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Environmental labels and declarations — Type III environmental declarations — Principles and procedures

Marquages et déclarations environnementaux — Déclarations environnementales de Type III — Principes et modes opératoires

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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 2.

The main task of technical committees is to prepare International Standards. 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.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 14025 was prepared by Technical Committee ISO/TC 207, *Environmental management*, Subcommittee SC 3, *Environmental labelling*.

This first edition of ISO 14025 cancels and replaces ISO/TR 14025:2000, which has been technically revised.

Introduction

Type III environmental declarations present quantified environmental information on the life cycle of a product to enable comparisons between products fulfilling the same function. Such declarations

— are provided by one or more organizations,

— are based on independently verified life cycle assessment (LCA) data, life cycle inventory analysis (LCI) data or information modules in accordance with the ISO 14040 series of standards and, where relevant, additional environmental information,

— are developed using predetermined parameters, and

— are subject to the administration of a programme operator, such as a company or a group of companies, industrial sector or trade association, public authorities or agencies, or an independent scientific body or other organization.

Type III environmental declarations as described in this International Standard are primarily intended for use in business-to-business communication, but their use in business-to-consumer communication is not precluded. It is recognized that a developer of a Type III environmental declaration cannot precisely determine the audience. However, it is important to consider the information needs of different purchaser or user groups, for instance large businesses, small and medium sized enterprises (SMEs), public procurement agencies and consumers. Those responsible for developing Type III environmental declarations and programmes based on this International Standard will need to pay due attention to the level of awareness of the target audience.

In programmes based on this International Standard, the organization making the declaration will be required to ensure that data are independently verified either internally or externally. This could, but does not necessarily, mean third-party verification except in the case of business-to-consumer declarations. ISO provides a general definition for “certification” (procedure by which a third party gives written assurance that a product or process conforms to specified requirements). Nevertheless, “certification” is understood and conducted differently in different regions. To avoid confusion, this International Standard uses the term “third-party verification” instead of “certification”.

Harmonization of general programme instructions and particularly product category rules (PCR) are encouraged between programmes to meet the principle of comparability. This includes mutual recognition of rules with respect to PCR development, PCR review and verification procedures, administrative procedures and declaration format. To ensure comparability, programme operators are encouraged to work cooperatively to achieve harmonization of the programmes and to develop mutual recognition agreements.

NOTE In the practice of developing Type III environmental declarations, programmes or their declarations are referred to by various names such as Eco-Leaf, eco-profile, environmental declaration of product, environmental product declaration (EPD) and environmental profile.

Environmental labels and declarations — Type III environmental declarations — Principles and procedures

1 Scope

This International Standard establishes the principles and specifies the procedures for developing Type III environmental declaration programmes and Type III environmental declarations. It specifically establishes the use of the ISO 14040 series of standards in the development of Type III environmental declaration programmes and Type III environmental declarations.

This International Standard establishes principles for the use of environmental information, in addition to those given in ISO 14020.

Type III environmental declarations as described in this International Standard are primarily intended for use in business-to-business communication, but their use in business-to-consumer communication under certain conditions is not precluded.

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

This International Standard does not include sector-specific provisions, which may be dealt with in other ISO documents. It is intended that sector-specific provisions in other ISO documents related to Type III environmental declarations be based on and use the principles and procedures of this International Standard.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 14020:2000, *Environmental labels and declarations — General principles*

ISO 14021:1999, *Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling)*

ISO 14024:1999, *Environmental labels and declarations — Type I environmental labelling — Principles and procedures*

ISO 14040:2006[1)], *Environmental management — Life cycle assessment — Principles and framework*

ISO 14044:2006[1)], *Environmental management — Life cyle assessment — Requirements and guidelines*

ISO 14050, *Environmental management — Vocabulary*

1) ISO 14040:2006 and ISO 14044:2006 cancel and replace ISO 14040:1997, ISO 14041:1998, ISO 14042:2000 and ISO 14043:2000.

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14050 and the following apply.

NOTE Terms are not defined where they retain their normal dictionary definition. Where bold type is used within a definition, this indicates a cross-reference to another term defined in this clause, and the number reference for the term is given in parentheses.

3.1
environmental label
environmental declaration
claim which indicates the environmental aspects of a **product** (3.11) or service

NOTE An environmental label or declaration may take the form of a statement, symbol or graphic on a product or package label, in product literature, in technical bulletins, in advertising or in publicity, amongst other things.

[ISO 14020:2000]

3.2
Type III environmental declaration
environmental declaration (3.1) providing quantified environmental data using predetermined parameters and, where relevant, additional environmental information

NOTE 1 The predetermined parameters are based on the ISO 14040 series of standards, which is made up of ISO 14040 and ISO 14044.

NOTE 2 The additional environmental information may be quantitative or qualitative.

3.3
Type III environmental declaration programme
voluntary programme for the development and use of **Type III environmental declarations** (3.2), based on a set of operating rules

3.4
programme operator
body or bodies that conduct a **Type III environmental declaration programme** (3.3)

NOTE A programme operator can be a company or a group of companies, industrial sector or trade association, public authorities or agencies, or an independent scientific body or other organization.

