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Environmental labels and declarations — Type I environmental labelling — Principles and procedures

*Marquage et déclarations environnementaux — Étiquetage
environnemental de type I — Principes et méthodes*



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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 14024 was prepared by Technical Committee ISO/TC 207, *Environmental management*, Subcommittee SC 3, *Environmental labelling*.

Introduction

There are a number of approaches to environmental labelling. This International Standard relates to Type I environmental labelling programmes which award their environmental label to products which meet a set of predetermined requirements. The label thus identifies products which are determined to be environmentally preferable within a particular product category.

Type I environmental labelling programmes are voluntary, can be operated by public or private agencies and can be national, regional or international in nature.

Environmental labels and declarations — Type I environmental labelling — Principles and procedures

1 Scope

This International Standard establishes the principles and procedures for developing Type I environmental labelling programmes, including the selection of product categories, product environmental criteria and product function characteristics; and for assessing and demonstrating compliance. This International Standard also establishes the certification procedures for awarding the label.

2 Normative reference

The following normative document contains provisions which, through reference in this text, constitute provisions of this International Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the normative document indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 14020:1998, *Environmental labels and declarations — General principles*.

3 Terms and definitions

For the purposes of this International Standard, the following terms and definitions apply.

3.1

Type I environmental labelling programme

voluntary, multiple-criteria-based third party programme that awards a licence which authorizes the use of environmental labels on products indicating overall environmental preferability of a product within a particular product category based on life cycle considerations

3.2

product

any goods or service

3.3

product category

group of products which have equivalent function

3.4

product environmental criteria

environmental requirements that the product shall meet in order to be awarded an environmental label

3.5

product function characteristic

attribute or characteristic in the performance and use of a product

3.6**ecolabelling body**

third party body, and its agents, which conducts a Type I environmental labelling programme

3.7**third party**

person or body that is recognized as being independent of the parties involved, as concerns the issue in question

[ISO/IEC Guide 2:1996]

NOTE "Parties involved" are usually supplier ("first party") and purchaser ("second party") interests.

3.8**interested party**

any party affected by a Type I environmental labelling programme

3.9**licensee**

party authorized by an ecolabelling body to use a Type I environmental label

3.10**environmental aspect**

element of an organization's activities, products or services which can interact with the environment

NOTE A significant environmental aspect is an environmental aspect which has, or can have, a significant environmental impact.

[ISO 14001:1996]

3.11**environmental impact**

any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's activities, products or services

[ISO 14001:1996]

3.12**certification**

procedure by which a third party gives written assurance that a product, process or service conforms to specified requirements

[ISO/IEC Guide 2:1996]

3.13**licence (for Type I environmental labelling)**

document, issued under the rules of a certification system, by which an ecolabelling body grants to a person or body the right to use Type I environmental labels for its products or services in accordance with the rules of the environmental labelling programme

3.14**fitness for purpose**

ability of a product, process or service to serve a defined purpose under specific conditions

[ISO/IEC Guide 2:1996]

4 Objective of Type I environmental labelling

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

The objective of Type I environmental labelling programmes is to contribute to a reduction in the environmental impacts associated with products, through the identification of products that meet a specific Type I programme's criteria for overall environmental preferability.

The objective of this International Standard is to secure transparency and credibility in implementing Type I environmental labelling programmes and to harmonize the principles and procedures applicable to the programmes.

5 Principles

5.1 Voluntary nature of the programme

Type I environmental labelling programmes, including those developed or operated by government-sponsored agencies, shall be voluntary in nature.

5.2 Relationship with ISO 14020

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

5.3 Relationship with legislation

A precondition for the granting and maintenance of a licence to use a Type I environmental label shall be the compliance by the applicant with environmental and other relevant legislation.

5.4 Life cycle consideration

The objective of reducing environmental impacts and not merely transferring impacts across media or stages of the product life cycle is best served by considering the whole product life cycle when setting product environmental criteria.

