INTERNATIONAL STANDARD

ISO 14050

Fourth edition
2020-07

Environmental management — Vocabulary

Management environnemental — Vocabulaire

Reference number
ISO 14050:2020(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword ..... **iv**
Introduction ..... **v**
1 Scope **1**
2 Normative references **1**
3 Terms and definitions **1**
3.1 General terms relating to management systems 1
3.2 General terms relating to environmental management 3
3.3 Terms relating to environmental management systems 6
3.4 Terms relating to verification, validation and audit 6
3.5 Terms relating to product systems 10
3.6 Terms relating to life cycle assessment 12
3.7 Terms relating to environmental labelling, declarations and communication 17
3.8 Terms relating to climate change and climate action 19
3.9 Terms relating to greenhouse gases 21
3.10 Terms relating to water footprint 25
3.11 Terms relating to carbon footprint 27
3.12 Terms relating to economy and finance 27
Annex A (informative) **Concept relations and concept systems** **32**
Bibliography **55**
Alphabetical index **57**

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 207, *Environmental management*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/SS S26, *Environmental management*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This fourth edition cancels and replaces the third edition (ISO 14050:2009), which has been technically revised. The fourth edition is structured differently from the third edition. It presents a more generic vocabulary of environmental management terminology.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

Communication is important in the implementation and operation of environmental management systems. This communication will be most effective if there is a common understanding of the terms used.

To simplify the harmonization of terms and definitions in the field of environmental management, each terminological entry in this document contains a generic term and its definition. Notes to entry and examples have been included only in a few cases to provide additional information or clarification.

The terminology is arranged in subclauses, each representing a specific sub-domain. The sequence of the term entries corresponds to the concept diagrams in Annex A.

This document has been developed in close cooperation with the committees and working groups involved in the development and revision of the ISO 14000 family of standards. A list of published documents in the ISO 14000 family of standards is presented in the Bibliography.

Environmental management — Vocabulary

1 Scope

This document defines terms used in documents in the fields of environmental management systems and tools in support of sustainable development. These include management systems, auditing and other types of assessment, communications, footprinting studies, greenhouse gas mitigation and adaptation to climate change.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1 General terms relating to management systems

3.1.1
organization
person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its *objectives* (3.1.6)

3.1.2
interested party
stakeholder
person or *organization* (3.1.1) that can affect, be affected by, or perceive itself to be affected by a decision or activity

3.1.3
top management
person or group of people who directs and controls an *organization* (3.1.1) at the highest level

3.1.4
management system
set of interrelated or interacting elements of an *organization* (3.1.1) to establish *policies* (3.1.5) and *objectives* (3.1.6), as well as *processes* (3.1.9) to achieve those objectives

3.1.5
policy
intentions and direction of an *organization* (3.1.1), as formally expressed by its *top management* (3.1.3)

3.1.6
objective
result to be achieved

3.1.7
risk
effect of uncertainty

3.1.8
hazard
potential source of injury or damage to the health of people, or damage to property or the *environment* (3.2.2)

3.1.9
process
set of interrelated or interacting activities that uses or transforms inputs to deliver a result

3.1.10
competence
ability to apply knowledge and skills to achieve intended results

3.1.11
documented information
information required to be controlled and maintained by an *organization* (3.1.1) and the medium on which it is contained

3.1.12
performance
measurable result

3.1.13
continual improvement
recurring activity to enhance *performance* (3.1.12)

3.1.14
effectiveness
extent to which planned activities are realized and planned results achieved

3.1.15
requirement
need or expectation that is stated, generally implied or obligatory

3.1.16
conformity
fulfilment of a *requirement* (3.1.15)

3.1.17
nonconformity
non-fulfilment of a *requirement* (3.1.15)

3.1.18
corrective action
action to eliminate the cause(s) of a *nonconformity* (3.1.17) and to prevent recurrence

3.1.19
audit
systematic and independent *process* (3.1.9) for obtaining evidence and evaluating it objectively to determine the extent to which the *audit criteria* (3.4.44) are fulfilled

3.1.20
measurement
process (3.1.9) to determine a value

3.1.21
monitoring
determining the status of a system, a *process* (3.1.9) or an activity

3.2 General terms relating to environmental management

3.2.1
environmental management
set of coordinated activities within an *organization* (3.1.1) related to its *environmental aspects* (3.2.20)

3.2.2
environment
surroundings in which an *organization* (3.1.1) operates, including air, water, *land* (3.8.16), *natural resources* (3.2.5), flora, fauna, humans and their interrelationships

3.2.3
ecosystem
dynamic complex of communities of plants, animals and microorganisms and their non-living environment, interacting as a functional entity

3.2.4
ecosystem service
benefit people obtain from one or several *ecosystems* (3.2.3)

3.2.5
natural resource
part of nature that provides benefits to humans or underpins human well-being

3.2.6
environmental baseline
state of the *environment* (3.2.2) without the change that is considered

3.2.7
target group
interested party (3.1.2) or interested parties selected as the focus of an *organization's* (3.1.1) *environmental communication* (3.7.19) activity

3.2.8
third party
person or body that is recognized as being independent of the parties involved, as concerns the issues in question

3.2.9
sustainable development
development that meets the needs of the present without compromising the ability of future generations to meet their own needs

3.2.10
prevention of pollution
use of *processes* (3.1.9), practices, techniques, materials, *products* (3.5.12), or energy to avoid, reduce or control (separately or in combination) the creation, emission or discharge of any type of pollutant or waste, in order to reduce adverse *environmental impacts* (3.2.22)

3.2.11
area of concern
aspect of the natural environment, human health or resources of interest to society

3.2.12
environmental topic area
area of interest or concern for *environmental management* (3.2.1) in an *organization* (3.1.1) in relation to its surroundings

3.2.13
methodology
set of means or *procedures* (3.3.6) used for a specific purpose

3.2.14
transparency
open, comprehensive and understandable presentation of information

3.2.15
benchmark
reference point against which comparisons can be made

3.2.16
equity share
extent of the rights an *organization* (3.1.1) has to the *risks* (3.1.7) and rewards from an operation based on its equity interest

3.2.17
local authority
public body given the authority by legislation or directives of a higher level of government to set general *policies* (3.1.5), plans or *requirements* (3.1.15)

3.2.18
site
location with geographical boundaries and on which activities under the control of an *organization* (3.1.1) can be carried out

3.2.19
facility
single installation, set of installations or production *processes* (3.1.9) (stationary or mobile), which can be defined within a single geographical boundary, organizational unit or production process

3.2.20
environmental aspect
element of an *organization's* (3.1.1) activities or *products* (3.5.12) that interacts or can interact with the *environment* (3.2.2)

3.2.21
environmental impact pathway
series of consecutive, causal relationships, ultimately starting at an *environmental aspect* (3.2.20) and ending at an *environmental impact* (3.2.22)

3.2.22
environmental impact
change to the *environment* (3.2.2), whether adverse or beneficial, including possible consequences, wholly or partially resulting from an *organization's* (3.1.1) *environmental aspects* (3.2.20)

3.2.23
environmental impact factor
quantity of *environmental impact* (3.2.22) per quantity of *environmental aspect* (3.2.20)

3.2.24
indicator
quantitative, qualitative or binary variable that can be measured, calculated or described, representing the status of operations, management, conditions or impacts

3.2.25
key performance indicator
KPI
indicator (3.2.24) of *performance* (3.1.12) deemed by an *organization* (3.1.1) to be significant and giving prominence and attention to certain aspects of operations, management, conditions or impacts

3.2.26
combined indicator
indicator (3.2.24) that includes information on more than one aspect of operations, management, conditions or impacts

3.2.27
environmental performance
performance (3.1.12) related to the management of *environmental aspects* (3.2.20)

3.2.28
environmental performance evaluation
EPE
process (3.1.9) to facilitate management decisions regarding an *organization's* (3.1.1) *environmental performance* (3.2.27) by selecting *indicators* (3.2.24), collecting and analysing data, assessing information against environmental performance criteria, reporting and communicating, and periodically reviewing and improving this process

3.2.29
environmental performance indicator
EPI
indicator (3.2.24) that provides information about an *organization's* (3.1.1) *environmental performance* (3.2.27)

3.2.30
management performance indicator
MPI
environmental performance indicator (3.2.29) that provides information about the management efforts to influence an *organization's* (3.1.1) *environmental performance* (3.2.27)

3.2.31
operational performance indicator
OPI
environmental performance indicator (3.2.29) that provides information about the *environmental performance* (3.2.27) of an *organization's* (3.1.1) operation

3.2.32
environmental condition indicator
indicator (3.2.24) that provides information about the local, regional, national or global *environmental condition* (3.2.33)

3.2.33
environmental condition
state or characteristic of the *environment* (3.2.2) as determined at a certain point in time

3.2.34
sphere of influence
range or extent of political, contractual, economic or other relationships through which an *organization* (3.1.1) has the ability to affect the decisions or activities of individuals or organizations

3.2.35
trade-off
decision-making actions that select from various *requirements* (3.1.15) and alternative solutions on the basis of net benefit to *interested parties* (3.1.2)

3.3 Terms relating to environmental management systems

3.3.1
environmental management system
EMS
part of the *management system* (3.1.4) used to manage *environmental aspects* (3.2.20), fulfil *compliance obligations* (3.3.4), and address *risks* (3.1.7) and opportunities

3.3.2
environmental policy
policy (3.1.5) related to *environmental performance* (3.2.27)

3.3.3
environmental objective
objective (3.1.6) set by the *organization* (3.1.1) and consistent with its *environmental policy* (3.3.2)

3.3.4
compliance obligation
legal requirement that an *organization* (3.1.1) has to comply with or other *requirement* (3.1.15) that an organization has to or chooses to comply with

3.3.5
maturity level
level of achievement in the implementation process measured on a scale of maturity for *environmental management system* (3.3.1) elements

3.3.6
procedure
specified way to carry out an activity or a *process* (3.1.9)

3.4 Terms relating to verification, validation and audit

3.4.1
verification
conformity assessment
confirmation through the provision of *objective evidence* (3.4.32), that specified *requirements* (3.1.15) have been fulfilled

3.4.2
verification statement
formal declaration of the outcome of a *verification* (3.4.1)

3.4.3
verification team
one or more *verifiers* (3.4.5) conducting a *verification* (3.4.1), supported if needed by *technical experts* (3.4.36)

3.4.4
verification body
organization (3.1.1) that performs *verifications* (3.4.1)

3.4.5
verifier
competent and independent person or persons with responsibility for performing and reporting on a *verification* (3.4.1) *process* (3.1.9)

3.4.6
verification plan
planning document detailing the implementation of *verification* (3.4.1)

3.4.7
verification report
document detailing a *verification* (3.4.1) and its results

3.4.8
environmental claim verification
confirmation of the validity of an *environmental claim* (3.7.3) using specific predetermined criteria and *procedures* (3.3.6) with an assurance of data reliability

3.4.9
technology
application of scientific knowledge, tools, techniques, crafts or systems in order to solve a problem or to achieve an *objective* (3.1.6), which can result in a *product* (3.5.12) or *process* (3.1.9)

3.4.10
environmental technology
technology (3.4.9) that either results in an *environmental added value* (3.4.12) or measures parameters that indicate an *environmental impact* (3.2.22)

3.4.11
environmental technology verification
verification (3.4.1) of the *performance* (3.1.12) of an *environmental technology* (3.4.10) by a *verifier* (3.4.5)

3.4.12
environmental added value
more beneficial or less adverse *environmental impact* (3.2.22) of a *technology* (3.4.9) with respect to the relevant alternative

3.4.13
intrusive investigation
sampling and testing requiring physical interference

3.4.14
professional scepticism
attitude that includes a questioning mind and a critical assessment of evidence

3.4.15
completeness check
process (3.1.9) of verifying whether information from the phases of a *life cycle assessment* (3.6.2) is sufficient for reaching conclusions in accordance with the goal and scope definition

3.4.16
consistency check
process (3.1.9) of verifying that the assumptions, methods and data are consistently applied throughout the study and are in accordance with the goal and scope definition performed before conclusions are reached

3.4.17
sensitivity check
process (3.1.9) to determine that the information obtained from a *sensitivity analysis* (3.6.25) is relevant for reaching conclusions, changing results, have influence on results and giving recommendations

3.4.18
test body
organization (3.1.1) providing an environment for testing, test implementation and means for performing and reporting on the testing

3.4.19
test plan
planning document detailing the principles, test methods, conditions, *procedures* (3.3.6) and *data quality* (3.6.46) required to carry out testing and to produce test data

3.4.20
test report
document describing conditions and results of testing, and usually including a description of or reference to *procedures* (3.3.6)

3.4.21
validation
confirmation through the provision of *objective evidence* (3.4.32) that the *requirements* (3.1.15) for a specific intended use or application have been fulfilled

3.4.22
validation statement
formal declaration of the outcome of a *validation* (3.4.21)

3.4.23
validation team
one or more *validators* (3.4.25) conducting a *validation* (3.4.21), supported if needed by *technical experts* (3.4.36)

3.4.24
validation body
organization (3.1.1) that performs *validations* (3.4.21)

3.4.25
validator
competent and independent person or persons with responsibility for performing a *validation* (3.4.21) and reporting on the results of the validation

3.4.26
complaint
expression of dissatisfaction, other than by appeal, by any person or *organization* (3.1.1) to another person or organization, relating to its activities, where a response is expected

3.4.27
validation criteria
policy (3.1.5), *procedure* (3.3.6) or *requirement* (3.1.15) used as a reference against which evidence is compared

3.4.28
level of assurance
degree of reliability the intended user requires in a *validation* (3.4.21) or *verification* (3.4.1)

3.4.29
conflict of interest
situation in which, because of other activities or relationships, impartiality in performing *validation* (3.4.21) or *verification* (3.4.1) activities is or could be compromised

3.4.30
accreditation
third-party attestation related to a *validation body* (3.4.24), *verification body* (3.4.4) or certification body conveying a formal demonstration of its *competence* (3.1.10) to carry out specific *validation* (3.4.21) or *verification* (3.4.1) tasks

3.4.31
accreditation body
authority that performs *accreditation* (3.4.30)

3.4.32
objective evidence
<audit> data supporting the existence or verity of something

3.4.33
audit client
organization (3.1.1) or person requesting an *audit* (3.1.19)

3.4.34
auditee
organization (3.1.1) being audited

3.4.35
audit team
one or more persons conducting an *audit* (3.1.19), supported if needed by *technical experts* (3.4.36)

3.4.36
technical expert
person who provides specific knowledge on a specified subject

3.4.37
auditor
person who conducts an *audit* (3.1.19)

3.4.38
combined audit
audit (3.1.19) carried out together at a single *auditee* (3.4.34) on two or more *management systems* (3.1.4)

3.4.39
joint audit
audit (3.1.19) carried out at a single *auditee* (3.4.34) by two or more auditing *organizations* (3.1.1)

3.4.40
internal audit
audit (3.1.19) where the *audit team* (3.4.35) belongs to the *auditee* (3.4.34)

3.4.41
audit programme
set of one or more *audits* (3.1.19) planned for a specific time frame and directed towards a specific purpose

3.4.42
audit scope
extent and boundaries of an *audit* (3.1.19)

3.4.43
audit plan
description of the activities and arrangements for an *audit* (3.1.19)

3.4.44
audit criteria
set of *requirements* (3.1.15) used as a reference against which *objective evidence* (3.4.32) is compared

3.4.45
audit evidence
records, statements of fact or other information, which are relevant to the *audit criteria* (3.4.44) and verifiable

3.4.46
audit findings
results of the evaluation of the collected *audit evidence* (3.4.45) against *audit criteria* (3.4.44)

3.4.47
audit conclusion
outcome of an *audit* (3.1.19), after consideration of the audit *objectives* (3.1.6) and all *audit findings* (3.4.46)

3.4.48
certification
third-party attestation related to an object of conformity assessment, with the exception of *accreditation* (3.4.30)

[SOURCE: ISO/IEC 17000:2020, 7.6]

3.4.49
environmental information validation
process (3.1.9) to evaluate the reasonableness of the assumptions, limitations, and methods that support an *environmental information statement* (3.4.51) about the outcome of future activities