3.5
product category rules
PCR
set of specific rules, requirements and guidelines for developing **Type III environmental declarations** (3.2) for one or more **product categories** (3.12)

3.6
PCR review
process whereby a **third party** (3.10) panel verifies the **product category rules** (3.5)

3.7
competence
demonstrated personal attributes and demonstrated ability to apply knowledge and skills

[ISO 19011:2002]

3.8
verifier
person or body that carries out **verification** (3.9)

3.9
verification
confirmation, through the provision of objective evidence, that specified requirements have been fulfilled

[ISO 9000:2005]

3.10
third party
person or body that is recognized as being independent of the parties involved, as concerns the issues in question

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

[ISO 14024:1999]

3.11
product
any goods or service

[ISO 14024:1999]

3.12
product category
group of **products** (3.11) that can fulfil equivalent functions

3.13
information module
compilation of data to be used as a basis for a **Type III environmental declaration** (3.2), covering a unit process or a combination of unit processes that are part of the **life cycle** (3.20) of a **product** (3.11)

3.14
functional unit
quantified performance of a product system for use as a reference unit

[ISO 14040:2006]

3.15
interested party
person or body interested in or affected by the development and use of a **Type III environmental declaration** (3.2)

3.16
consumer
individual member of the general public purchasing or using goods, property or services for private purposes

(Reference [5], subclause 4.3)

3.17
environmental aspect
element of an organization's activities, products or services that can interact with the environment

[ISO 14040:2006]

3.18
environmental impact
any change to the environment, whether adverse or beneficial, wholly or partially resulting from an organization's **environmental aspects** (3.17)

[ISO 14001:2004]

3.19
comparative assertion
environmental claim regarding the superiority or equivalence of one product versus a competing **product** (3.11) that performs the same function

[ISO 14040:2006]

3.20
life cycle
consecutive and interlinked stages of a product system, from raw material acquisition or generation from natural resources to final disposal

[ISO 14040:2006]

4 Objectives

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

The objectives of Type III environmental declarations are as follows:

a) to provide LCA-based information and additional information on the environmental aspects of products;

b) to assist purchasers and users to make informed comparisons between products; these declarations are not comparative assertions;

c) to encourage improvement of environmental performance;

d) to provide information for assessing the environmental impacts of products over their life cycle.

5 Principles

5.1 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.

5.2 Voluntary nature

The development and operation of Type III environmental declaration programmes and the development and use of Type III environmental declarations are voluntary. This International Standard provides requirements for an organization choosing to develop and operate such a programme or to develop and use such declarations.

5.3 Life cycle basis

In the development of Type III environmental declarations, all relevant environmental aspects of the product throughout its life cycle shall be taken into consideration and become part of the declaration. If the aspects considered to be relevant do not cover all stages of the life cycle then this shall be stated and justified. The data shall be generated using the principles, framework, methodologies and practices established by the ISO 14040 series of standards (i.e. ISO 14040 and ISO 14044).

Relevant environmental aspects that have not been covered by LCA shall be addressed using other appropriate methods.

5.4 Modularity

LCA-based data for materials, parts and other inputs that are used in the manufacture or assembly of other products may be used to contribute to Type III environmental declarations for those other products. In such circumstances, the LCA-based data for the materials, parts and other inputs shall be referred to as information modules and may represent the whole or a portion of the life cycle for those materials or parts. Information modules may be used to develop a Type III environmental declaration or may be combined to develop a Type III environmental declaration for a product, provided that the information modules are adjusted in accordance with the PCR for the product category. If the information modules combined to develop a Type III environmental declaration for a product do not cover all stages of the life cycle of the product, then any omissions shall be stated and justified in the PCR document.

An information module may be, but does not have to be, a Type III environmental declaration.

5.5 Involvement of interested parties

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.

NOTE Taken from ISO 14020:2000, 4.9.1, Principle 8.

The interested parties for Type III environmental declaration programmes may include, but are not limited to, material suppliers, manufacturers, trade associations, purchasers, users, consumers, non-governmental organizations (NGOs), public agencies and, when relevant, independent parties and certification bodies.

“Open consultation” should take place and is strongly recommended, but this does not necessarily imply a public consultation. The programme operator shall be responsible for ensuring that appropriate consultations take place to ensure credibility and transparency in the operation of the programme. Competitors of the organization(s) developing the programme or the PCR may be included in the open consultation.

5.6 Comparability

Type III environmental declarations are intended to allow a purchaser or user to compare the environmental performance of products on a life cycle basis. Therefore comparability of Type III environmental declarations is critical. The information provided for this comparison shall be transparent in order to allow the purchaser or user to understand the limitations of comparability inherent in the Type III environmental declarations (see 6.7.2).

NOTE Type III environmental declarations not based on an LCA covering all life cycle stages, or based on different PCR, are examples of declarations that have limited comparability.

5.7 Verification

To ensure that a Type III environmental declaration contains relevant and verifiable LCA information based on the ISO 14040 series of standards, the programme operator shall establish transparent procedures for

— PCR review, including review of the LCA, LCI, information modules and additional environmental information on which the PCR are based (see 8.1.2),

— independent verification of the LCA, LCI, information modules and additional environmental information on which the declaration is based (see 8.1.3), and

— independent verification of the Type III environmental declaration (see 8.1.4).

5.8 Flexibility

For Type III environmental declarations to be successful in improving environmental understanding of products, it is important that these declarations maintain their technical credibility while providing flexibility, practicality and cost-effectiveness of application.

This International Standard allows

— a range of different types of bodies to operate a Type III environmental declaration programme (see 3.4 and Clause 6),

— use of relevant stages of the life cycle, provided necessary information is supplied (see 7.2.5), and

— provision of additional environmental information (see Figure 2 and 7.2.3).

5.9 Transparency

To ensure that a Type III environmental declaration can be understood and correctly interpreted by any person interested in the information, the programme operator shall ensure the availability of

— general programme instructions (see 6.4),

— a list of all published PCR documents within the programme,

— PCR documents, and

— explanatory material, as specified in this International Standard (see 7.2.1 and 9.2.3).

6 Programme requirements

6.1 General

Type III environmental declaration programmes are voluntary and have a set of rules guiding their overall administration and operation. These rules, managed by a programme operator, are referred to as general programme instructions.

An overview of Type III environmental declaration programme development and operation with references to relevant clauses of this International Standard can be found in Annex A.

6.2 Scope of the programme

The scope of the programme shall be clear and shall define whether the programme is limited, for example, to a certain geographical area or to certain industrial sectors, products or groups of products.

A programme should be accessible to all organizations interested in developing a PCR or Type III environmental declarations within the defined scope.

6.3 Responsibilities of the programme operator

The programme operator shall be responsible for the administration of a Type III environmental declaration programme.

