXXXX-XXX