3.4.50
environmental information verification
process (3.1.9) for evaluating an *environmental information statement* (3.4.51) based on historical data and information to determine whether the statement is materially correct and conforms to criteria

3.4.51
environmental information statement
environmental information claim
declaration of environmental information

3.5 Terms relating to product systems

3.5.1
product system
collection of *unit processes* (3.6.9) with *elementary flows* (3.6.12) and *product flows* (3.5.3), performing one or more defined functions and which models the *life cycle* (3.6.1) of a *product* (3.5.12)

3.5.2
process energy
energy input required for operating the *process* (3.1.9) or equipment within a *unit process* (3.6.9), excluding energy inputs for production and delivery of the process energy itself

3.5.3
product flow
products (3.5.12) entering from or leaving to another *product system* (3.5.1)

3.5.4
energy use
manner or kind of application of energy

3.5.5
product system value
worth or desirability ascribed to a *product system* (3.5.1)

3.5.6
product system value indicator
numerical quantity representing the *product system value* (3.5.5)

3.5.7
product standard
standard that specifies *requirements* (3.1.15) to be fulfilled by a *product* (3.5.12) or group of products to establish its *fitness for purpose* (3.5.8)

3.5.8
fitness for purpose
ability of a *product* (3.5.12) or a *process* (3.1.9) to serve a defined purpose under specific conditions

3.5.9
product environmental criteria
<environmental labelling> environmental *requirements* (3.1.15) that the *product* (3.5.12) has to meet in order to be awarded an *environmental label* (3.7.1)

3.5.10
product environmental aspect
element of a *product* (3.5.12) that, during its *life cycle* (3.6.1), can interact with the *environment* (3.2.2)

3.5.11
performance tracking of an organization
comparison of the *performance* (3.1.12) of the same *organization's* (3.1.1) *products* (3.5.12) and *unit processes* (3.6.9) over time, based on the same time period, *system boundary* (3.6.8) and reporting unit

3.5.12
product
any goods or service

3.5.13
co-product
product (3.5.12) coming from the same *unit process* (3.6.9) or *product system* (3.5.1) as one or more other products

3.5.14
intermediate product
output from a *unit process* (3.6.9) within a system that is input to one or more other unit process(es) within the same system, where it is transformed

3.5.15
final product
product (3.5.12) that requires no additional *transformation* (3.8.26) prior to its use

3.5.16
service life
period of time during which a *product* (3.5.12) in use meets or exceeds the *performance* (3.1.12) *requirements* (3.1.15)

3.5.17
consumer
individual member of the general public purchasing or using *products* (3.5.12) and property for private purposes

3.5.18
raw material
primary or secondary material that is used to produce a *product* (3.5.12)

3.5.19
release
emission to air or discharge to water or soil

3.5.20
design and development
process (3.1.9) that transforms *requirements* (3.1.15) into a *product* (3.5.12)

3.5.21
product function characteristic
attribute or characteristic in the *performance* (3.1.12) and use of a *product* (3.5.12)

3.5.22
ecodesign
systematic approach that considers *environmental aspects* (3.2.20) in *design and development* (3.5.20) with the aim to reduce adverse *environmental impacts* (3.2.22) throughout the *life cycle* (3.6.1) of a *product* (3.5.12)

3.5.23
recyclable
characteristic of a *product* (3.5.12), including *packaging* (3.5.26) and associated components, that can be diverted from the waste stream through available *processes* (3.1.9) and programmes, and can be collected, processed and returned to use in the form of *raw materials* (3.5.18)

3.5.24
upgradability
characteristic of a *product* (3.5.12) that allows its modules or parts to be separately upgraded or replaced without having to replace the entire product

3.5.25
double counting
accounting for the inputs or outputs of a *process* (3.1.9) more than once

3.5.26
packaging
product (3.5.12) that is used to protect or contain another product during transportation, storage, marketing or use

3.5.27
supply chain
those involved, through upstream and downstream linkages, in activities delivering value in the form of a *product* (3.5.12) to different *interested parties* (3.1.2)

3.5.28
value chain
entire sequence of activities or parties that create or receive value through the provision of a *product* (3.5.12)

3.6 Terms relating to life cycle assessment

3.6.1
life cycle
consecutive and interlinked stages from *raw material* (3.5.18) acquisition or generation from *natural resources* (3.2.5) to final disposal

3.6.2
life cycle assessment
LCA
compilation and assessment of the inputs, outputs and the potential *environmental impacts* (3.2.22) of a *product system* (3.5.1) throughout its *life cycle* (3.6.1)

3.6.3
life cycle inventory analysis
phase of *life cycle assessment* (3.6.2) involving the compilation and quantification of inputs and outputs for a *product* (3.5.12) throughout its *life cycle* (3.6.1)

3.6.4
life cycle inventory analysis result
outcome of a *life cycle inventory analysis* (3.6.3) that catalogues the flows crossing the *system boundary* (3.6.8) and provides the starting point for *life cycle impact assessment* (3.6.5)

3.6.5
life cycle impact assessment
LCIA
phase of *life cycle assessment* (3.6.2) aimed at understanding and evaluating the magnitude and significance of the potential *environmental impacts* (3.2.22) for a *product system* (3.5.1) throughout the *life cycle* (3.6.1) of the *product* (3.5.12)

3.6.6
life cycle interpretation
phase of *life cycle assessment* (3.6.2) in which the findings of either the *life cycle inventory analysis* (3.6.3) or the *life cycle impact assessment* (3.6.5), or both, are evaluated in relation to the defined goal and scope in order to reach conclusions and recommendations

3.6.7
functional unit
quantified *performance* (3.1.12) of a *product system* (3.5.1) for use as a reference unit

3.6.8
system boundary
boundary based on a set of criteria specifying which *unit processes* (3.6.9) are part of the system under study

3.6.9
unit process
smallest element considered in the *life cycle inventory analysis* (3.6.3) for which input and output data are quantified

3.6.10
ancillary input
material input that is used by the *unit process* (3.6.9) producing the *product* (3.5.12), but which does not constitute part of the product

3.6.11
feedstock energy
heat of combustion of a *raw material* (3.5.18) input that is not used as an energy source to a *product system* (3.5.1), expressed in terms of higher heating value or lower heating value

3.6.12
elementary flow
material or energy entering the system being studied that has been drawn from the *environment* (3.2.2) without previous human *transformation* (3.8.26), or material or energy leaving the system being studied that is released into the environment without subsequent human transformation

3.6.13
energy flow
input to or output from a *unit process* (3.6.9), an *information module* (3.6.47) or a *product system* (3.5.1), quantified in energy units

3.6.14
intermediate flow
product flow (3.5.3), *material flow* (3.12.30) or *energy flow* (3.6.13) occurring between *unit processes* (3.6.9) of the *product system* (3.5.1) being studied

3.6.15
reference flow
measure of the outputs from *processes* (3.1.9) in a given *product system* (3.5.1) required to fulfil the function expressed by the *functional unit* (3.6.7)

3.6.16
allocation
partitioning the input or output of a *process* (3.1.9) or a *product system* (3.5.1) between the product system under study and one or more other product systems

3.6.17
environmental mechanism
system of physical, chemical and biological *processes* (3.1.9) for a given *impact category* (3.6.18), linking the *life cycle inventory analysis results* (3.6.4) to category *indicators* (3.2.24) and to *category endpoints* (3.6.22)

3.6.18
impact category
<life cycle assessment> class representing environmental issues of concern to which *life cycle inventory analysis results* (3.6.4) can be assigned

3.6.19
impact category indicator
<life cycle assessment> quantifiable representation of *impact category* (3.6.18)

3.6.20
weighting factor
factor that is applied to convert an assigned *life cycle inventory analysis result* (3.6.4) or a life cycle *impact category indicator* (3.6.19) result to the common unit of the weighting indicator

3.6.21
cut-off criteria
specification of the amount of *material flow* (3.12.30) or *energy flow* (3.6.13) or the level of environmental significance associated with *unit processes* (3.6.9) or the *product system* (3.5.1) to be excluded from a study

3.6.22
category endpoint
attribute or aspect of the natural environment, human health or resources, which identifies an environmental issue giving cause for concern

3.6.23
characterization factor
factor derived from a characterization model, which is applied to convert an assigned *life cycle inventory analysis result* (3.6.4) to the common unit of the category *indicator* (3.2.24)

3.6.24
uncertainty analysis
systematic *procedure* (3.3.6) to quantify the uncertainty in the results of a *life cycle inventory analysis* (3.6.3) or *product system value* (3.5.5) assessment due to the cumulative effects of model imprecision, input uncertainty and data variability

3.6.25
sensitivity analysis
systematic *procedure* (3.3.6) for estimating the effects of the choices made regarding methods and data on the outcome of a study

3.6.26
organizational life cycle assessment
OLCA
compilation and evaluation of the inputs, outputs and potential *environmental impacts* (3.2.22) of the activities associated with an *organization* (3.1.1) as a whole or portion thereof adopting a *life cycle* (3.6.1) perspective

3.6.27
critical review
process intended to ensure *conformity* (3.1.16) of a *life cycle assessment* (3.6.2) or an *eco-efficiency* (3.6.48) assessment to the principles and *requirements* (3.1.15) of the relevant International Standards

3.6.28
critical review statement
conclusive document aggregating the conclusions from the reviewer(s) regarding the *life cycle assessment* (3.6.2) study, and stating unambiguously whether the life cycle assessment study is in conformance with the *requirements* (3.1.15)

3.6.29
critical review report
documentation of the *critical review* (3.6.27) process and its findings, including detailed comments from the reviewer(s) or the critical review panel, as well as corresponding responses from the practitioner of the *life cycle assessment* (3.6.2) study

3.6.30
commissioner of the critical review
organization (3.1.1) (or group of organizations) that finances the *critical review* (3.6.27) of the *life cycle assessment* (3.6.2) study

3.6.31
independent external expert
competent person, not employed in a full-time or part-time role by the commissioner of the *life cycle assessment* (3.6.2) study or the practitioner of the life cycle assessment study, and not involved in defining the scope of or conducting the life cycle assessment study

3.6.32
independent internal expert
competent person, employed in a full-time or part-time role by the commissioner of the *life cycle assessment* (3.6.2) study or by the practitioner of the life cycle assessment study, but not involved in defining the scope of or conducting the life cycle assessment study

3.6.33
life cycle thinking
life cycle perspective
LCT
consideration of the *environmental aspects* (3.2.20) relating to a *product* (3.5.12) during its entire *life cycle* (3.6.1)

3.6.34
primary data
quantified value of a *unit process* (3.6.9) or an activity obtained from a direct *measurement* (3.1.20) or a calculation based on direct measurements at the original source

3.6.35
secondary data
data that do not fulfil the *requirements* (3.1.15) for *primary data* (3.6.34)

3.6.36
basic data
data acquired from a data acquisition *process* (3.1.9)

3.6.37
physical object
identifiable entity in the real world, which is described by *basic data* (3.6.36)

3.6.38
site-specific data
data obtained from a direct *measurement* (3.1.20) or a calculation based on direct measurement at the original source within the *product system* (3.5.1)

3.6.39
quantitative data
numerical data item, which includes its unit

3.6.40
quantitative information
quantitative data (3.6.39) that has been processed or analysed to be meaningful for a specific purpose or *objective* (3.1.6)

3.6.41
data generator
person(s) or *organization(s)* (3.1.1) responsible for the modelling of the *process* (3.1.9) and the compilation or the updating of the data

3.6.42
data documentation format
structure of the documentation of data

3.6.43
data documentor
person(s) or *organization(s)* (3.1.1) responsible for entering the data into the *data documentation format* (3.6.42) in use

3.6.44
data commissioner
person(s) or *organization(s)* (3.1.1) that commissions the data collection and documentation

3.6.45
data field
container for specified data with a specified data type

3.6.46
data quality
characteristics of data that relate to their ability to satisfy stated *requirements* (3.1.15)

3.6.47
information module
compilation of data covering a *unit process* (3.6.9) or a combination of unit processes that are part of the *life cycle* (3.6.1) of a *product* (3.5.12)

3.6.48
eco-efficiency
aspect of sustainability relating the *environmental performance* (3.2.27) of a *product system* (3.5.1) to its *product system value* (3.5.5)

3.6.49
eco-efficiency indicator
measure relating *environmental performance* (3.2.27) of a *product system* (3.5.1) to its *product system value* (3.5.5)

3.6.50
eco-efficiency profile
eco-efficiency (3.6.48) assessment results relating the *life cycle impact assessment* (3.6.5) results to the *product system value* (3.5.5) assessment results

3.6.51
comparative eco-efficiency assertion
claim in *eco-efficiency* (3.6.48) regarding the superiority or equivalence of one *product* (3.5.12) versus a competitor's product that performs the same function

3.7 Terms relating to environmental labelling, declarations and communication

3.7.1
environmental label
claim that indicates the *environmental aspects* (3.2.20) of a *product* (3.5.12)

3.7.2
ecolabelling body
third-party body, and its agents, that conducts a *Type I environmental labelling programme* (3.7.8)

3.7.3
environmental claim
statement, symbol or graphic that indicates an *environmental aspect* (3.2.20) of a *product* (3.5.12), including any associated components and *packaging* (3.5.26)

3.7.4
self-declared environmental claim
environmental claim (3.7.3) that is made, without an independent third-party *certification* (3.4.48), by manufacturers, importers, distributors, retailers or anyone else likely to benefit from such a claim

3.7.5
qualified environmental claim
environmental claim (3.7.3) that is accompanied by an *explanatory statement* (3.7.6) to describe the limits of the claim

3.7.6
explanatory statement
explanation that is needed or given so that an *environmental claim* (3.7.3) can be properly understood by a purchaser, potential purchaser or user of the *product* (3.5.12)

3.7.7
comparative assertion
environmental claim (3.7.3) regarding the superiority or equivalence of one *product* (3.5.12) versus a competing product that performs the same function

3.7.8
Type I environmental labelling programme
voluntary, multiple-criteria-based *third party* (3.2.8) programme that awards a licence that authorizes the use of *environmental labels* (3.7.1) on *products* (3.5.12) to indicate the overall environmental preferability of a product within a particular product category based on *life cycle* (3.6.1) considerations

3.7.9
Type III environmental declaration
environmental declaration providing quantified environmental data using predetermined parameters and, where relevant, additional environmental information

3.7.10
Type III environmental declaration programme
voluntary programme for the development and use of *Type III environmental declarations* (3.7.9), based on a set of operating rules

3.7.11
declared unit
quantity of a *product* (3.5.12) for use as a reference unit in a *Type III environmental declaration* (3.7.9) or *footprint communication* (3.7.18), based on one or more *information modules* (3.6.47)

3.7.12
product category rules
PCR
set of specific rules, *requirements* (3.1.15) and guidelines for developing *Type III environmental declarations* (3.7.9) and *footprint communications* (3.7.18) for one or more *product* (3.5.12) categories

3.7.13
product category rules review
PCR review
process (3.1.9) whereby a third-party panel verifies the *product category rules* (3.7.12)

3.7.14
product category rules committee
PCR committee
group of representatives of *interested parties* (3.1.2) tasked by the *programme operator* (3.7.16) with drafting and finalizing the *product category rules* (3.7.12)

3.7.15
core rules
set of rules that provides consistent *requirements* (3.1.15) for the development of *product category rules* (3.7.12) across multiple *product* (3.5.12) categories

3.7.16
programme operator
body that conducts a communication programme

3.7.17
footprint
metric(s) used to report *life cycle assessment* (3.6.2) results addressing an *area of concern* (3.2.11)

3.7.18
footprint communication
result of the preparation, provision and dissemination of a *footprint* (3.7.17), supporting information and *explanatory statement* (3.7.6)

3.7.19
environmental communication
process (3.1.9) that an *organization* (3.1.1) conducts to provide and obtain information, and to engage in dialogue with internal and external *interested parties* (3.1.2), to encourage a shared understanding of environmental issues, aspects and *performance* (3.1.12)