This administration includes, but is not limited to, the following tasks:

a) preparing, maintaining and communicating general programme instructions;

b) publishing the names of the organizations actually involved as interested parties in the programme development (not individual names);

c) ensuring that the Type III environmental declaration requirements are followed (see Clause 7);

d) establishing a procedure to safeguard the consistency of data within a programme;

e) maintaining publicly available lists and records of PCR documents and Type III environmental declarations within the programme;

f) publishing PCR documents and Type III environmental declarations within the programme;

g) monitoring changes in procedures and documents of related Type III environmental declaration programmes and revising procedures and documents when necessary;

h) ensuring the selection of competent independent verifiers and PCR review panel members (see 8.2.3);

i) establishing a transparent procedure for the PCR review (see 8.1.2), including the scope of the review, details of the review and how the PCR review panel is constituted;

j) establishing procedures to avoid misuse of references to this International Standard, the Type III environmental declaration programme, its Type III environmental declarations and, where relevant, its logo.

6.4 General programme instructions

The programme operator shall prepare general programme instructions describing the operation of the programme including, but not limited to, the following information:

a) scope of programme;

b) objectives of the programme;

c) identification of programme operator;

d) intended audience of the programme, which may be business-to-business (B-to-B) or business-to-consumer (B-to-C), or both;

e) involvement of interested parties;

f) procedure for definition of product categories;

g) procedure for the management of the data and documentation used; such procedures may be based on ISO 14001:2004, 4.4.5, or ISO 14044:2006, Clause 5;

h) data confidentiality management;

i) procedure for development and maintenance of PCR, including

   — content of PCR,

   — rules for period of validity, which must include consideration of changes in relevant information affecting the PCR, and

   — selection procedure for predetermined parameters;

j) procedure for independent verification, including

   — competence of verifiers, and

   — competence of PCR review panel;

k) funding sources and other resources provided for programme development and operation;

l) periodic review of the programme instructions;

m) fees, if relevant.

The general programme instructions shall be available to any person on request.

6.5 Involvement of interested parties

The programme operator shall identify and invite interested parties to participate in the programme development by an open consultation process (see 5.5), and shall ensure that the role of interested parties in the process is made clear and open to enable their participation.

This consultation process shall specifically cover

— the development of PCR, and

— the set of rules that describes the general methodological and procedural aspects of how to produce and verify a Type III environmental declaration.

Reasonable efforts should be made and resources and time should be made available to achieve this.

Interested parties shall be given adequate time for review and access to details and sources of information used. The consultation process shall also ensure that interested parties who comment on the general programme instructions or the PCR receive consideration of, and response to, their comments within a reasonable time.

The consultation process for the participation of interested parties may include the use of selected groups of interested parties' representatives, for instance through consultation boards, advisory committees or public hearings.

6.6 Procedure for definition of product categories

Within the established consultation process, the programme operator shall ensure that product categories are defined using a transparent procedure. When products have similar functions and applications, the basis for assigning a group of products to a product category shall be that the same functional unit can be applied.

6.7 Procedure for the development of PCR

6.7.1 Developing the contents of a PCR document

Programme operators should facilitate harmonization when developing PCR for a product category by considering the adoption of readily available PCR documents in the same product category and in the appropriate market area. However, there may be valid reasons for developing PCR documents that have a different content from those that are already existing. The justification for differing from existing PCR shall be based on the content of existing PCR documents; and shall not, for example, be based on the origin of any particular PCR.

The efforts undertaken to achieve harmonization, the outcome and the explanations for not using readily available PCR shall be reported in the PCR document.

The PCR shall identify and document the goal and scope of the LCA-based information for the product category and the rules for producing the additional environmental information for the product category. The PCR shall also determine the life cycle stages to be included, the parameters to be covered, and the way in which the parameters shall be collated and reported.

For the sake of completeness and consistency, the PCR shall be based on one or more life cycle assessments (in accordance with the ISO 14040 series of standards) and other relevant studies to identify requirements for additional environmental information. These life cycle assessments and other relevant studies shall be referenced in the PCR document.

The steps shown in Figure 1 are recommended for the preparation of a PCR document.

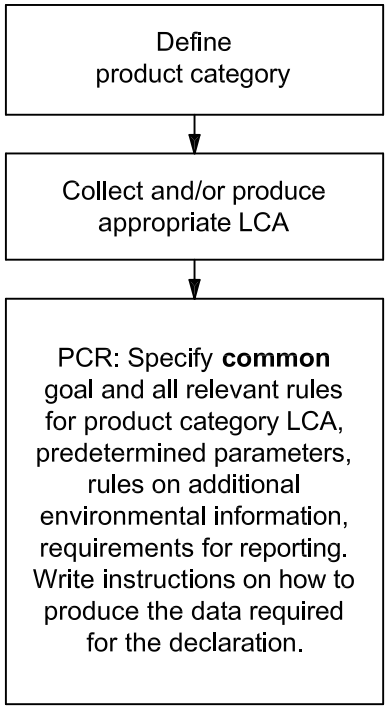


Figure 1 — Steps in preparation of a PCR document

The programme operator shall produce the PCR document using the established consultation process, including the involvement of interested parties. The PCR document shall include the following:

a) product category definition and description (e.g. function, technical performance and use);

b) goal and scope definition for the LCA of the product, according to the ISO 14040 series, including

- functional unit,
- system boundary,
- description of data,
- criteria for the inclusion of inputs and outputs,
- data quality requirements including coverage, precision, completeness, representativeness, consistency, reproducibility, sources and uncertainty, and
- units;

c) inventory analysis, including

- data collection,
- calculation procedures, and
- allocation of material and energy flows and releases;

d) impact category selection and calculation rules, if applied;

e) predetermined parameters for reporting of LCA data (inventory data categories and impact category indicators) (see Note below);

f) requirements for provision of additional environmental information, including any methodological requirements (e.g. specifications for hazard and risk assessment); see 7.2.3 for information;

g) materials and substances to be declared (e.g. information about product content, including specification of materials and substances that can adversely affect human health and/or the environment, in all stages of the life cycle);

h) instructions for producing the data required to develop the declaration (LCA, LCI, information modules and additional environmental information);

i) instructions on the content and format of the Type III environmental declaration (see 7.2);

j) information on which stages are not considered, if the declaration is not based on an LCA covering all life cycle stages;

k) period of validity.