Life cycle stages to be taken into account when developing the product environmental criteria should include: extraction of resources, manufacturing, distribution, use and disposal relating to relevant cross-media environmental indicators. Any departure from this comprehensive approach or selective use of restricted environmental issues shall be justified.

5.5 Selectivity

Product environmental criteria shall be established to differentiate environmentally preferable products from others in the product category, based on a measurable difference in environmental impact. Product environmental criteria should differentiate between products only when these differences are significant. Testing and verification methodologies used to evaluate products have different levels of precision and accuracy. This should be considered when determining the significance of this difference.

Once product environmental criteria are established according to the above paragraph, all products which meet the criteria shall be eligible to use the label.

5.6 Product environmental criteria

5.6.1 Life cycle considerations

The product environmental criteria shall be based on indicators arising from life cycle considerations (see 6.4).

5.6.2 Basis of criteria

The product environmental criteria should be set at attainable levels and give consideration to relative environmental impacts, measurement capability and accuracy.

5.7 Product function characteristics

In developing the criteria, the fitness for purpose of the product and levels of performance shall be taken into account. International, regional or national standards for the product should be considered for use in the programme, according to the hierarchy for use of standards set out in ISO 14020.

NOTE In the context of environmental labelling, fitness for purpose implies that a product satisfies health, safety and consumer performance needs.

5.8 Validity of programme requirements

5.8.1 Period of validity

The product environmental criteria and product function requirements for each product category shall be set for a predefined period.

5.8.2 Review period

The product environmental criteria and product function requirements shall be reviewed within a predefined period, taking account of factors such as new technologies, new products, new environmental information and market changes. Review of the product environmental criteria and product functional requirements need not necessarily lead to changes in them.

5.9 Consultation

A process of formal open participation among interested parties shall be established at the outset for the purpose of selecting and reviewing product categories, product environmental criteria and product function characteristics.

5.10 Compliance and verification

All the elements in the product environmental criteria and product function characteristics of the environmental labelling programme shall be verifiable by the ecolabelling body. The methods for assessing compliance should make use of, in order of preference:

- ISO and IEC standards;
- other internationally recognized standards;
- regional and national standards;
- other repeatable and reproducible methods which follow accepted principles of good laboratory practice (see ISO/IEC 17025 for information on good laboratory practice);
- manufacturer's evidence.

5.11 Transparency

A Type I environmental labelling programme should be able to demonstrate transparency through all stages of its development and operation. Transparency implies that information shall be available to interested parties for inspection and comment where appropriate. Adequate time shall be allowed for comments to be submitted. This information should include:

- selection of product categories;
- selection and development of product environmental criteria;
- product function characteristics;
- testing and verification methods;
- certification and award procedures;

- review period;
- period of validity;
- nonconfidential evidence on which the awarding of the label is based;
- funding sources for the programme development (e.g. fees, government financial support etc.);
- compliance verification.

Transparency should not conflict with the requirements of 5.17.

5.12 International trade aspects

Procedures and requirements for environmental labelling programmes shall not be prepared, adopted or applied with a view to, or with the effect of creating unnecessary obstacles to international trade. The applicable provisions and interpretations of the World Trade Organization (WTO) should be taken into account.

5.13 Accessibility

Application to, and participation in, environmental labelling programmes shall be open to all potential applicants. All applicants who fulfil the product environmental criteria for a given product category and the other programme requirements shall be entitled to be granted a licence and authorized to use the label.

5.14 Scientific basis of product environmental criteria

The development and selection of criteria shall be based on sound scientific and engineering principles. The criteria should be derived from data that support the claim of environmental preferability.

5.15 Avoidance of conflict of interest

Type I Environmental labelling programmes shall ensure that they are free from undue influence. Programmes shall be able to demonstrate that sources of funding do not create a conflict of interest.

NOTE Attention is drawn to the provisions of ISO/IEC Guide 65.

5.16 Costs and fees

Fees may include application, testing or administration fees. In principle, the costs and fees for the granting and maintaining of a label should be based on all programme costs and should be kept as low as possible to maximize accessibility.