3.7.20
environmental communication policy
overall intentions and directions of an *organization* (3.1.1) related to its *environmental communication* (3.7.19) as formally expressed by *top management* (3.1.3)

3.7.21
environmental communication objective
overall *environmental communication* (3.7.19) goal consistent with the *environmental communication policy* (3.7.20) that an *organization* (3.1.1) sets itself to achieve as part of its *environmental communication strategy* (3.7.23)

3.7.22
environmental communication target
detailed *performance* (3.1.12) *requirement* (3.1.15), applicable to the *organization* (3.1.1), that arises from the *environmental communication objectives* (3.7.21), and that needs to be set and met in order to achieve those objectives

3.7.23
environmental communication strategy
organization's (3.1.1) framework for implementing its *environmental communication policy* (3.7.20) and for the setting of *environmental communication objectives* (3.7.21) and *environmental communication targets* (3.7.22)

3.8 Terms relating to climate change and climate action

3.8.1
climate
statistical description of the weather in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years

3.8.2
climate scenario
plausible and often simplified representation of the future *climate* (3.8.1), based on an internally consistent set of climatological relationships that has been constructed for explicit use in investigating the potential consequences of anthropogenic *climate change* (3.8.3)

3.8.3
climate change
change in *climate* (3.8.1) that persists for an extended period, typically decades or longer

3.8.4
climate action
human intervention to achieve *climate change* (3.8.3) measures or goals based on mitigation or adaptation priorities under climate change *policies* (3.1.5)

3.8.5
adaptation to climate change
climate change adaptation
process of adjustment to actual or expected *climate* (3.8.1) and its effects

3.8.6
climate change mitigation
human intervention to reduce *greenhouse gas emissions* (3.9.8) or enhance *greenhouse gas removals* (3.9.22)

3.8.7
adaptive capacity
ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of opportunities, or to respond to consequences

3.8.8
environmental integrity
environmental soundness of *climate actions* (3.8.4) that do not lead to direct or indirect harm to the environment

3.8.9
eligibility criteria
criteria used to demonstrate that the *climate actions* (3.8.4) are based on appropriate methodologies that reduce current or future *climate change risk* (3.8.12)

3.8.10
climate change impact
effect on natural or human systems as a result of exposure to *climate change* (3.8.3)

3.8.11
climate sensitivity
<climate change> degree to which a system or species is affected, either adversely or beneficially, by *climate* (3.8.1) variability or *climate change* (3.8.3)

3.8.12
climate change risk
climate risk
potential of negative *climate change impacts* (3.8.10) that reflects the interaction among *vulnerability* (3.8.13), *climate change exposure* (3.8.15) and *hazard* (3.1.8)

3.8.13
vulnerability
<climate change> propensity or predisposition to be adversely affected by *climate* (3.8.1) variability or *climate change* (3.8.3)

3.8.14
vulnerability assessment
<climate change> identification of and predictions for vulnerable groups, critical areas and regions, including estimation of the likelihood and consequence of *hazard* (3.1.8) related to *climate change impacts* (3.8.10)

3.8.15
climate change exposure
potential impact of *climate change* (3.8.3) on locations and their social, economic and natural structures

3.8.16
land
solid surface of the earth that is not permanently covered by water

3.8.17
arable land
land (3.8.16) capable of being ploughed and used to grow crops

3.8.18
land use
LU
human use or management of *land* (3.8.16) within the relevant boundary

3.8.19
direct land use change
dLUC
change in the human use of *land* (3.8.16) within the relevant boundary

3.8.20
indirect land use change
iLUC
change in the use of *land* (3.8.16) that is a consequence of *direct land use change* (3.8.19) but that occurs outside the relevant boundary

3.8.21
agroecosystem
spatially and functionally coherent unit of agricultural activity that includes the living and non-living components involved in that unit as well as their interactions

3.8.22
biodiversity
biological diversity
variability among living organisms on the earth, including the variability within and between species, and within and between *ecosystems* (3.2.3)

3.8.23
biogenic
produced in natural processes by living organisms but not fossilized or derived from fossil resources

3.8.24
biogenic carbon
carbon derived from *biomass* (3.8.25)

3.8.25
biomass
material of biological origin excluding material embedded in geological formations and material transformed to fossilized material

3.8.26
transformation
change in the fundamental attributes of natural and human systems

3.9 Terms relating to greenhouse gases

3.9.1
greenhouse gas
GHG
gaseous constituent of the atmosphere, both natural and anthropogenic, that absorbs and emits radiation at specific wavelengths within the spectrum of infrared radiation emitted by the Earth's surface, the atmosphere and clouds

3.9.2
global warming potential
GWP
index, based on the radiative properties of *greenhouse gases* (3.9.1), measuring the radiative forcing following a pulse emission of a unit mass of a given greenhouse gas in the present-day atmosphere integrated over a chosen time horizon, relative to that of carbon dioxide (CO_2)

3.9.3
carbon dioxide equivalent
CO_2e
CO_2 equivalent
unit for comparing the radiative forcing of a *greenhouse gas* (3.9.1) to that of carbon dioxide

3.9.4
greenhouse gas source
GHG source
process (3.1.9) that releases a *greenhouse gas* (3.9.1) into the atmosphere

3.9.5
greenhouse gas sink
GHG sink
process (3.1.9) that removes a *greenhouse gas* (3.9.1) from the atmosphere

3.9.6
greenhouse gas reservoir
GHG reservoir
component, other than the atmosphere, that has the capacity to accumulate *greenhouse gases* (3.9.1) and to store and release them

3.9.7
sector
<greenhouse gas management> technical area sharing common attributes and similar *greenhouse gas sources* (3.9.4), *greenhouse gas sinks* (3.9.5) and *greenhouse gas reservoirs* (3.9.6)

3.9.8
greenhouse gas emission
GHG emission
release (3.5.19) of a *greenhouse gas* (3.9.1) into the atmosphere

3.9.9
direct greenhouse gas emission
direct GHG emission
greenhouse gas emission (3.9.8) from *greenhouse gas sources* (3.9.4) owned or controlled by an *organization* (3.1.1)

3.9.10
indirect greenhouse gas emission
indirect GHG emission
greenhouse gas emission (3.9.8) that is a consequence of an *organization's* (3.1.1) operations and activities, but that arises from *greenhouse gas sources* (3.9.4) that are not owned or controlled by the organization

3.9.11
energy indirect greenhouse gas emission
energy indirect GHG emission
greenhouse gas emission (3.9.8) from the generation of imported electricity, heat or steam consumed by an *organization* (3.1.1)

3.9.12
other indirect greenhouse gas emission
other indirect GHG emission
greenhouse gas emission (3.9.8), other than *energy indirect greenhouse gas emissions* (3.9.11), that is a consequence of an *organization's* (3.1.1) activities, but arises from *greenhouse gas sources* (3.9.4) that are owned or controlled by other organizations

3.9.13
downstream greenhouse gas emission
downstream GHG emission
energy indirect greenhouse gas emission (3.9.11) and *other indirect greenhouse gas emission* (3.9.12) from *products* (3.5.12) subsequent to sale or delivery by an *organization* (3.1.1) and to the end-of-life of such products

3.9.14
upstream greenhouse gas emission
upstream GHG emission
energy indirect greenhouse gas emission (3.9.11) and *other indirect greenhouse gas emission* (3.9.12) from *products* (3.5.12) acquired by an *organization* (3.1.1)

3.9.15
out of stream greenhouse gas emission
out of stream GHG emission
greenhouse gas emission (3.9.8) not included in either the *upstream greenhouse gas emission* (3.9.14) or the *downstream greenhouse gas emission* (3.9.13)

3.9.16
avoided greenhouse gas emission
avoided GHG emission
greenhouse gas emission reduction (3.9.17) that occurs outside the organizational boundaries of the reporting *organization* (3.1.1) as a direct consequence of the use of its *products* (3.5.12)

3.9.17
greenhouse gas emission reduction
GHG emission reduction
quantified decrease in *greenhouse gas emissions* (3.9.8) between a *baseline scenario* (3.9.18) and the project

3.9.18
baseline scenario
greenhouse gas baseline scenario
GHG baseline scenario
hypothetical reference case that best represents the conditions most likely to occur in the absence of a proposed *greenhouse gas project* (3.9.26)

3.9.19
base year
specific historical period identified for the purpose of comparing the inputs or outputs of a *process* (3.1.9) or other information over time

3.9.20
greenhouse gas emission factor
GHG emission factor
coefficient relating *greenhouse gas activity data* (3.9.31) with the *greenhouse gas emission* (3.9.8)

3.9.21
directed action
specific activity or initiative, not organized as a *greenhouse gas project* (3.9.26), implemented by an *organization* (3.1.1) to reduce or prevent *direct greenhouse gas emissions* (3.9.9) or *indirect greenhouse gas emissions* (3.9.10), or increase *greenhouse gas removals* (3.9.22)

3.9.22
greenhouse gas removal
GHG removal
withdrawal of a *greenhouse gas* (3.9.1) from the atmosphere by a *greenhouse gas sink* (3.9.5)

3.9.23
greenhouse gas removal enhancement
GHG removal enhancement
quantified increase in *greenhouse gas removals* (3.9.22) between a *baseline scenario* (3.9.18) and the *greenhouse gas project* (3.9.26)

3.9.24
greenhouse gas removal factor
GHG removal factor
coefficient relating *greenhouse gas activity data* (3.9.31) with the *greenhouse gas removal* (3.9.22)

3.9.25
direct greenhouse gas removal
direct GHG removal
greenhouse gas removal (3.9.22) from *greenhouse gas sinks* (3.9.5) owned or controlled by the *organization* (3.1.1)

3.9.26
greenhouse gas project
GHG project
activity or activities that intend to alter the conditions of a *greenhouse gas* (3.9.1) baseline, which cause(s) *greenhouse gas emission reductions* (3.9.17) or *greenhouse gas removal enhancements* (3.9.23)

3.9.27
greenhouse gas project proponent
GHG project proponent
individual or *organization* (3.1.1) that has overall control and responsibility for a *greenhouse gas project* (3.9.26)

3.9.28
greenhouse gas programme
GHG programme
voluntary or mandatory international, national, regional, or sub-national system or scheme that registers, accounts or manages *greenhouse gas emissions* (3.9.8), *greenhouse gas removals* (3.9.22), *greenhouse gas emission reductions* (3.9.17) or *greenhouse gas removal enhancements* (3.9.23) outside the *organization* (3.1.1) or *greenhouse gas project* (3.9.26)

3.9.29
greenhouse gas inventory
GHG inventory
list of *greenhouse gas sources* (3.9.4), *greenhouse gas sinks* (3.9.5), and their *quantified greenhouse gas emissions* (3.9.8) and *greenhouse gas removals* (3.9.22)

3.9.30
greenhouse gas information system
GHG information system
policies (3.1.5), *processes* (3.1.9) and *procedures* (3.3.6) to establish, manage and maintain *greenhouse gas* (3.9.1) information

3.9.31
greenhouse gas activity data
GHG activity data
quantitative measure of activity that results in a *greenhouse gas emission* (3.9.8) or *greenhouse gas removal* (3.9.22)

3.9.32
greenhouse gas report
GHG report
standalone document intended to communicate an *organization's* (3.1.1) or *greenhouse gas project's* (3.9.26) greenhouse gas-related information to its *intended users* (3.9.37)

3.9.33
greenhouse gas statement
GHG statement
DEPRECATED: GHG assertion
factual and objective declaration related to *greenhouse gas* (3.9.1) made by the *responsible party* (3.9.39) including statements related to greenhouse gas that provide the subject matter for the *verifier* (3.4.5) or *validator's* (3.4.25) opinion

3.9.34
greenhouse gas consultancy services
GHG consultancy services
provision of organization-specific or project-specific *greenhouse gas* (3.9.1) quantification, greenhouse gas data *monitoring* (3.1.21) or recording, *greenhouse gas information system* (3.9.30) or internal auditing services, or training that supports a *greenhouse gas statement* (3.9.33)

3.9.35
verification
<greenhouse gas> *process* (3.1.9) to evaluate a statement of historical data and information to determine if the statement is materially correct and conforms to criteria

3.9.36
validation
<greenhouse gas> *process* (3.1.9) to evaluate the reasonableness of the assumptions, limitations and methods that support a statement about the outcome of future activities

3.9.37
intended user
<greenhouse gas> individual or *organization* (3.1.1) identified by those reporting greenhouse gas-related information as being the one that relies on that information to make decisions

3.9.38
materiality
<greenhouse gas> individual or the aggregation of errors, omissions and misrepresentations that could affect the *greenhouse gas statement* (3.9.33) and could influence the *intended users'* (3.9.37) decisions

3.9.39
responsible party
<greenhouse gas> person or persons responsible for the provision of the *greenhouse gas statement* (3.9.33) and the supporting *greenhouse gas* (3.9.1) information

3.10 Terms relating to water footprint

3.10.1
water footprint
metric(s) that quantifies the potential *environmental impacts* (3.2.22) related to water

3.10.2
water footprint inventory
result of a *water footprint inventory analysis* (3.10.5), including *elementary flows* (3.6.12), which is usable for subsequent *water footprint impact assessment* (3.10.7)

3.10.3
direct water footprint inventory
water footprint inventory (3.10.2) considering the inputs and outputs resulting from activities within the established organizational boundaries

3.10.4
indirect water footprint inventory
water footprint inventory (3.10.2) considering the inputs and outputs resulting from an *organization's* (3.1.1) activities but which arise from *processes* (3.1.9) that are owned or controlled by other organizations

3.10.5
water footprint inventory analysis
phase of a *water footprint assessment* (3.10.6) involving the compilation and quantification of inputs and outputs related to water for *products* (3.5.12), *processes* (3.1.9) or *organizations* (3.1.1), as stated in the goal and scope definition phase

3.10.6
water footprint assessment
compilation and evaluation of the inputs, outputs and potential *environmental impacts* (3.2.22) related to water used or affected by a *product* (3.5.12), *process* (3.1.9) or *organization* (3.1.1)

3.10.7
water footprint impact assessment
phase of a *water footprint assessment* (3.10.6), following the *water footprint inventory analysis* (3.10.5), aimed at understanding and evaluating the magnitude and significance of the potential *environmental impacts* (3.2.22) related to water of a *product* (3.5.12), *process* (3.1.9) or *organization* (3.1.1)

3.10.8
water footprint profile
compilation of *impact category indicator* (3.6.19) results addressing the potential *environmental impacts* (3.2.22) related to water

3.10.9
water body
entity of water with definite hydrological, hydrogeomorphological, physical, chemical and biological characteristics in a given geographical area

EXAMPLE Lakes, rivers, *groundwaters* (3.10.19), seas, icebergs, glaciers, reservoirs.