NOTE Predetermined parameters are the parameters on which environmental information about a product is to be supplied as identified in the PCR.

6.7.2 Requirements for comparability

Comparability of different Type III environmental declarations shall be deemed to have been achieved when the following conditions are met.

a) The product category definition and description (e.g. function, technical performance and use) are identical.

b) The goal and scope definition for the LCA of the product, according to the ISO 14040 series, has the following characteristics:

   — the functional unit is identical;

   — the system boundary is equivalent;

   — the description of data is equivalent;

   — the criteria for the inclusion of inputs and outputs are identical;

   — the data quality requirements including coverage, precision, completeness, representativeness, consistency, reproducibility, sources and uncertainty are equivalent;

   — the units are identical.

c) For the inventory analysis,

   — the methods of data collection are equivalent,

   — the calculation procedures are identical, and

   — the allocation of material and energy flows and releases is equivalent.

d) Impact category selection and calculation rules, if applied, are identical.

e) Predetermined parameters for reporting of LCA data (inventory data categories and impact category indicators) are identical.

f) Requirements for provision of additional environmental information, including any methodological requirements (e.g. specifications for hazard and risk assessment) are equivalent.

g) Materials and substances to be declared (e.g. information about product content, including specification of materials and substances that can adversely affect human health and/or the environment, in all stages of the life cycle) are equivalent.

h) Instructions for producing the data required to create the declaration (LCA, LCI, information modules and additional environmental information) are equivalent.

i) Instructions on the content and format of the Type III environmental declaration are equivalent.

j) If the declaration is not based on an LCA covering all life cycle stages, information on which stages are not considered is equivalent.

k) Period of validity is equivalent.

In order to compare Type III environmental declarations based on information modules, either the environmental impacts of omitted life cycle stages of the products shall not be significant, or the data of omitted life cycle stages shall be identical within the accepted uncertainty of the data.

6.8 Procedure for the application of LCA methodology

6.8.1 Disseminating information about the general LCA methodology

To facilitate comparability between declarations, the programme operator shall ensure information is made available about the general methodological aspects of Type III environmental declarations. These methodological aspects may include the choice of calculation methods and system boundary and different demands for data quality.

6.8.2 Application of LCA methodology

The quantified environmental information in a Type III environmental declaration shall be based on

— results from one or more life cycle assessments in accordance with the ISO 14040 series of standards, or

— information modules (see 3.13), if used.

This subclause describes two methodological options for Type III environmental declarations and programmes. Figure 2 shows the different options. The common element is that each option is based on life cycle inventory analysis (LCI) in accordance with the ISO 14040 series.

The following parameters resulting from LCA or from information modules may be considered as predetermined parameters:

— a set of impact category indicator results (only option A);

— a set of inventory results that are elementary flows (e.g. iron ore, CO_2);

— a set of data that do not represent elementary flows (e.g. waste).

The methodologies for the development of Type III environmental declarations shall follow one of the following paths, as shown in Figure 2:

a) option A: LCA study, including the phases: goal and scope definition; inventory analysis (LCI); impact assessment (LCIA); interpretation;

b) option B: LCA study, including the phases: goal and scope definition; inventory analysis (LCI); interpretation.

Results from other environmental analysis tools shall be used where relevant (see Figure 2). This additional environmental information is intended to ensure that all relevant environmental aspects of the product are covered in the Type III environmental declaration. It may or may not be derived from an LCA. It may relate to other issues associated with the product's overall environmental performance. These may include, for example, relevant environmental aspects related to sustainable development (see 7.2.3).