Any fees should be applied equitably to all applicants and licensees.

5.17 Confidentiality

The confidentiality of all information which is identified as confidential shall be maintained.

5.18 Mutual recognition

Mutual recognition, based on confidence, should be encouraged. There may be mutual recognition of tests, inspections, conformity assessment, administrative procedures and, where appropriate, product environmental criteria.

To ensure full transparency, information on existing mutual recognition agreements with other eco-labelling bodies shall be made available.

NOTE For further guidance see Chapter 8 of reference [6].

6 Procedures

6.1 General

Type I environmental labelling involves an iterative process which includes:

- consultation with interested parties;
- the selection of product categories;
- development, review and modification of product environmental criteria;
- the identification of product function characteristics; and
- the establishment of certification procedures and other administrative elements of the programme.

6.2 Consultation with interested parties

The ecolabelling body shall implement a formal consultation mechanism that facilitates full participation of interested parties. Such a mechanism could include the use of selected groups of interested parties' representatives, e.g. consultation board, advisory committee or public hearing.

Consultation is an on-going process that occurs in the selection of the product category, and in the establishment of product environmental criteria and product function characteristics. Interested parties shall be given adequate time and access to details and sources of information used. The consultation process shall also ensure that interested parties who comment on the programme receive proper consideration of and response to their comments. Reasonable efforts should be made to achieve a consensus throughout the process.

6.3 Selection of product categories

6.3.1 Conducting a feasibility study

In this phase of the process, a study should be conducted on potential product categories and the nature of the market. The purpose of the study is to consider the feasibility of establishing the product categories. The study should include:

- initial selection of possible product categories;
- consultation with interested parties;
- market survey (e.g. nature, size, demand);
- suppliers in the market place (e.g. small and medium-sized enterprises, foreign and domestic producers);
- environmental impacts of products;
- potential and need for environmental improvement;
- definition of scope of product categories, taking into account equivalence of use
- fitness for use, including product function characteristics;
- availability of data;
- current national and international legislation and agreements.

6.3.2 Proposal for product category

Once a feasibility study has been completed, the ecolabelling body will be in a position to ascertain which product categories are most likely to obtain marketplace acceptance. A product category proposal should be prepared for

the interested parties which summarizes the components of the feasibility study, its findings, and the considerations leading to the proposal of product categories for the programme.

6.4 Selection and development of product environmental criteria

6.4.1 Selection of product environmental criteria

The framework and procedures which this International Standard sets forth are intended to provide uniformity while allowing decisions on the final criteria to be the result of the consultation process between the ecolabelling body and interested parties. The criteria shall be selected in accordance with the requirements set out in 5.2 to 5.17.

The matrix in Table 1 is an example of applying this approach and is included to assist ecolabelling bodies to initiate selection of product environmental criteria. The matrix links the stages of the product life cycle with the major environmental input and output indicators. The emission indicators are grouped by media and are usually more than one per medium. The study of the life cycle stages (which may be performed as a further part of the feasibility study given in 6.3.1) could lead to the conclusion that environmental impacts in some stages are insignificant and do not warrant further consideration. Regardless, the study shall show that the selection of product environmental criteria will not lead to the transfer of impacts from one stage of the life cycle to another or from one medium to another without a net gain of environmental benefit.

Table 1 — Typical product environmental criteria selection matrix

| Stage of the life cycle | Environmental input/output indicators | | | | | |
|-------------------------|---------------------------------------|----------------------------|-------------|-----|------|-------|
| | Energy | Resources | Emission to | | | Other |
| | Renewable/ Nonrenewable | Renewable/ Nonrenewable | Water | Air | Soil | |
| Resource extraction | | | | | | |
| Production | | | | | | |
| Distribution | | | | | | |
| Use | | | | | | |
| Disposal | | | | | | |

6.4.2 Development of product environmental criteria

6.4.2.1 General

The process for establishing the criteria should take into account relevant local, regional, and global environmental issues, available technology, and economic aspects.