3.10.10
water quality
physical (e.g. thermal), chemical and biological characteristics of water with respect to its suitability for an intended use by humans or *ecosystems* (3.2.3)

3.10.11
water availability
extent to which humans and *ecosystems* (3.2.3) have sufficient water resources for their needs

3.10.12
water scarcity
extent to which demand for water compares to the replenishment of water in an area, e.g. a *drainage basin* (3.10.23), without taking into account the *water quality* (3.10.10)

3.10.13
water use
use of water by human activity

3.10.14
water withdrawal
anthropogenic removal of water from any *water body* (3.10.9) or *drainage basin* (3.10.23), either permanently or temporarily

3.10.15
freshwater
water having a low concentration of dissolved solids

3.10.16
brackish water
water containing dissolved solids at a concentration less than that of *seawater* (3.10.17), but in amounts that exceed the normally acceptable standards for municipal, domestic and irrigation uses

3.10.17
seawater
water in a sea or an ocean

3.10.18
surface water
water in overland flow and storage, such as rivers and lakes, excluding *seawater* (3.10.17)

3.10.19
groundwater
water that is being held in, and can be recovered from, an underground formation

3.10.20
fossil water
groundwater (3.10.19) that has a negligible rate of natural recharge on the human timescale

3.10.21
water degradation
negative change in *water quality* (3.10.10)

3.10.22
water table
surface of the saturated zone at which the water pressure is atmospheric

3.10.23
drainage basin
area from which direct surface runoff from precipitation drains by gravity into a stream or other *water body* (3.10.9)

3.10.24
elementary water flow
water entering the system being studied that has been drawn from the *environment* (3.2.2), or water leaving the system being studied that is released into the environment

3.11 Terms relating to carbon footprint

3.11.1
carbon footprint of a product
CFP
sum of *greenhouse gas emissions* (3.9.8) and *greenhouse gas removals* (3.9.22) in a *product system* (3.5.1), expressed as *carbon dioxide equivalents* (3.9.3) and based on a *life cycle assessment* (3.6.2) using the *single impact category* (3.6.18) of *climate change* (3.8.3)

3.11.2
partial carbon footprint of a product
partial CFP
sum of *greenhouse gas emissions* (3.9.8) and *greenhouse gas removals* (3.9.22) of one or more selected *process(es)* (3.1.9) in a *product system* (3.5.1), expressed as *carbon dioxide equivalents* (3.9.3) and based on the selected stages or processes within the *life cycle* (3.6.1)

3.11.3
carbon footprint of a product – product category rules
CFP–PCR
set of specific rules, *requirements* (3.1.15) and guidelines for *carbon footprint of a product* (3.11.1) or *partial carbon footprint of a product* (3.11.2) quantification and communication for one or more *product* (3.5.12) categories

3.11.4
carbon footprint of a product study
CFP study
study that includes all activities that are necessary to quantify and report a *carbon footprint of a product* (3.11.1) or a *partial carbon footprint of a product* (3.11.2)

3.11.5
carbon offsetting
mechanism for compensating for all or for a part of the *carbon footprint of a product* (3.11.1) or the *partial carbon footprint of a product* (3.11.2) through the prevention of the *release* (3.5.19) of, reduction in, or removal of an amount of *greenhouse gas emissions* (3.9.8) in a *process* (3.1.9) outside the *product system* (3.5.1) under study

3.12 Terms relating to economy and finance

3.12.1
management accounting
process (3.1.9) of supplying the managers and employees in an *organization* (3.1.1) with relevant information, both financial and non-financial, for making decisions, allocating resources, and *monitoring* (3.1.21), evaluating and rewarding *performance* (3.1.12)

3.12.2
environmental benefit
internal or external gain related to the *environment* (3.2.2)

3.12.3
co-benefit
benefit accompanying the intended benefits

3.12.4
discounting
process of calculating the present value of future *monetary values* (3.12.7)

3.12.5
financial control
ability to direct the financial and operating *policies* (3.1.5) of the operation with a view to gain economic benefits from its activities

3.12.6
monetary valuation
procedure (3.3.6) for determining *monetary value* (3.12.7)

3.12.7
monetary value
amount of money representing *willingness to pay* (3.12.14) or *willingness to accept compensation* (3.12.15)

3.12.8
reference unit of monetary value
unit of environmental change for which the *monetary value* (3.12.7) is determined

3.12.9
total economic value
net sum of all relevant *use values* (3.12.10) and *non-use values* (3.12.11)

3.12.10
use value
monetary value (3.12.7) of a *good* (3.12.27) in relation to its actual, planned or possible use

3.12.11
non-use value
monetary value (3.12.7) of a *good* (3.12.27) independent of its actual, planned or possible use

3.12.12
externality
external effect
consequence of an activity that affects *interested parties* (3.1.2) other than the *organization* (3.1.1) undertaking the activity, for which the organization is neither compensated nor penalized through markets or regulatory mechanisms

3.12.13
internalization
act of taking into account externalities in decision-making

3.12.14
willingness to pay
WTP
maximum amount of money an individual is prepared to give up to secure an environmental improvement or to avoid an environmental loss

3.12.15
willingness to accept compensation
WTA
minimum amount of money an individual is prepared to accept as compensation to forgo an environmental improvement or to tolerate an environmental loss

3.12.16
environmental dependency
reliance on the use of environmental resources or processes

3.12.17
environmental dependency pathway
causal relationship ultimately starting at an *environmental condition* (3.2.33) and ending at an effect on the *organization* (3.1.1)

3.12.18
environmental cost
internal or external loss related to the *environment* (3.2.2)

3.12.19
value transfer
transfer of a *monetary value* (3.12.7) estimate from a primary *monetary valuation* (3.12.6) study to another context

3.12.20
revealed preference
monetary value (3.12.7) placed by an individual on a market *good* (3.12.27) from which the individual's valuation of a non-market good is inferred

3.12.21
stated preference
monetary value (3.12.7) expressed by an individual through survey-based response for a *good* (3.12.27) in a constructed or hypothetical market

3.12.22
external environmental cost
adverse externality (3.12.12) due to an *organization's* (3.1.1) *environmental aspects* (3.2.20)

3.12.23
external environmental benefit
positive *externality* (3.12.12) due to an *organization's* (3.1.1) *environmental aspects* (3.2.20)

3.12.24
affected human population
group of people whose well-being, utility or values are influenced directly or indirectly by the *environmental impact* (3.2.22)

3.12.25
equity weighting
procedure (3.3.6) to modify the costs and benefits incurred by people in different social and economic contexts to reflect their loss of utility

3.12.26
reference situation
baseline
current or future state relative to which the assessment is performed

3.12.27
good
something that satisfies human wants or needs

3.12.28
marginal utility
additional satisfaction a person gains from consuming one more unit of a *good* (3.12.27)

3.12.29
cost
monetary value (3.12.7) of resources consumed to perform activities

3.12.30
material flow
input or output of a material or group of materials

3.12.31
material flow cost accounting
tool for quantifying the flows and stocks of materials in *processes* (3.1.9) or production lines in both physical and monetary units

3.12.32
material distribution percentage
proportion of the material inputs that flow into *products* (3.5.12) or material losses

3.12.33
material balance
comparison of the physical quantities of inputs, outputs and inventory changes in a *quantity centre* (3.12.45) over a specified time period

3.12.34
cost allocation
indirect attribution of a *cost* (3.12.29) between different objects, such as a *product* (3.5.12) or *process* (3.1.9), by using an appropriate apportionment basis

3.12.35
cost assignment
direct attribution of a *cost* (3.12.29) to a specific object, such as a *product* (3.5.12) or *process* (3.1.9)

3.12.36
system cost
cost (3.12.29) incurred in the course of the in-house handling of *material flows* (3.12.30), except for the *material cost* (3.12.39), *energy cost* (3.12.37) and *waste management cost* (3.12.40)

3.12.37
energy cost
cost (3.12.29) for electricity, fuels, steam, heat, compressed air and other like media

3.12.38
energy loss
applied energy, except energy incorporated into intended *products* (3.5.12)

3.12.39
material cost
cost (3.12.29) for a substance that enters or leaves a *quantity centre* (3.12.45)

3.12.40
waste management cost
cost (3.12.29) of handling material losses generated in a *quantity centre* (3.12.45)

3.12.41
environment-related internal cost
cost derived from an *organization's* (3.1.1) *environmental aspects* (3.2.20) and *environmental dependencies* (3.12.16) that is part of its financial accounting or *management accounting* (3.12.1)

3.12.42
environment-related internal benefit
benefit derived from the *environment* (3.2.2) by an *organization* (3.1.1) that is part of its financial accounting and non-financial accounting

3.12.43
environmental dependency cost
cost of adverse effects of a change or changes in *environmental conditions* (3.2.33) on the *organization* (3.1.1)

3.12.44
environmental damage cost
cost of adverse *environmental impacts* (3.2.22) that are due to an *organization's* (3.1.1) *environmental aspects* (3.2.20)

3.12.45
quantity centre
selected part or parts of a *process* (3.1.9) for which inputs and outputs are quantified in physical and monetary units

Annex A
(informative)

Concept relations and concept systems

A.1 General

Concepts are not independent of one another. This document arranges concepts based on concept relations, which are represented in concept systems. Concept diagrams with most of the concepts in this vocabulary are reproduced in A.3.

NOTE Useful information about terminological principles and terminology work can be found in ISO/IEC Directives, Part 2:2018, Clause 16, as well as in International Standards from ISO/TC 37, in particular, ISO 704[1] and ISO 10241-1[2].

A.2 Concept relations and their graphical representation

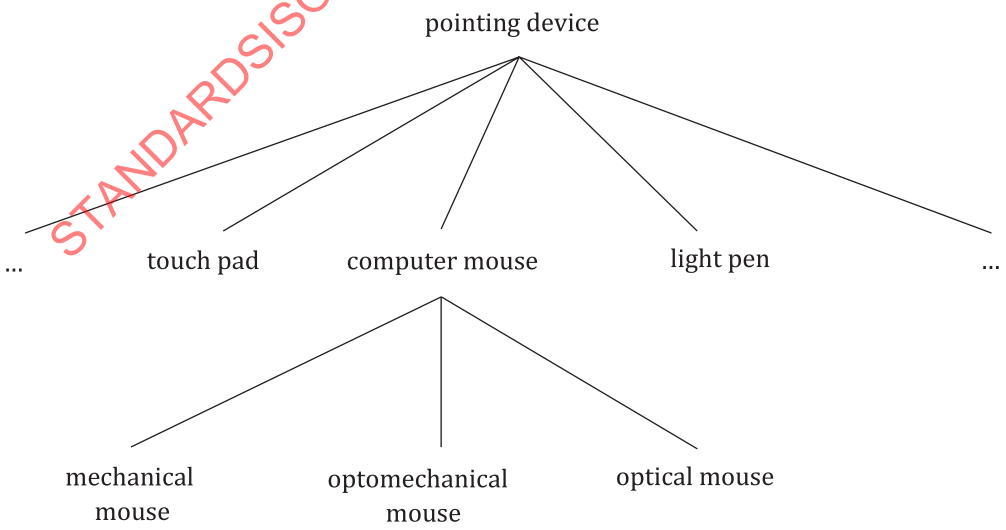
A.2.1 General

There are three basic forms of concept relations, as indicated in this annex: the hierarchical generic relations (see A.2.2) and partitive relations (see A.2.3), and the non-hierarchical associative relations (see A.2.4).

A.2.2 Generic relations

Subordinate concepts within the hierarchy inherit all the characteristics of the superordinate concept and contain descriptions of these characteristics which distinguish them from the superordinate (parent) and coordinate (sibling) concepts, e.g. the relation of mechanical mouse, optomechanical mouse and optical mouse to computer mouse.

Generic relations are depicted by a fan or tree diagram without arrows (see Figure A.1).



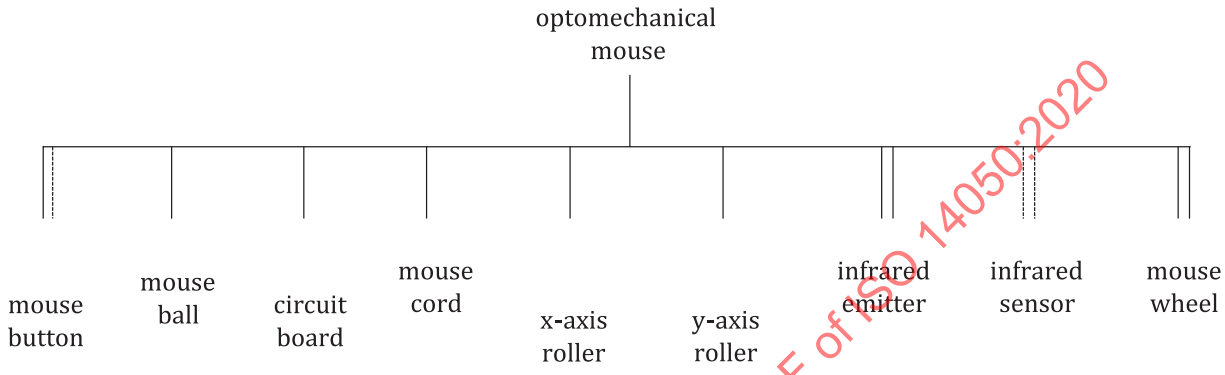
NOTE Example from ISO 704:2009, 5.5.2.2.1.

Figure A.1 — Graphical representation of a generic relation

A.2.3 Partitive relations

Subordinate concepts within the hierarchy form constituent parts of the superordinate concept, e.g. mouse button, mouse cord, infrared emitter and mouse wheel may be defined as parts of the concept optomechanical mouse. In comparison, it is inappropriate to define red cord (one possible characteristic of mouse cord) as part of an optomechanical mouse.

Partitive relations are depicted by a rake without arrows (see Figure A.2). Singular parts are depicted by single line, multiple parts by double lines.



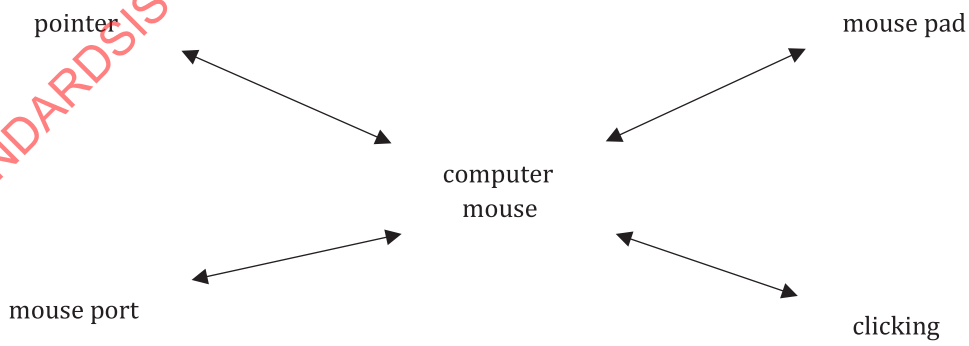
NOTE Example from ISO 704:2009, 5.5.2.3.1.

Figure A.2 — Graphical representation of a partitive relation

A.2.4 Associative relations

Associative relations cannot provide the economies in description that are present in generic and partitive relations but are helpful in identifying the nature of the relation between one concept and another within a concept system, e.g. cause and effect, activity and location, activity and result, tool and function, material and product. Besides, associative relations are the most commonly encountered in terminology practical work, as they correspond to the concepts relations established in the real world.

Associative relations are depicted by a line with arrowheads at each end (see Figure A.3).



NOTE Example from ISO 704:2009, 5.6.2.

Figure A.3 — Graphical representation of an associative relation

A.3 Concept diagrams

Figures A.4 through A.27 include most of the concepts that are defined in this vocabulary. Some concepts are included in more than one concept diagram.