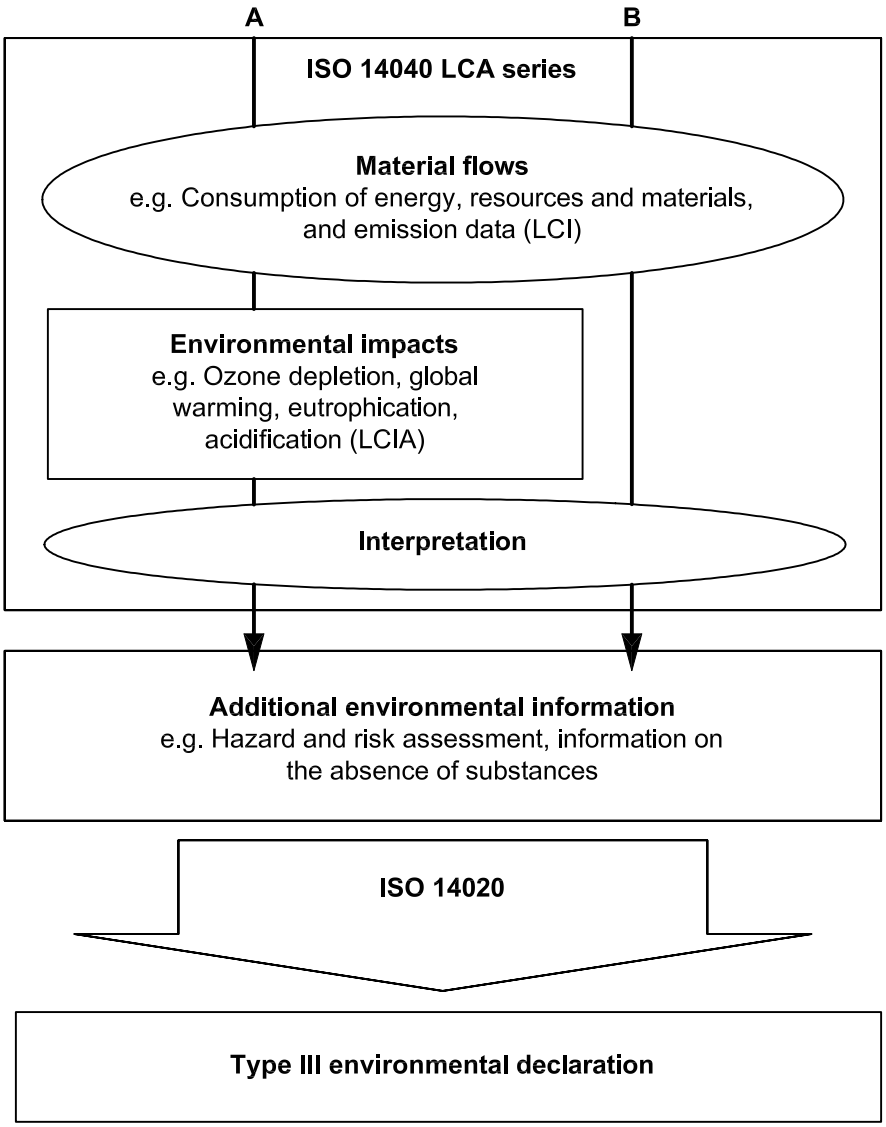


Figure 2 — Two different methodological options for Type III environmental declarations and programmes

7 Declaration requirements

7.1 General

Type III environmental declarations are intended to facilitate comparison of the environmental attributes of products that meet equivalent functional requirements. Quantitative data shall be reported in appropriate and consistent units of measurement as prescribed by PCR. Qualitative data, where provided, shall be comparable. The same methods or systems should be used to produce the qualitative information, and these methods and systems shall be identified. Details of the PCR shall be available upon request to the purchaser or user of the product.

7.2 Declaration content

7.2.1 General

All Type III environmental declarations in a product category shall follow the format and include the parameters as identified in the PCR provided by the programme operator.

The following information shall be included in any Type III environmental declaration according to the PCR:

a) identification and description of the organization making the declaration;

b) description of product;

c) product identification (e.g. model number);

d) name of the programme and the programme operator's address and, if relevant, logo and website;

e) PCR identification;

f) date of publication and period of validity;

g) data from LCA, LCI or information modules (see 7.2.2);

h) additional environmental information (see 7.2.3);

i) content declaration covering materials and substances to be declared (e.g. information about product content, including specification of materials and substances that can adversely affect human health and the environment, in all stages of the life cycle);

j) information on which stages are not considered, if the declaration is not based on an LCA covering all life cycle stages;

k) statement that environmental declarations from different programmes may not be comparable;

l) information on where explanatory material may be obtained.

With appropriate justification, requirement i) does not apply to proprietary information relating to materials and substances covered by intellectual property rights or similar legal restrictions. It may also not be appropriate for declarations concerning intangible products.

In addition to that listed in a) to l), the information in Figure 3 (except for the notes) shall be clearly provided in the Type III environmental declaration.

PCR[a] review[b], was conducted by: <name and organization of the chair, and information on how to contact the chair through the programme operator>
Independent verification of the declaration and data, according to ISO 14025:2006 ☐ internal ☐ external
(Where appropriate[c]) Third party verifier: <name of the third party verifier>

[a] Product category rules are in accordance with 6.7.1.

[b] PCR review is in accordance with 8.1.2.

[c] Optional for business-to-business communication; mandatory for business-to-consumer communication (see 9.4).

Figure 3 — Demonstration of verification

7.2.2 Data from LCA, LCI or information modules

A Type III environmental declaration shall, according to the selected option (see Figure 2), include the relevant data from LCA-studies, LCI-studies and/or information modules. These may include, but are not limited to, the following categories derived from the life cycle stages or additional environmental information. These data shall be clearly separated in the following three categories:

a) data from life cycle inventory analysis (LCI), according to the PCR, including

   — consumption of resources, including energy, water and renewable resources, and

   — emissions to air, water and soil;

b) indicator results of life cycle impact assessment (LCIA), if applied, including

   — climate change,

   — depletion of the stratospheric ozone layer,

   — acidification of land and water sources,

   — eutrophication,

   — formation of photochemical oxidants,

   — depletion of fossil energy resources, and

   — depletion of mineral resources;

c) other data such as quantities and types of waste produced (hazardous and non-hazardous waste).

The declaration shall be presented in a manner that clearly indicates whether the declaration applies to the product, or only to a part of a product or packaging, or to an element of a service.

7.2.3 Additional environmental information

A Type III environmental declaration shall include, where relevant, additional information related to environmental issues, other than the environmental information derived from LCA, LCI or information modules [see 6.7.1 f)]. This information shall be separated from the information described in 7.2.2. Identification of the significant environmental aspects should, as a minimum, take into consideration the following:

a) information on environmental issues, such as

   1) impact(s) and potential impact(s) on biodiversity,

   2) toxicity related to human health and/or the environment, and

   3) geographical aspects relating to any stages of the life cycle (e.g. a discussion on the relation between the potential environmental impact(s) and the location of the product system);

b) data on product performance, if environmentally significant;

c) the organization's adherence to any environmental management system, with a statement on where an interested party may find details of the system;

d) any other environmental certification programme applied to the product and a statement on where an interested party may find details of the certification programme;

e) other environmental activities of the organization, such as participation in recycling or recovery programmes, provided details of these programmes are readily available to the purchaser or user and contact information is provided;

f) information that is derived from LCA but not communicated in the typical LCI or LCIA based formats;

g) instructions and limits for efficient use;

h) hazard and risk assessment on human health and the environment;

i) information on absence or level of presence of a material in the product that is considered of environmental significance in certain areas [see ISO 14021:1999, 5.4 and 5.7 r)];

j) preferred waste management option for used products;

k) potential for incidents that can have impact(s) on the environment.

Additional environmental information shall only be related to environmental issues. Information and instructions on product safety unrelated to the environmental performance of the product shall not be part of a Type III environmental declaration.

7.2.4 Requirements for additional environmental information

All additional environmental information shall be presented in a manner that clearly indicates that it is not part of the LCA-, LCI- and information module-based data.