Product environmental criteria should be expressed in terms of

- impacts on the environment and natural resources; or
- whenever that is not practicable, environmental aspects, such as emissions to the environment.

Criteria that directly or indirectly require or exclude the use of particular processes or production methods without justification shall be avoided. Any exclusions of certain substances should be based on scientific methodology meeting Principle 3 of ISO 14020. Methods such as risk assessment may provide useful information in this respect.

Some major considerations in this phase of the labelling programme are set out in 6.4.2.2 to 6.4.2.5.

6.4.2.2 Identification of the areas most relevant for reduction of environmental impact

The ecolabelling body shall identify the product life cycle stages where there is differentiation of environmental impacts among the products within the category. The ranges and variability of the data obtained for specific products shall be analysed to ensure that the selected product environmental criteria are adequate and reflect the differences among products.

6.4.2.3 Use of qualitative and quantitative indices

The ecolabelling body may consider it proper to apply weighting factors to the selected environmental requirements. The reasons for each weighting factor shall be clearly explained and justified.

6.4.2.4 Determination of numerical values for each relevant criterion

The ecolabelling body shall determine the criteria that most accurately reflect the selected environmental aspects. Once the criteria have been determined, the ecolabelling body shall assign numerical values to them. These values could take the form of minimum values, threshold levels not to be exceeded, a scale-point system or other relevant and appropriate approaches.

6.4.2.5 Determination of test methods, procedures and availability of test laboratories

Testing and verification requirements should be considered in parallel with the preparation of requirements for a given product category. The organizational, technical and economic feasibility of such testing and verification requirements should be carefully considered.

The ecolabelling body should provide a reference to the test methods that are required for any given criterion or characteristic, and should examine the availability of competent laboratories capable of performing the tests. The test methods should be selected according to the guidance given in 5.10.

6.5 Selection of product function characteristics

In the selection of the product function characteristics, due consideration shall be given to product function. This should be addressed in terms of product performance, rather than design or descriptive characteristics.

When establishing product function characteristics, consideration should be given to:

- identification of the product function characteristics;
- selection of key performance elements that characterize function;
- verification that the key performance elements are applicable to all products in the category;
- identifying the necessary levels of performance (see 5.7).

6.6 Reporting and publication

Once the product categories, product environmental criteria and product function characteristics have been established, they shall be published. The selected report format shall be accompanied by information which demonstrates that:

- the establishment of the category, criteria and characteristics conforms with the scope, principles, practices, and requirements set out in this International Standard;
- the criteria are objective and justifiable;
- methods to verify the product environmental criteria and product function characteristics are available;
- interested parties were given the opportunity to participate in the process and their views were taken into consideration.

The ecolabelling body should also provide information on request that explains the meaning of the label to purchasers and the public.

6.7 Implementation of modifications to the product environmental criteria

In cases where the label has already been awarded to products, there are a number of factors which should be considered when establishing the date on which revisions to the criteria will come into force.

These factors include, but are not limited to:

- the urgency of complying with the revised product environmental criteria;
- the extent of the change, the length of time, and the level of complexity involved in retooling the manufacturing process to comply with the revised criteria;
- avoidance of unintentional commercial advantage given to a particular manufacturer, particular design or process;
- the need to involve the licensee's material suppliers;
- action that needs to be taken with respect to existing products with the label awarded under the old criteria which are still in the chain of supply to the end consumer;
- time for appropriate consultation with licensees;
- complexity of administering the changes for the ecolabelling body;
- legislative requirements.

7 Certification and compliance

7.1 General

Clause 7 sets out general requirements for certification and compliance.

NOTE In addition, reference to ISO/IEC Guide 65 is recommended.

7.2 Basic concepts

7.2.1 General

The prerequisites for awarding the label are normally divided into the elements set out in 7.2.2 and 7.2.3

7.2.2 General rules

General rules guide the overall operation of the programme. These general rules control the general conditions for the awarding of the licence and the use of the label. The general rules should address, but may not be limited to, the following issues:

- publicity by licensees;
- conditions which could lead to the suspension, cancellation or withdrawal of a licence;
- procedures for implementing corrective action in case of non-conformity;
- procedures for resolution of disputes;
- procedures for testing and verification;
- fee structure;

- guidance for the use of logotype.