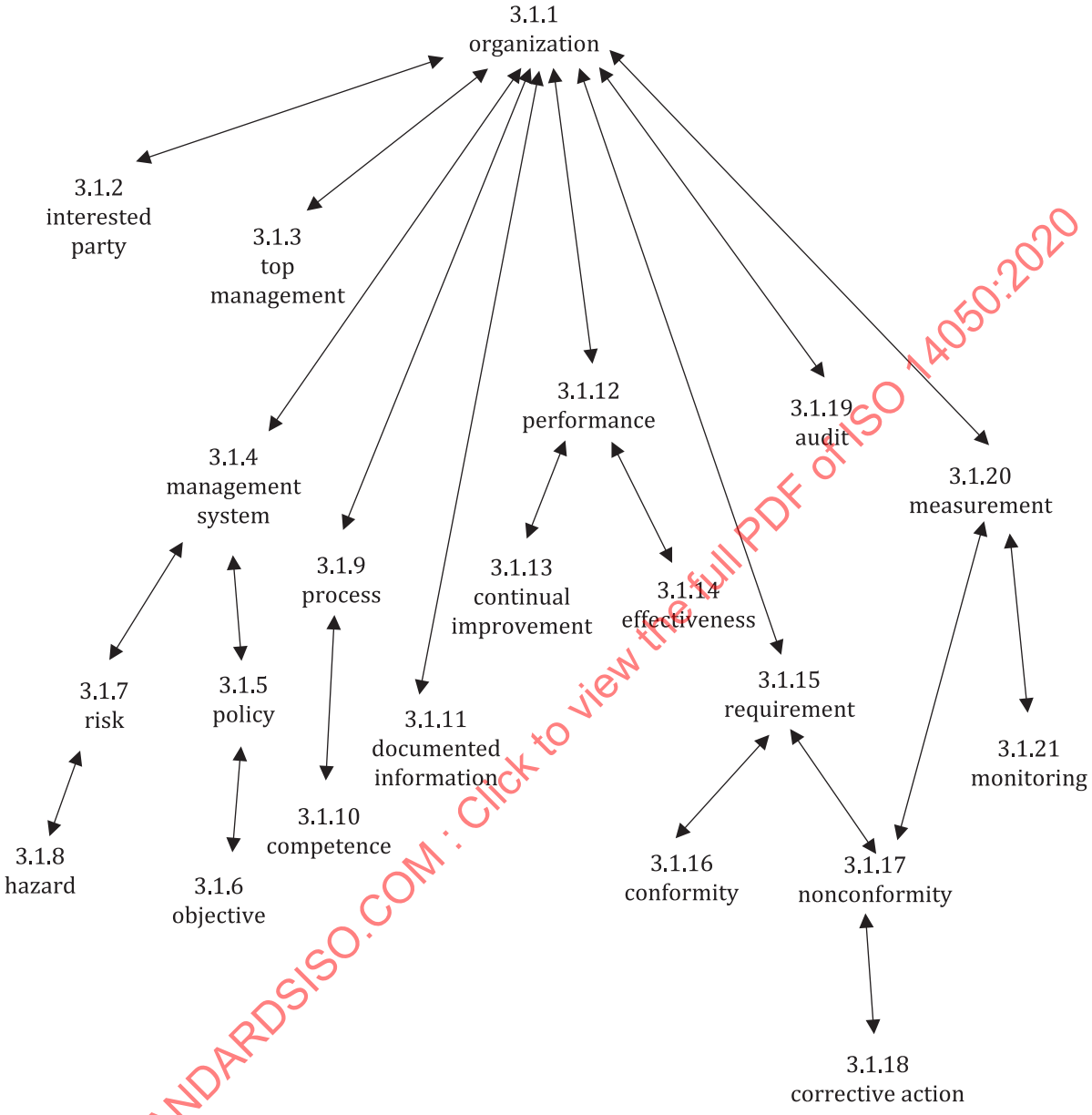


Figure A.4 — General terms relating to management systems

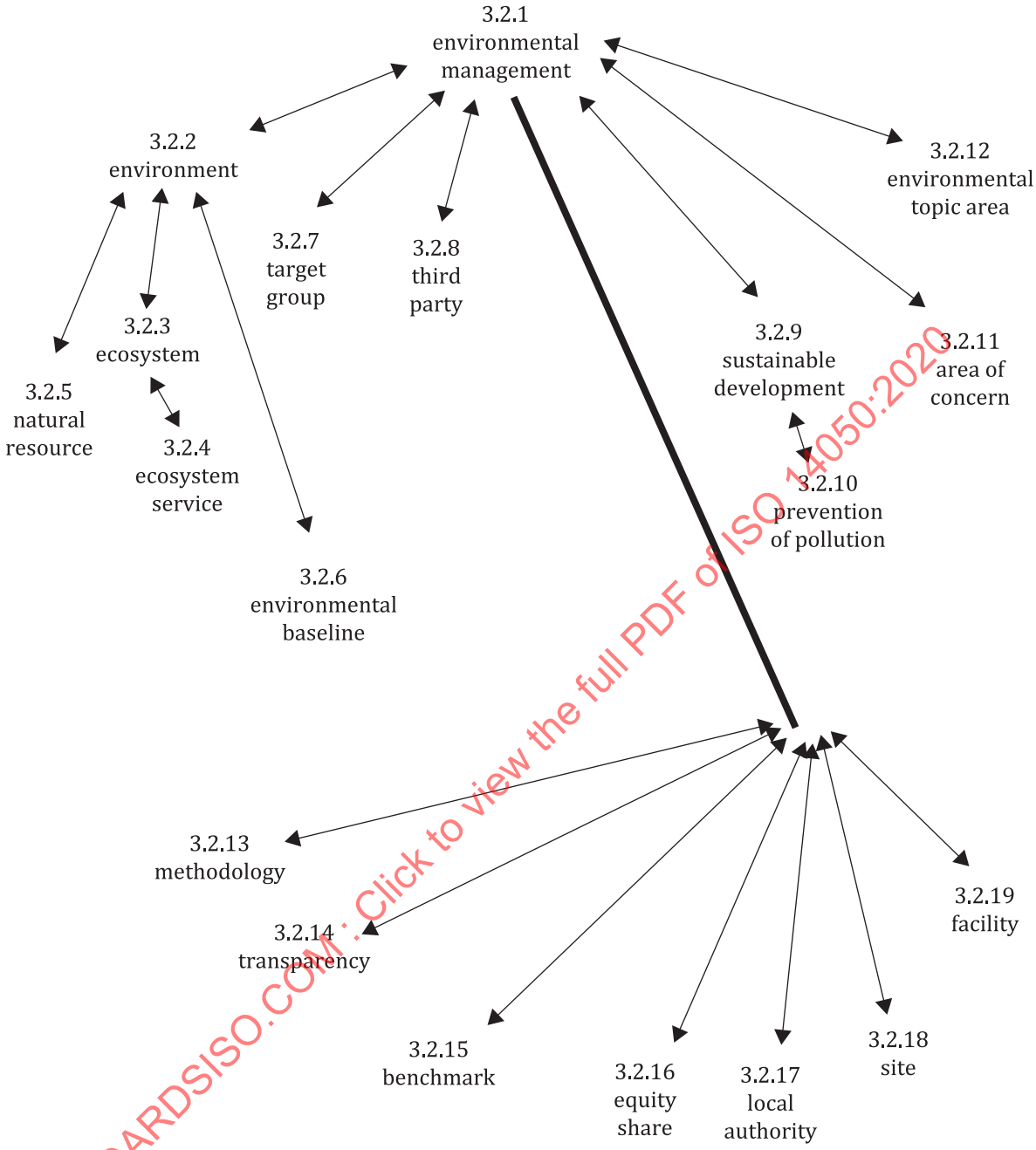


Figure A.5 — General terms relating to environmental management — 1

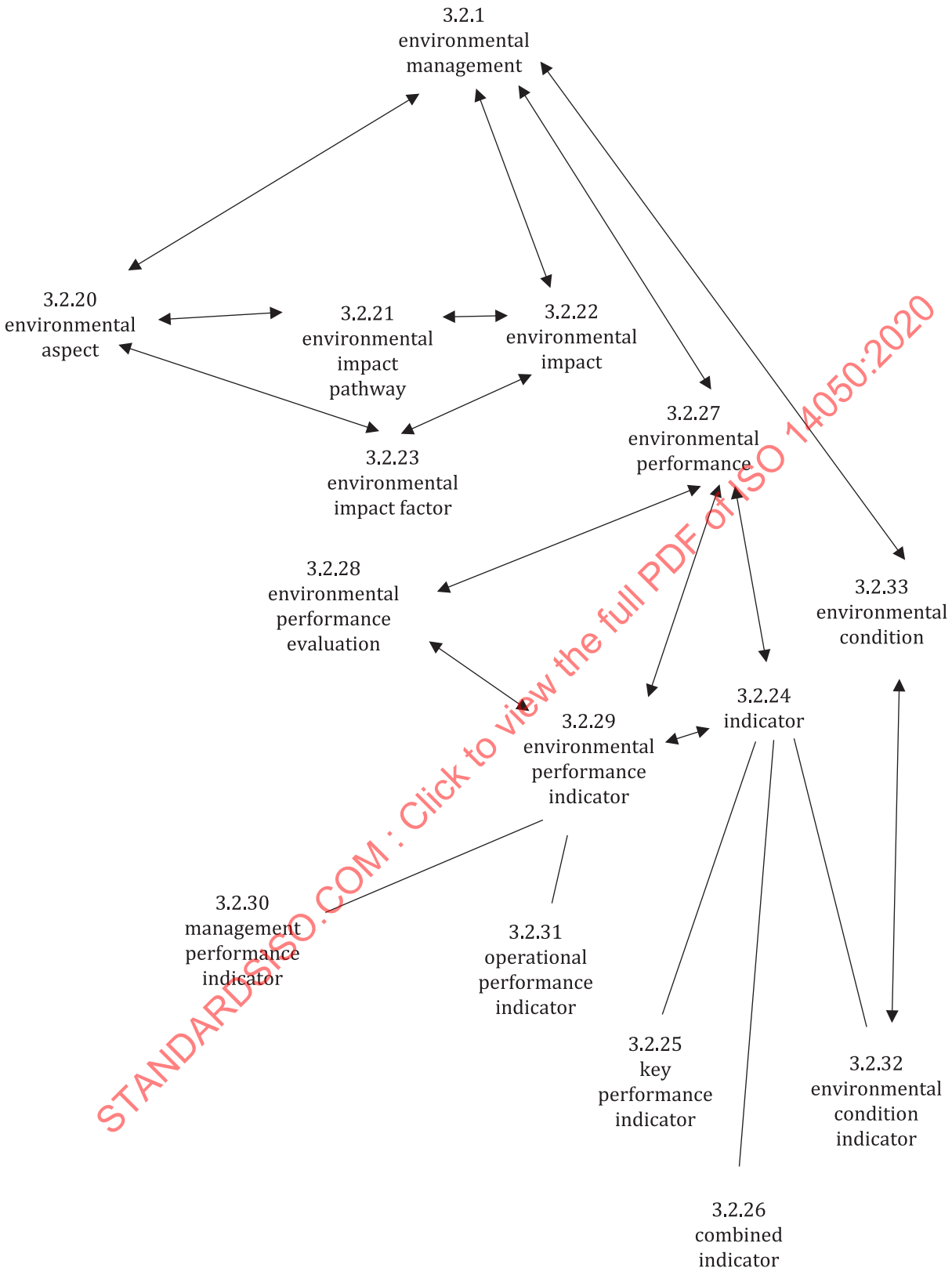


Figure A.6 — General terms relating to environmental management — 2

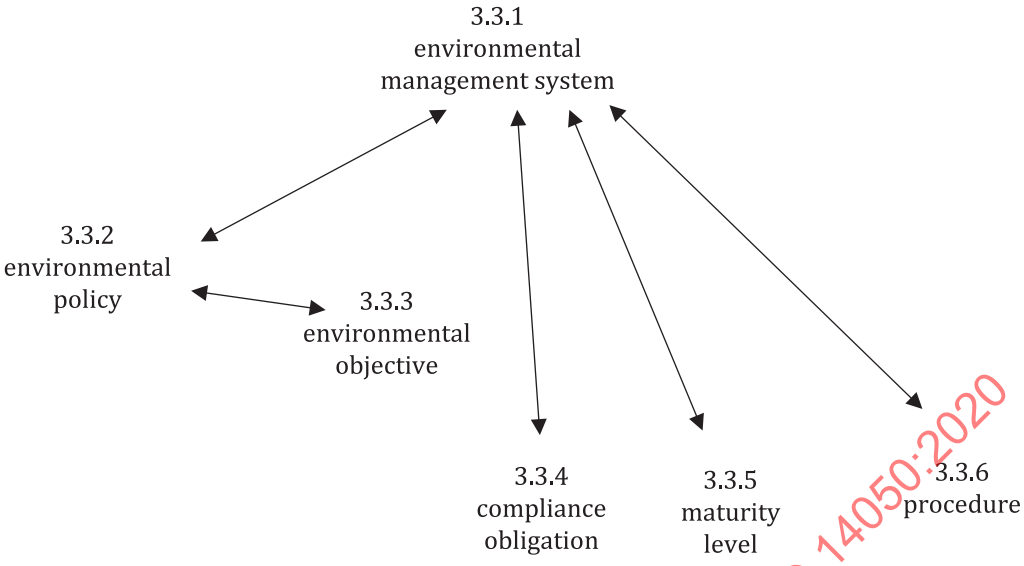


Figure A.7 — Terms relating to environmental management systems

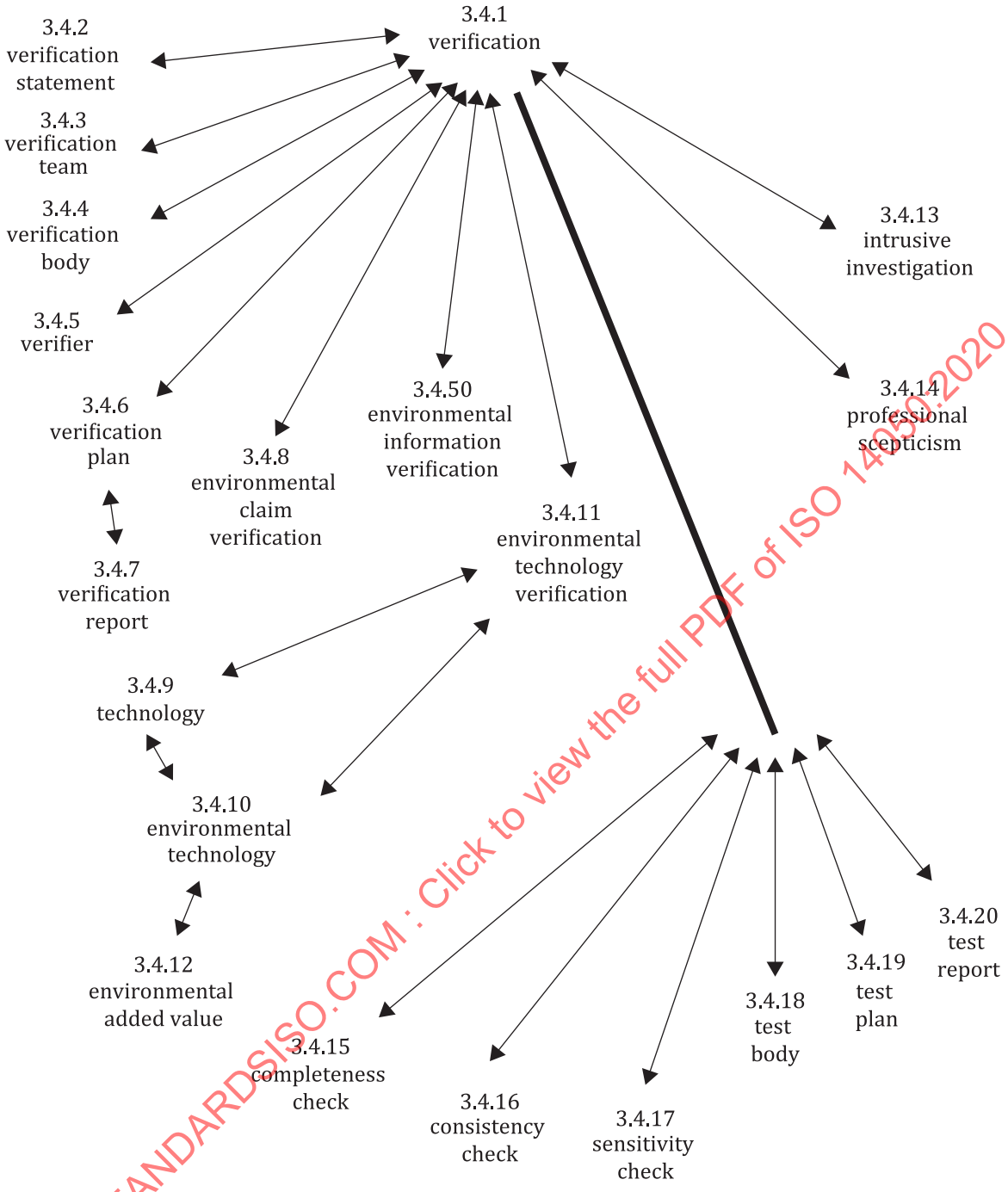


Figure A.8 — Terms relating to verification, validation and audit — 1