Additional environmental information shall

a) be based on information that is substantiated and verified, in accordance with the requirements of ISO 14020 and Clause 5 of ISO 14021:1999,

b) be specific, accurate and not misleading,

c) be relevant to the particular product,

d) be unlikely to result in misinterpretation, particularly through the omission of certain facts,

e) only relate to an environmental aspect that either exists, is likely to be realised during the life cycle of the product or is related to the life cycle of the product,

f) not make a comparative assertion, but shall be comparable within the product category,

g) only state the absence of a substance as "… free" when the level of the specified substance is no more than that which would be found as an acknowledged trace contaminant or background level,

h) not refer to the absence of substances or features that are not or have never been associated with the product category, and

i) if using symbols, follow the requirements outlined in ISO 14021:1999, 5.8 and 5.9.

7.2.5 Type III environmental declarations based on information modules

Type III environmental declarations for one or more life cycle stages may be prepared using information modules.

Information modules may be combined to obtain an LCA covering all life cycle stages on which to base a Type III environmental declaration for a product under the following conditions:

— the information modules for all stages of the life cycle and for all parts of the product are combined (see Annex B);

— all requirements of ISO 14040 series are fulfilled (see 6.8.2);

— the PCR of the product category are satisfied (see 6.7.1).

Component and material suppliers should provide information, when available, about use and the end-of-life stages.

If the information modules combined in a Type III environmental declaration do not cover the life cycle of the product, then the omissions shall be stated.

If relevant aspects and impacts of the life cycle are not included in the information modules, the Type III environmental declaration shall be supported with relevant additional environmental information and the omissions shall be justified.

Annex B provides a simple example of how information modules and Type III environmental declarations based on information modules can be combined to develop a Type III environmental declaration based on an LCA covering all life cycle stages.

7.3 Updating the declaration

An organization may need to correct or amend information included in the Type III environmental declaration. Type III environmental declarations shall be reassessed and updated as necessary to reflect changes in technology or other circumstances that could alter the content and accuracy of the declaration. When updating a Type III environmental declaration, the same requirements shall be fulfilled as in the development of the original declaration; i.e. verification of the changes in the LCA-based data, additional environmental information and the declaration.

The organization making the Type III environmental declaration is responsible for notifying the programme operator of the requested changes in the Type III environmental declaration and supplying the programme operator with a document from the verifier confirming conformance with relevant requirements. The programme operator shall publish the updated declaration.

8 Verification

8.1 Procedure for review and independent verification

8.1.1 General verification issues

In developing a Type III environmental declaration programme, the rules for verification shall be set up in accordance with this International Standard and with ISO 14020 and the ISO 14040 series.

The programme operator shall establish the appropriate verification procedure (see 6.4) to ensure the declaration complies with all general programme instructions. This procedure shall include the verification format and documentation as well as adequate access to verification rules and results.

Although the data shall be independently verified either internally or externally, this could but does not necessarily mean third-party verification. Consequently, the use of third-party verification as a final step is a decision for the programme operator.

Specific requirements for verification (see 9.4) apply when using Type III environmental declarations for business-to-consumer communication.

8.1.2 PCR review

The PCR review shall be conducted by a third-party panel, which shall have as a minimum a chair and two members. The PCR document shall include the results of the PCR review as well as comments and recommendations made by the panel members.

The PCR review shall demonstrate that

— the PCR have been developed in accordance with the ISO 14040 series of standards and, specifically, in accordance with 6.7.1 of this International Standard,

— the PCR fulfil the general programme instructions, and

— the LCA-based data, together with the additional environmental information prescribed by the PCR, give a description of the significant environmental aspects of the product.

The programme operator may define additional tasks for the PCR review panel.

8.1.3 Independent verification of data

Independent verification of data from LCA, LCI and information modules, and of additional environmental information shall as a minimum confirm the following:

a) conformance with the PCR;

b) conformance with the ISO 14040 series of standards;

c) conformance with general programme instructions for the Type III environmental declaration;

d) that data evaluation includes coverage, precision, completeness, representativeness, consistency, reproducibility, sources and uncertainty;

e) the plausibility, quality and accuracy of the LCA-based data;

f) the quality and accuracy of additional environmental information;

g) the quality and accuracy of the supporting information.

The programme operator may define additional tasks for the independent verifier.

8.1.4 Independent verification of the Type III environmental declaration

The independent verification procedure shall as a minimum be appropriate to determine whether the Type III environmental declaration is in conformance with

— ISO 14020 and the relevant requirements of this International Standard,

— general programme instructions (see 6.4), and

— current and relevant PCR.

The verification procedure shall be transparent. The independent verifier shall generate a report documenting the verification process, while adhering to the obligations of 8.3 covering rules for data confidentiality. This report shall be available to any person upon request.

The verification procedure shall confirm whether the information given in the Type III environmental declaration accurately reflects the information in the documents on which the declaration is based. The verification procedure shall also confirm whether this information is valid and scientifically sound.

The PCR review and the independent verification of the Type III environmental declaration are two separate processes. The independent verification of the Type III environmental declaration may be carried out by the PCR review panel, or may be carried out by an independent verifier who may or may not have been a member of the PCR review panel.

8.2 Independence and competencies of verifiers and PCR review panel

8.2.1 Independence of verifiers

Independent verifiers, whether internal or external to the organization, shall not have been involved in the execution of the LCA or the development of the declaration, and shall not have conflicts of interests resulting from their position in the organization.

8.2.2 Competence of verifiers

The programme operator shall establish minimum requirements for the competence of verifiers, including

— knowledge of relevant sector, product and product-related environmental aspects,

— process and product knowledge of the product category,

— expertise in LCA and methodology for LCA work,

— knowledge of relevant standards in the fields of environmental labelling and declarations and LCA,

— knowledge of the regulatory framework within which requirements for Type III environmental declarations have been prepared, and

— knowledge of the Type III environmental declarations programme.