It is essential that all prerequisites for the awarding of the licence and the use of the label are included in the general rules, the product environmental criteria and product function characteristics, since only these requirements can be used as the basis for awarding or withholding the licence to use the label.

7.2.3 Product environmental criteria and product function characteristics for each product category

Product environmental criteria and product function characteristics set out the technical requirement elements of the Type I environmental labelling programme for each product category.

7.3 Licensing

The ecolabelling body is responsible for licensing of applicants. The ecolabelling body shall award a licence to use the label only when it is satisfied that, among other contractual obligations:

- the applicant is in compliance with the general rules of the programme;
- the product is in compliance with the product environmental criteria and product function characteristics applicable to its product category.

The issuing of a licence does not oblige the licensee to use the label.

The ecolabelling body shall maintain a publicly available list of products which have been awarded the label.

7.4 Procedures for assessing and demonstrating compliance

7.4.1 Basic principle

The methodology for assessing whether a product complies with the product environmental criteria and product function characteristics, and of verifying on-going compliance, shall be documented and have sufficient rigour to maintain confidence in the programme.

There may be many factors influencing the choice of compliance procedures, and the methodologies may vary from one programme to another.

7.4.2 Supervision and control

The ecolabelling body shall review the programme requirements and, in accordance with the General rules (see 7.2.2), determine the appropriate form of verification for each. Once the requirements have been reviewed, a plan of supervision and control shall be prepared.

7.4.3 Supporting documentation

The ecolabelling body shall require the applicant to make a commitment to comply with environmental and other relevant legislation.

The ecolabelling body shall obtain documentary evidence of the applicant's conformity with the programme requirements. All data shall be of known and verifiable quality.

The ecolabelling body shall prepare and make available, on request, documentation including, at a minimum:

- product categories;
- product environmental criteria;
- product function characteristics;
- period of validity of criteria;
- testing and verification methods;

- certification and award procedures;
- periodic review criteria;
- nonconfidential evidence on which the awarding of the label is based;
- funding sources for the programme development (e.g. fees, government financial support, etc.);
- compliance verification.

7.4.4 Declarations of conformity

If the programme allows for the use of the applicant's declaration of conformity with certain programme requirements, the declaration of conformity should follow the guidelines set out in ISO/IEC Guide 22.

7.5 Compliance monitoring

After the licence has been awarded to an applicant, the licensee shall inform the ecolabelling body of any change that might affect its continued compliance with the requirements.

The ecolabelling body shall ensure that any change in the product or its manufacturing process likely to affect compliance is considered and shall require the licensee to initiate corrective action if compliance is not maintained.

It is the responsibility of the licensee to ensure that compliance with the programme requirements is maintained.

7.6 Protection of the label

The ecolabelling body shall ensure that its label (i.e. the certification mark/logotype) is legally protected in order to prevent unauthorized use and to maintain public confidence in the programme.

The ecolabelling body shall have a clear and explicit policy regarding the proper use of the label. Any deviation from this policy shall result in appropriate corrective action and possible withdrawal of the licence.

Bibliography

- [1] ISO 14001:1996, *Environmental management systems — Specification with guidance for use*.
- [2] ISO/IEC 17025, *General requirements for the competence of calibration and testing laboratories*.
- [3] ISO/IEC Guide 2:1996, *General terms and their definitions concerning standardization and related activities*.
- [4] ISO/IEC Guide 22:1997, *General criteria for supplier's declaration of conformity*.
- [5] ISO/IEC Guide 65:1996, *General requirements for bodies operating product certification systems*.
- [6] *Certification and related activities: Assessment and verification of conformity to standards and technical specifications*. International Organization for Standardization, Geneva, 1992, ISBN 92-67-10176-5.