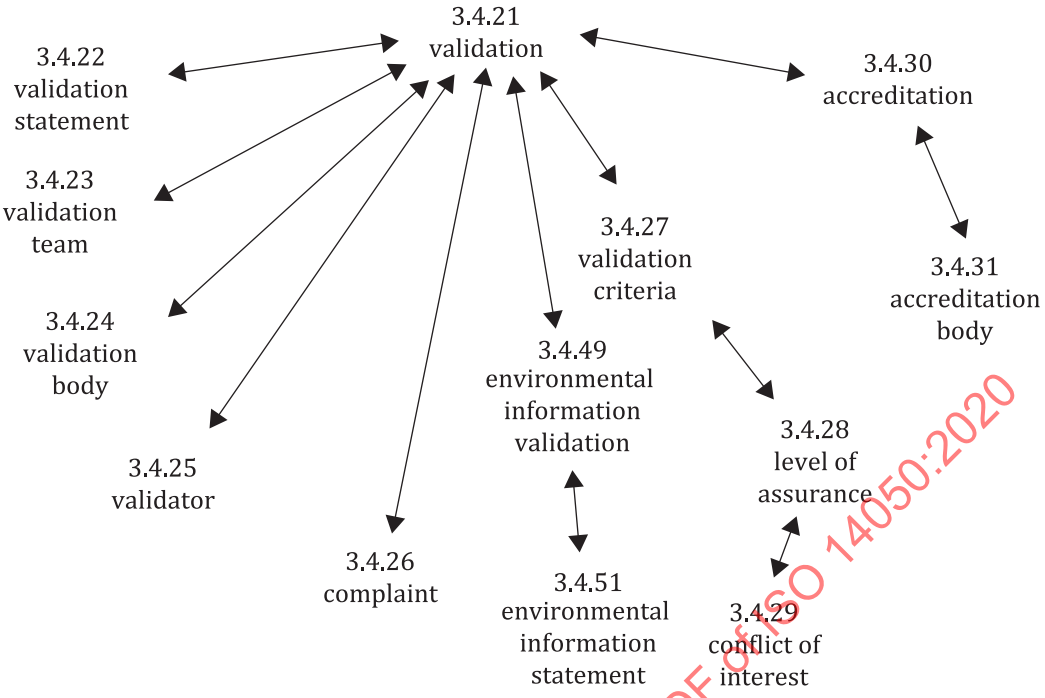


Figure A.9 — Terms relating to verification, validation and audit — 2

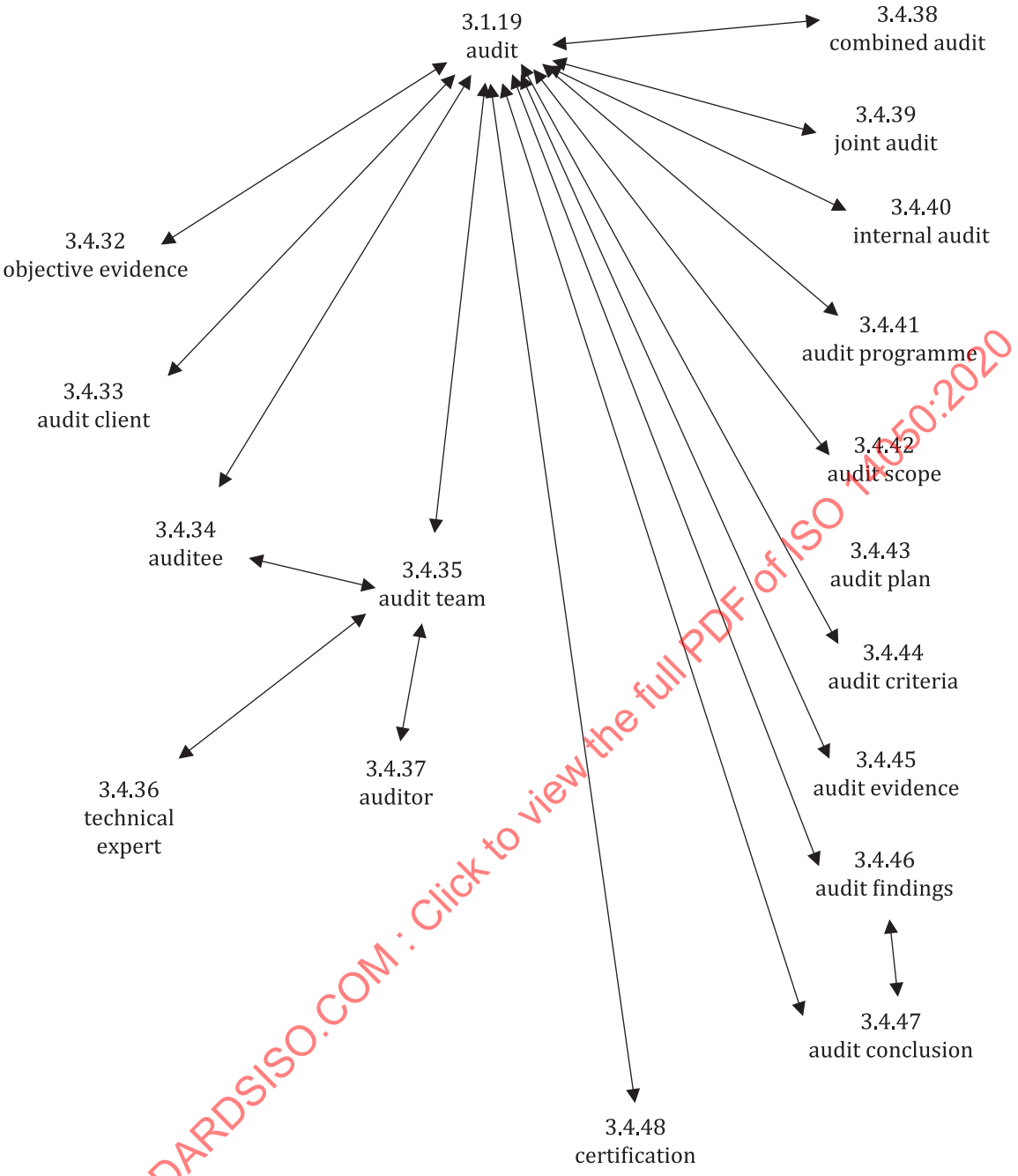


Figure A.10 — Terms relating to verification, validation and audit — 3

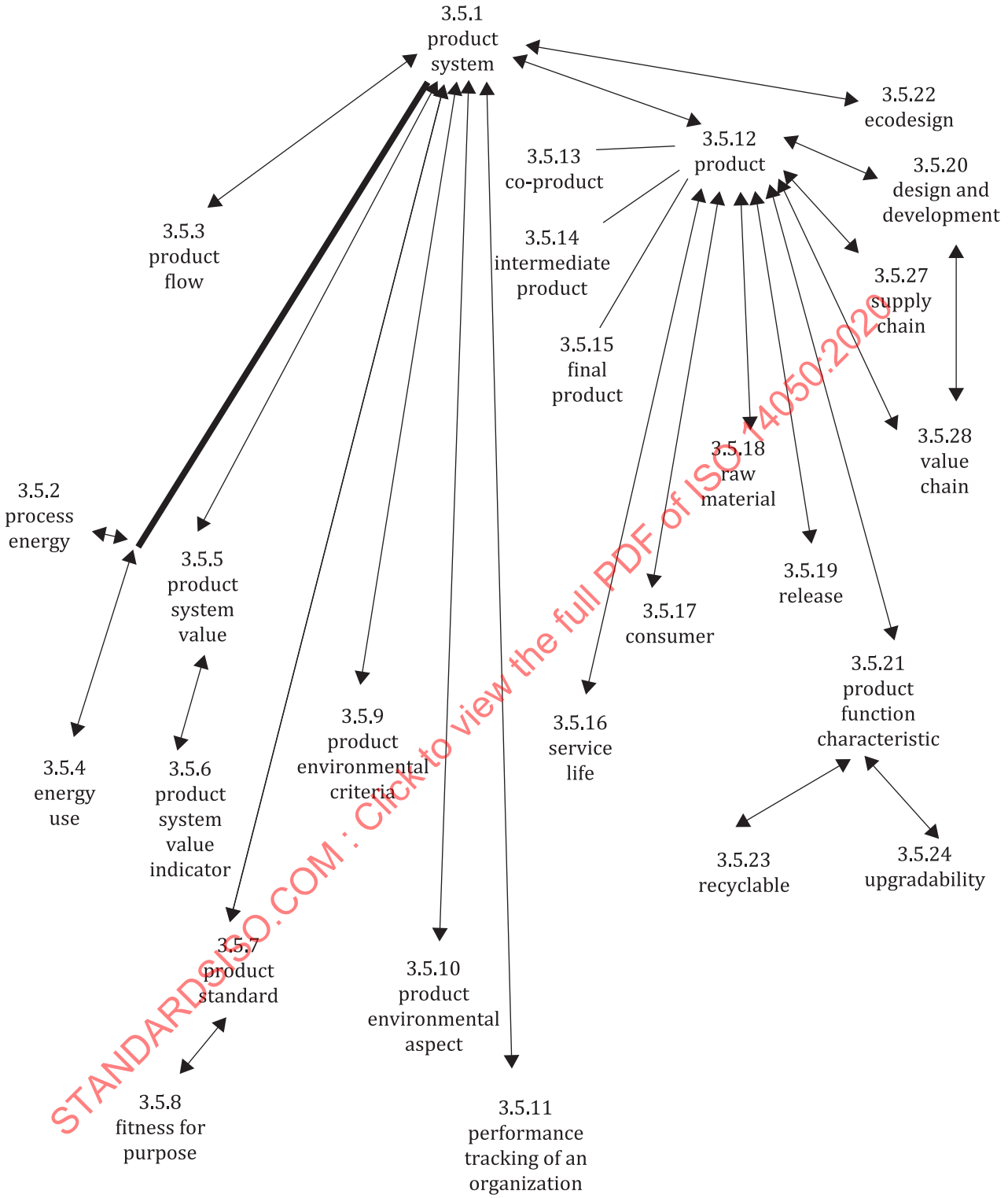


Figure A.11 — Terms relating to product systems — 1

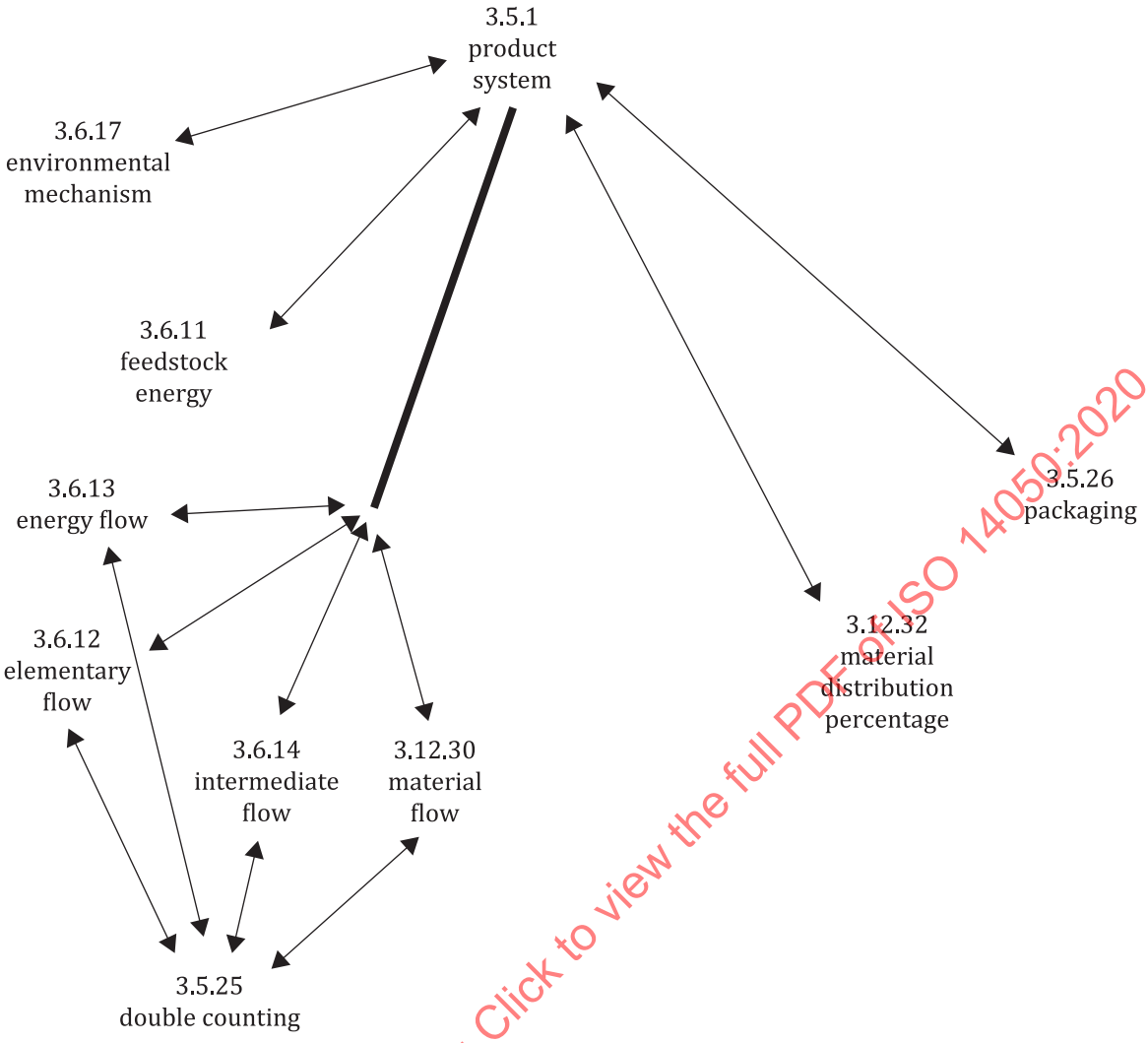


Figure A.12 — Terms relating to product systems — 2

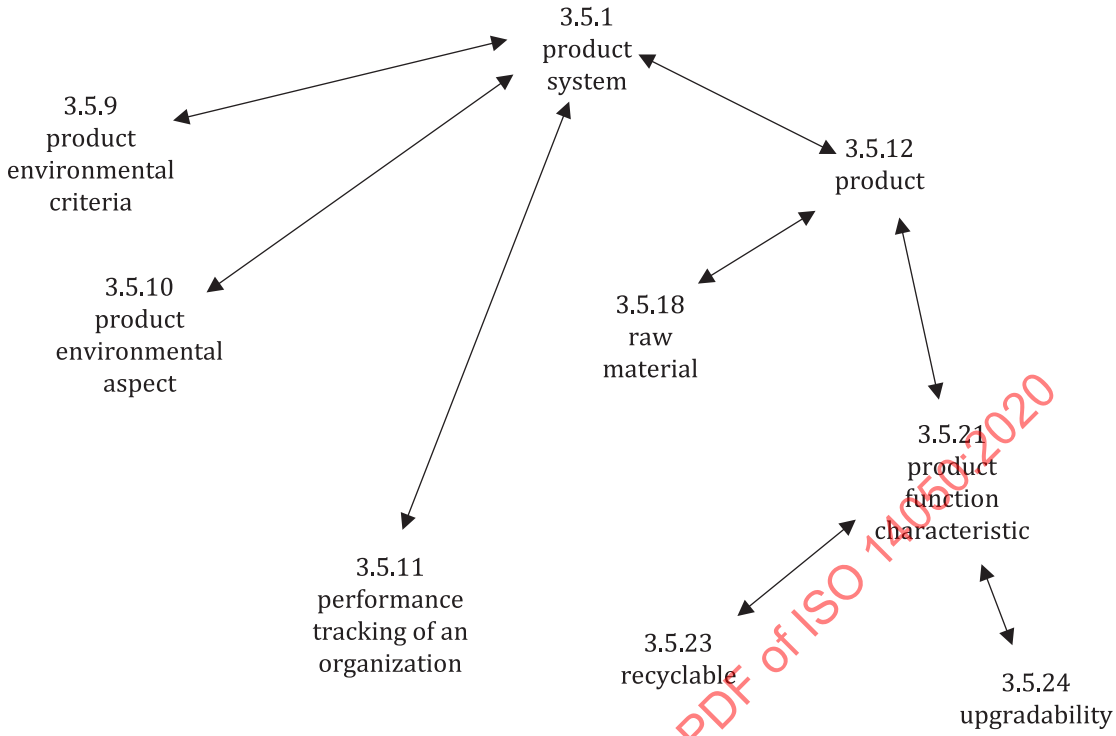