8.2.3 Competence of PCR review panel

The programme operator shall establish minimum requirements for competence of the PCR review panel. The combined competencies of the PCR review panel should include

— general background knowledge of the relevant sector, product and product-related environmental aspects,

— expertise in LCA and methodology for LCA work,

— awareness of relevant standards in the fields of environmental labelling and declarations and LCA,

— knowledge of the regulatory framework within the scope of the PCR, and

— knowledge of the programme for Type III environmental declarations.

In addition, the programme operator shall ensure a reasonable mix of interested party perspectives and competencies.

8.3 Rules for data confidentiality

Product-specific data are often confidential because of

— competitive business requirements,

— proprietary information covered by intellectual property rights, or

— similar legal restrictions.

Such confidential data are not required to be made public. The declaration typically only provides data aggregated over all or relevant stages of the life cycle. Business data identified as confidential that is provided for the independent verification process shall be kept confidential, in accordance with general programme instructions (see 6.4).

If the programme operator determines, based on the verification report, that the data supporting the Type III environmental declaration are inadequate, the declaration shall not be published.

9 Additional requirements for developing Type III environmental declarations for business-to-consumer communication

9.1 General

The programme operator shall consider the potential audience for any Type III environmental declarations under development. Although it is anticipated that most Type III environmental declarations will be developed for use in business-to-business communication, there may be declarations intended and/or used to provide this type of detailed, quantitative data in business-to-consumer communication.

The requirements of 9.2 to 9.4 shall apply in addition to those of the other clauses when Type III environmental declarations are intended for, or likely to be used by, consumers. The requirements of 9.2 to 9.4 shall also apply when the potential audience for the Type III environmental declaration can be considered to be a consumer as defined in 3.16.

9.2 Provision of information

9.2.1 Content of declaration

Type III environmental declarations are complex and require considerable documentation. No part of the required content of the declaration required by the PCR shall be omitted or simplified for business-to-consumer communication.

Type III environmental declarations shall be based on the life cycle of the product, unless

— information on specific stages (e.g. the use and end-of-life stages of the product) is not available and reasonable scenarios cannot be modelled, or

— these stages may reasonably be expected to be environmentally insignificant.

Only under these circumstances can the specific stages be excluded. A statement on omissions shall be included in the Type III environmental declaration.

Where reasonable scenarios for the specific stages can be modelled, those stages shall not be excluded. Assumptions made to create the scenarios should be clearly stated in the PCR.

9.2.2 Availability of declaration

Type III environmental declarations intended for business-to-consumer communication shall be available to the consumer at the point of purchase.

9.2.3 Explanatory material

When Type III environmental declarations are used for business-to-consumer communication, the organization making the declaration shall provide, upon request and at a reasonable cost, extra explanatory material to facilitate consumer understanding of the data in the declaration. The organization making the declaration shall publish information allowing a consumer to contact the organization from any area in which the product is sold. Suitable means of contacting the organization may include telephone or other electronic access. Means of obtaining the explanatory material shall be clearly stated in the declaration.

9.3 Involvement of interested parties

In addition to the requirements of 5.5, the interested parties involved in the development of a Type III environmental declaration or programme for use in business-to-consumer communication shall include representatives of both consumer interests and environmental interests. These representatives may be selected by local, national or regional groups, bodies or organizations.

The programme operator shall be responsible for facilitating this participation.

9.4 Verification

Verification required in this International Standard shall, in the case of Type III environmental declarations used for business-to-consumer communication, be carried out by a third party (see competence for verifiers in 8.2).

When the intended audience for the Type III environmental declaration is a consumer, as defined in 3.16, the declaration shall clearly state that the verification was performed by a competent third party.

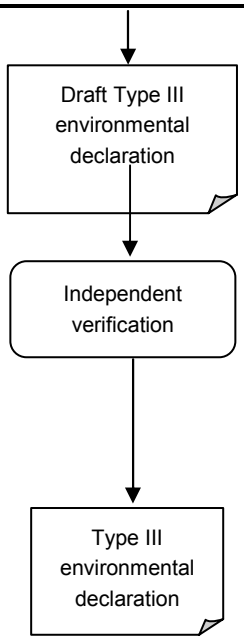
Annex A
(informative)

Type III environmental declaration programme development and operation scheme

Table A.1 — Type III environmental declaration programme development and operation scheme

Body			Flow (steps and results)	Activities/procedure		Subclause
Organizations	Programme operator	Others		Main	Sub	
	Programme operator [e.g. company(ies), industry sector, trade association or independent body]		Programme development	Programme establishment		6.1
	Programme operator	Interested parties	General programme instructions	Development of the programme (including open consultation) *Not necessary if programme already exists*		6.2, 6.3, 6.4, 6.5, 8.3
Organizations	Programme operator	Interested parties	Product category rules (PCR) development	Development of the PCR document (including open consultation) *Not necessary if PCR already exist*		6.5, 6.7, 8.3
Organizations	Programme operator	Interested parties			Definition of product category	6.6
Organizations		Interested parties			Collection or creation of product category LCA-based information	6.7.1, 6.7.2, 6.8
Organizations	Programme operator	Interested parties	PCR		Development of the PCR document	6.7.1, 6.7.2
		PCR review panel: independent competent panel members			PCR review	8.1.2

Table A.1 (*continued*)

Body			Flow (steps and results)	Activities/procedure		Subclause
Organizations	**Programme operator**	**Others**		**Main**	**Sub**	
Organizations				Drafting of declaration		7.1, 7.2.1, 7.2.2, 7.2.3
		Independent verifier		Independent verification		8.1.1, 8.2, 8.3
		Independent verifier			Verification of LCA data	8.1.3, 8.3
		Independent verifier			Independent verification of the declaration	8.1.4, 8.3
		Third party			Third-party verification *Not mandatory, except for B to C (see Clause 9)*	8.1.1, 9.4
Organizations	Programme operator			Recording and publication of the declaration		6.3
Organizations		Addressed audience		Communication and use of the declaration		Communication is not covered by the scope of this International Standard
Organizations	Programme operator	Independent verifier		Updating of the declaration		7.3

Annex B
(informative)

Example illustrating the development of a Type III environmental declaration from information modules contained in Type III environmental declarations of parts of products

B.1 The product for which this example of a Type III environmental declaration is made is a refillable glass bottle for beverages consisting of the following three parts:

a) glass body;

b) aluminium cap;

c) printed paper label.

B.2 For the glass body, three different information modules are submitted, as follows:

a) an information module of the material production and the production of the glass body;

b) an information module of the transport, cleaning and refilling of the glass body, which is assigned to the use stage;

c) an information module of the collection and recycling of the glass body, after a certain number of uses.

For the aluminium cap, a Type III environmental declaration is submitted which covers the material production, the production of the cap, the recycling and the transport operations. The Type III environmental declaration does not include any data from the use stage of the cap.

For the paper label, two different information modules are submitted:

— an information module which covers the material production, paper production and printing operations;

— an information module of waste disposal by incineration.

No specific information module exists for the transport and use of the paper label.

As shown in Figure B.1, the information modules of the three different life cycle stages of the glass body can be combined to a Type III environmental declaration which covers all the stages of the life cycle.

By combining the information modules and the information from the Type III environmental declarations of the glass body, the aluminium cap and the paper label, a Type III environmental declaration of the refillable glass bottle can be made. However, the adjustment should consider the transport of the aluminium cap and the paper label from the filler to the user. It also has to consider the fact that during the life of the glass bottle, a specific number of aluminium caps and paper labels are used, which is given by the average number or trips of the refillable bottle.

NOTE 1 Information modules may be but do not have to be a Type III environmental declaration. However, it is understood that any box labelled as a “Type III environmental declaration” must have an associated PCR.

NOTE 2 Manufacturers have the choice whether to compile information modules into Type III environmental declarations or into information modules. In this example, the glass body manufacturer has chosen to make a Type III environmental declaration, whilst the paper label manufacturer has compiled the data to make an information module.

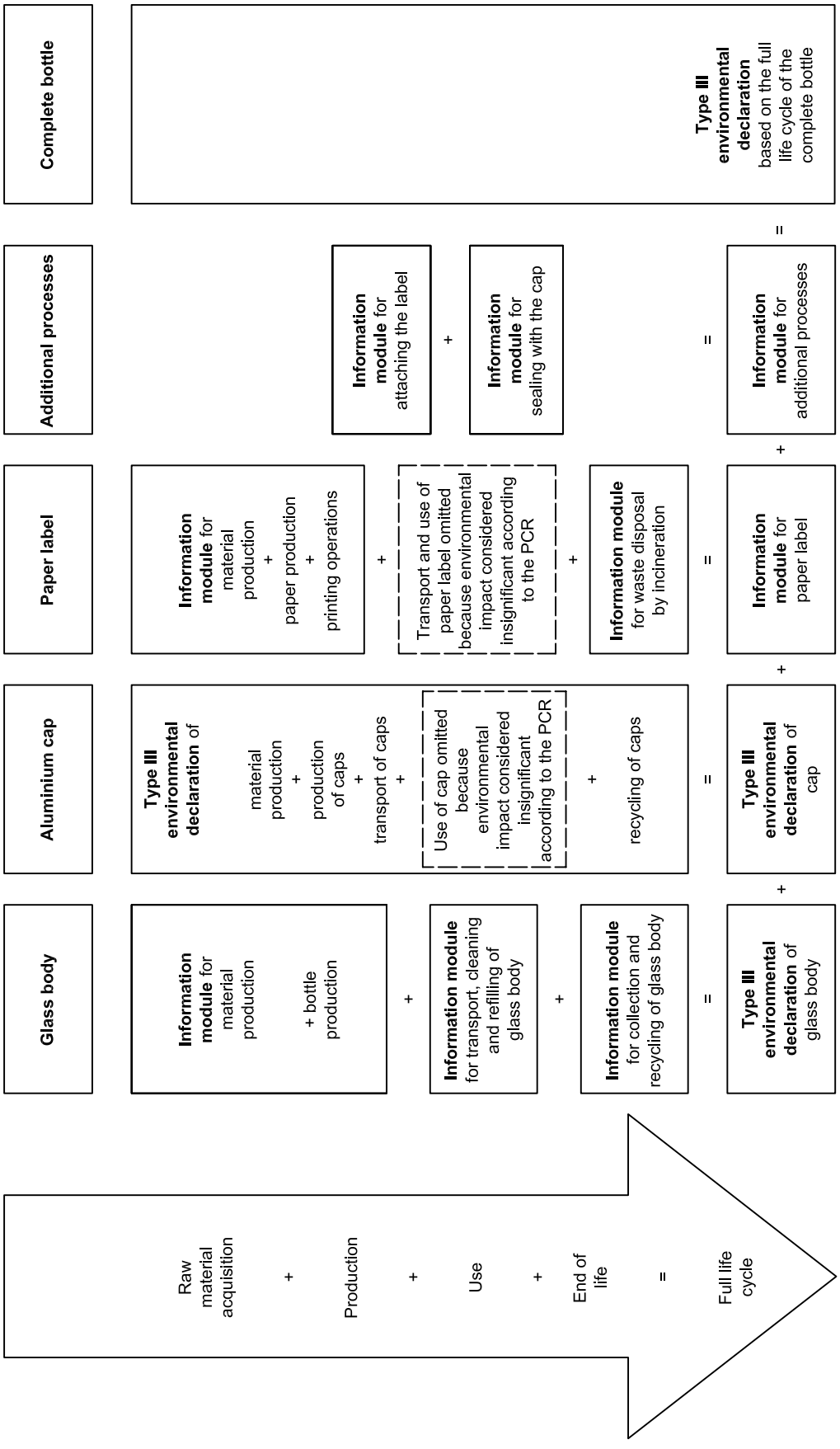


Figure B.1 — Diagrammatic simplified representation of the development of a Type III environmental declaration from information modules

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