Figure A.13 — Terms relating to product systems — 3

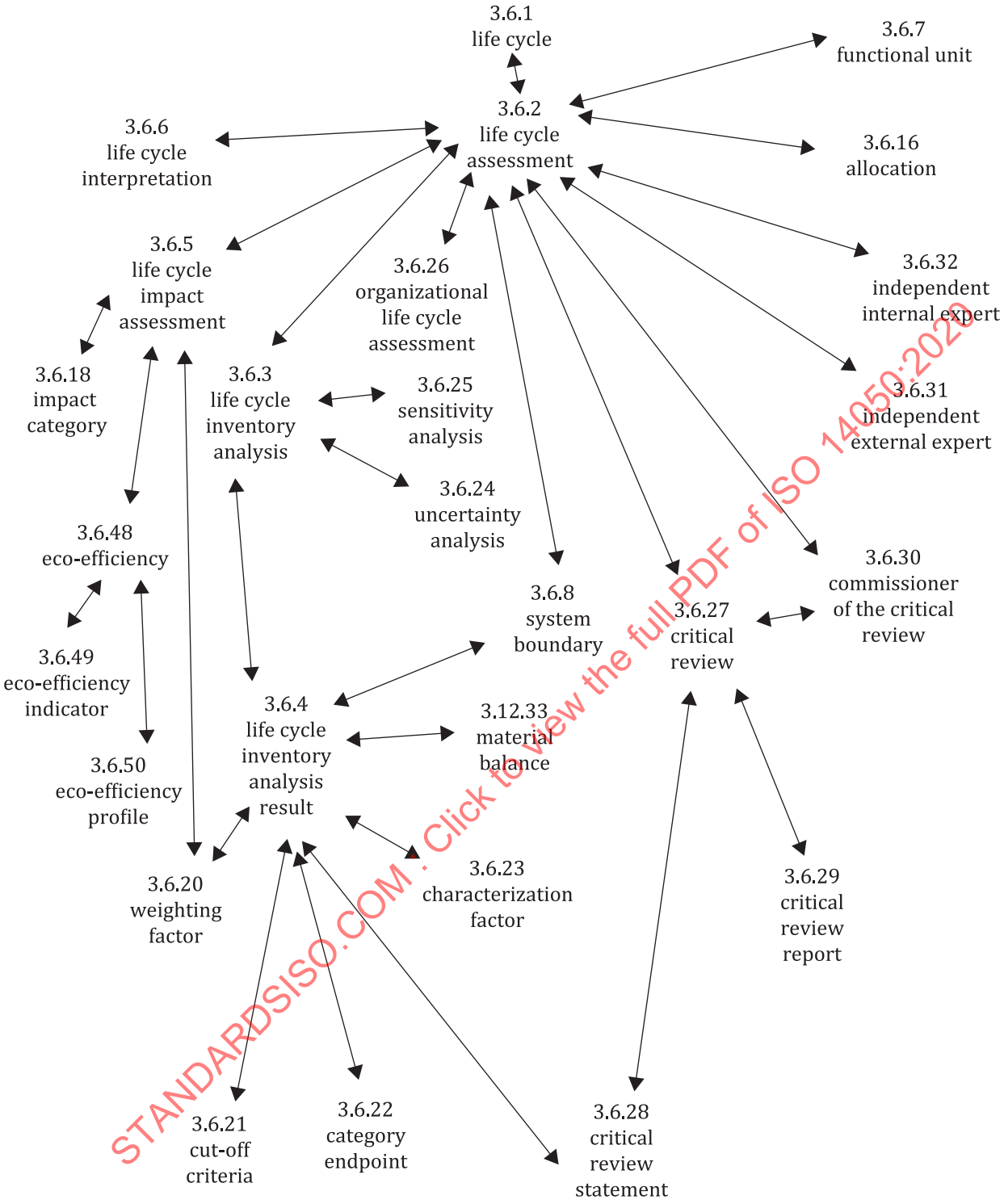


Figure A.14 — Terms relating to life cycle assessment — 1

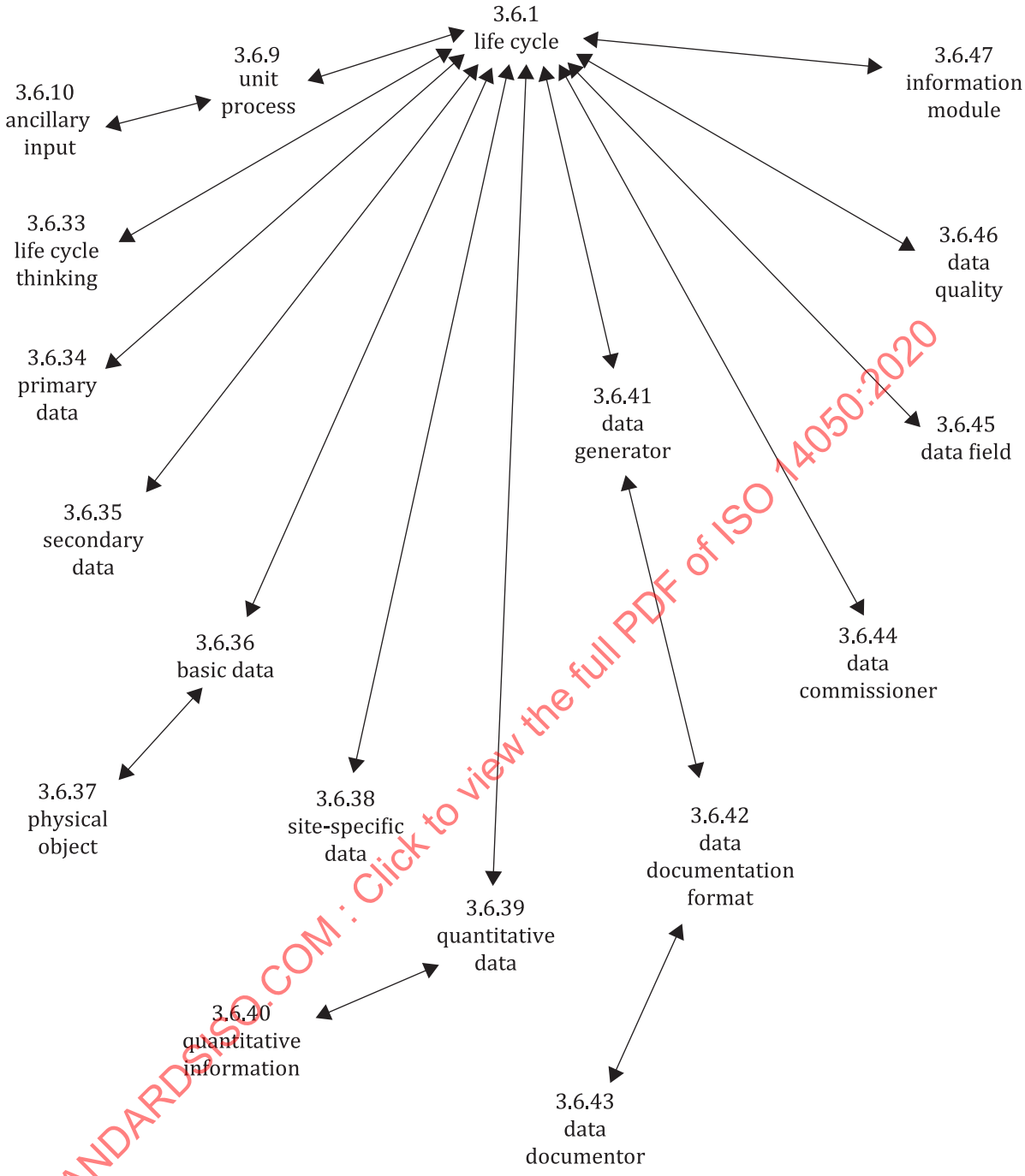


Figure A.15 — Terms relating to life cycle assessment — 2

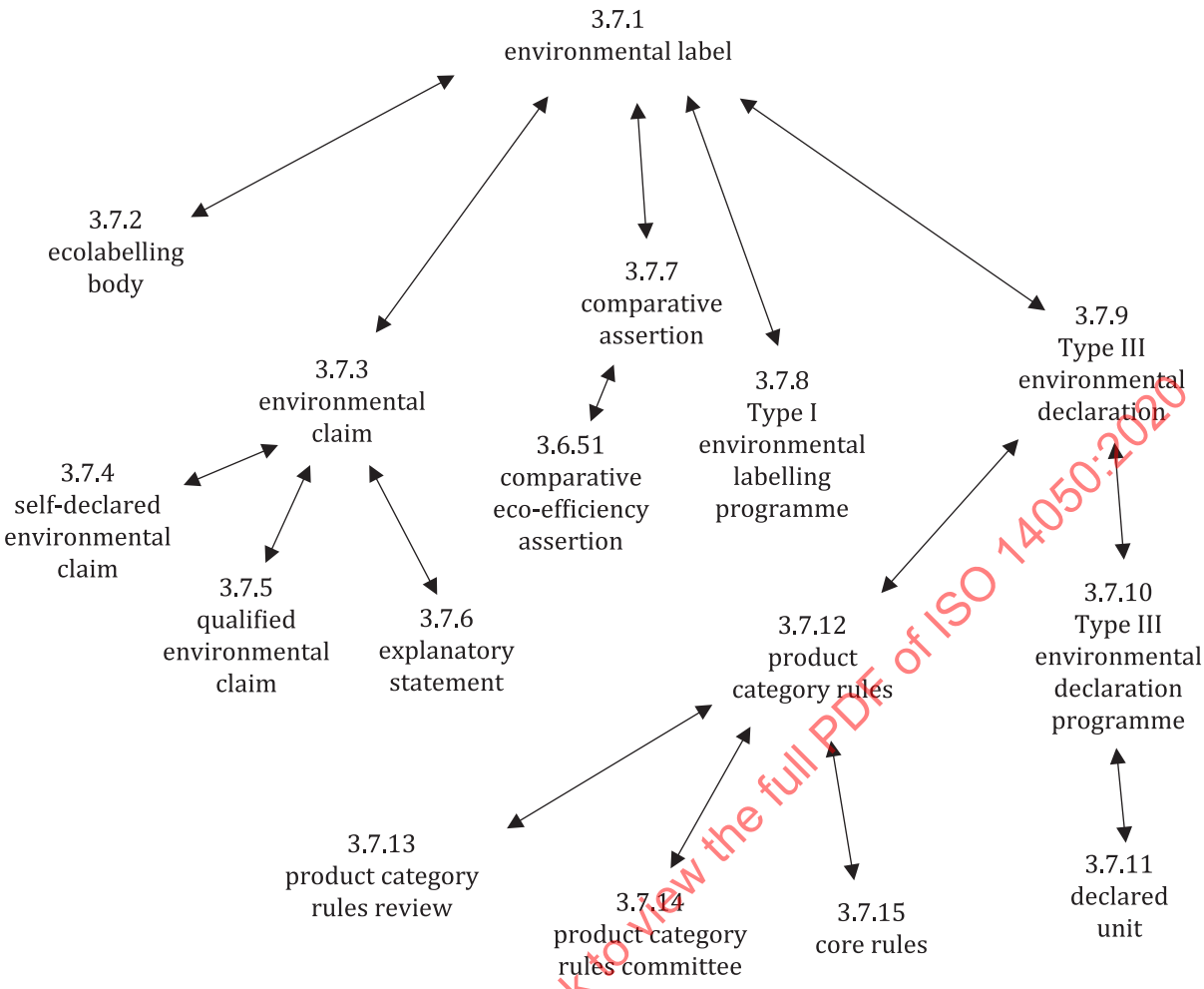


Figure A.16 — Terms relating to environmental labelling, declarations and communication — 1

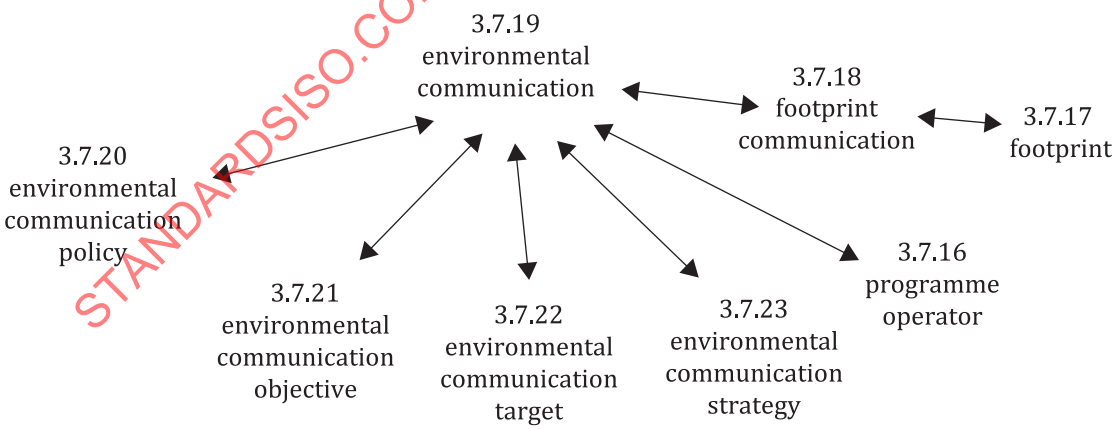


Figure A.17 — Terms relating to environmental labelling, declarations and communication — 2

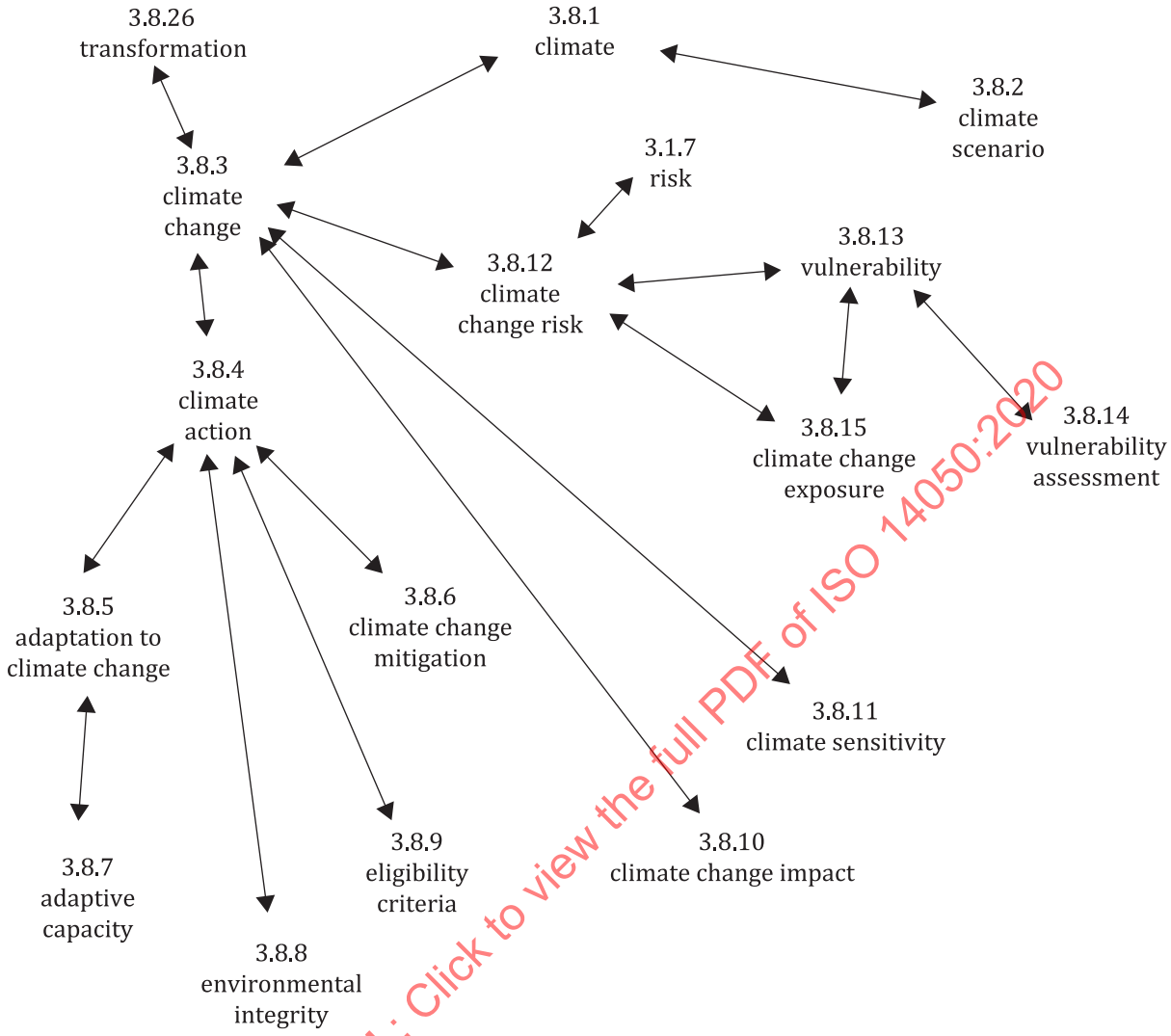


Figure A.18 — Terms relating to climate change and climate action — 1

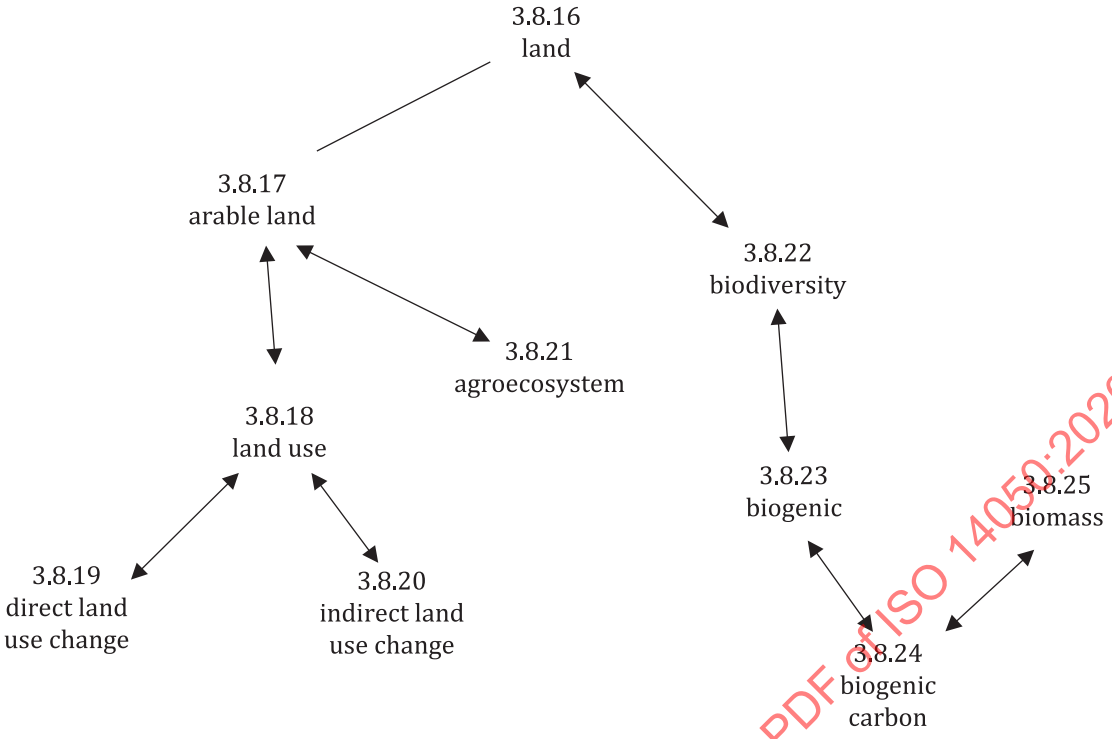


Figure A.19 — Terms relating to climate change and climate action — 2

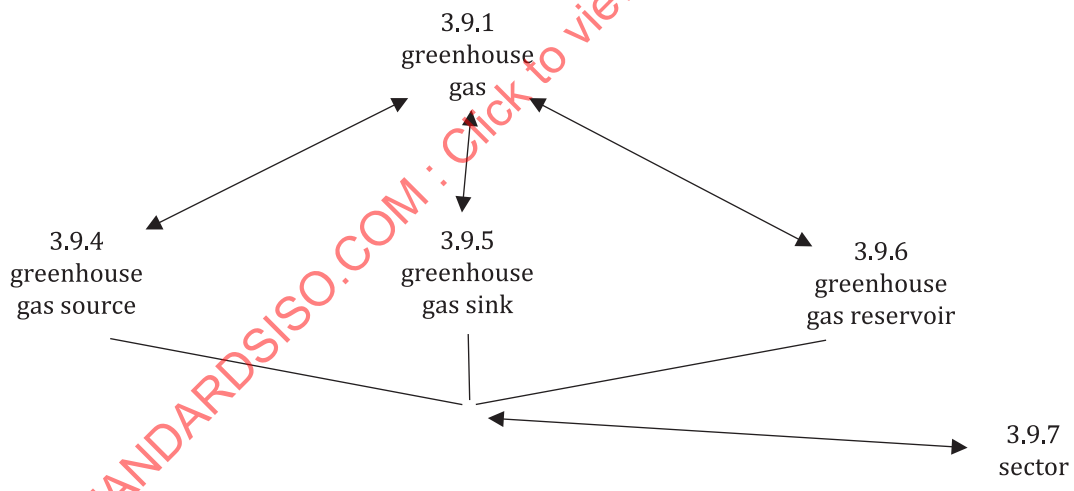


Figure A.20 — Terms relating to greenhouse gases — 1

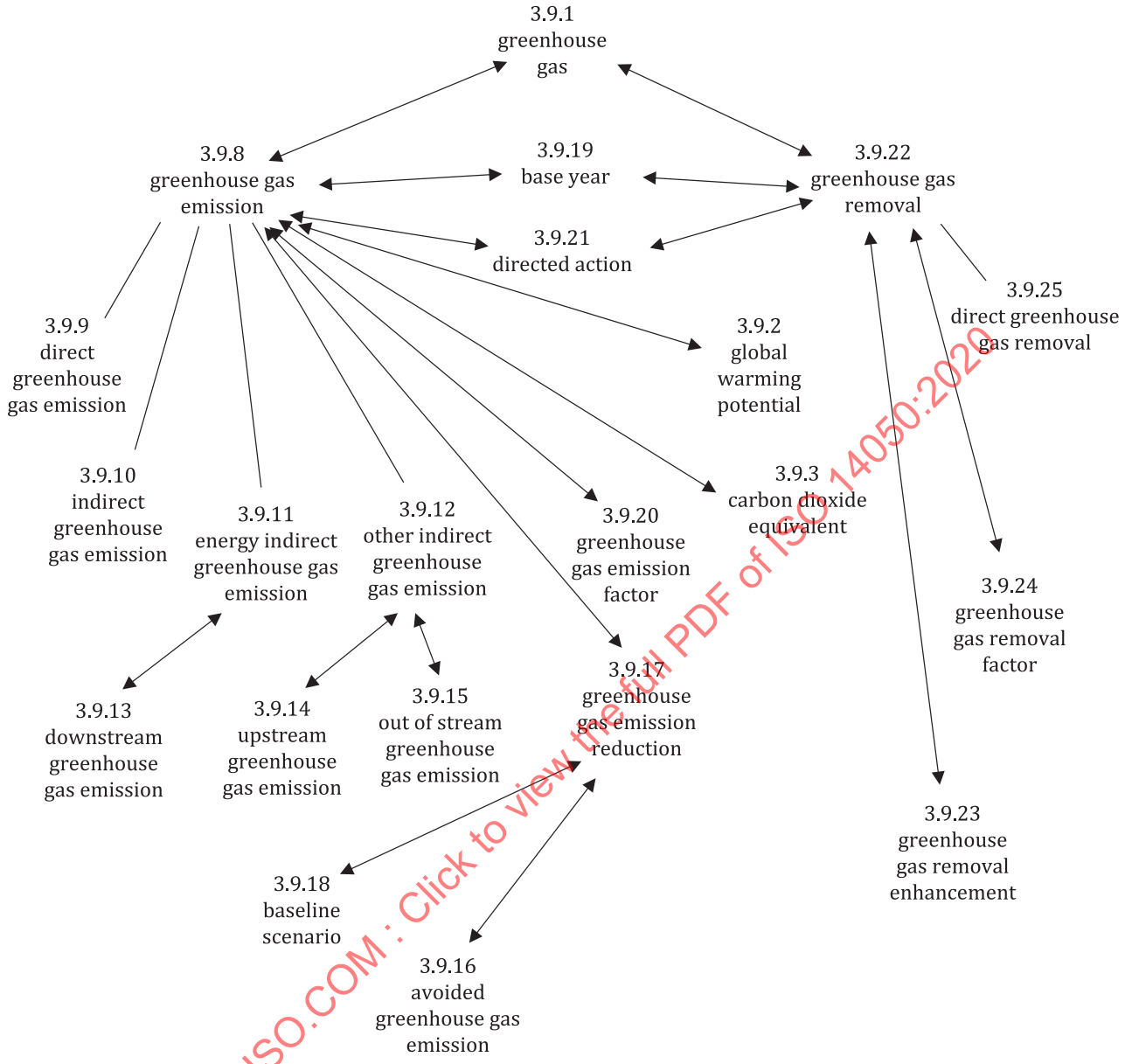


Figure A.21 — Terms relating to greenhouse gases — 2

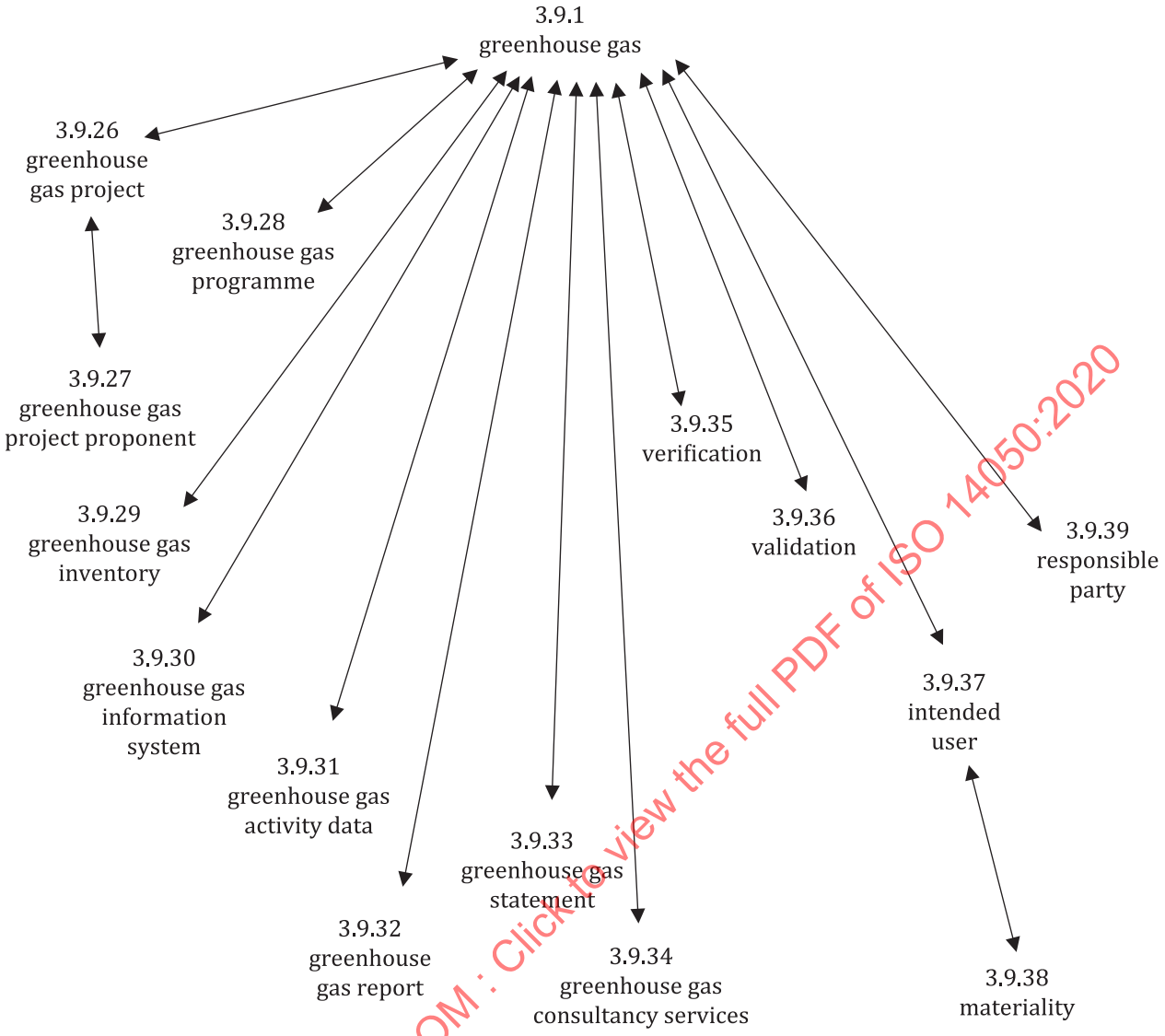


Figure A.22 — Terms relating to greenhouse gases — 3

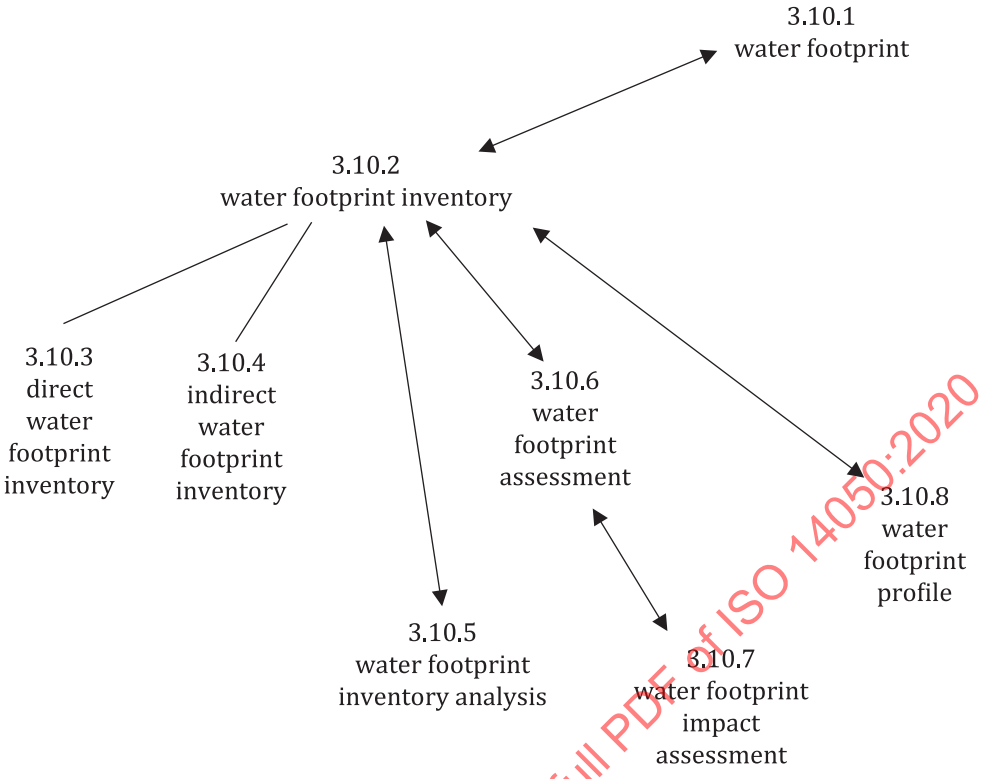


Figure A.23 — Terms relating to water footprint — 1

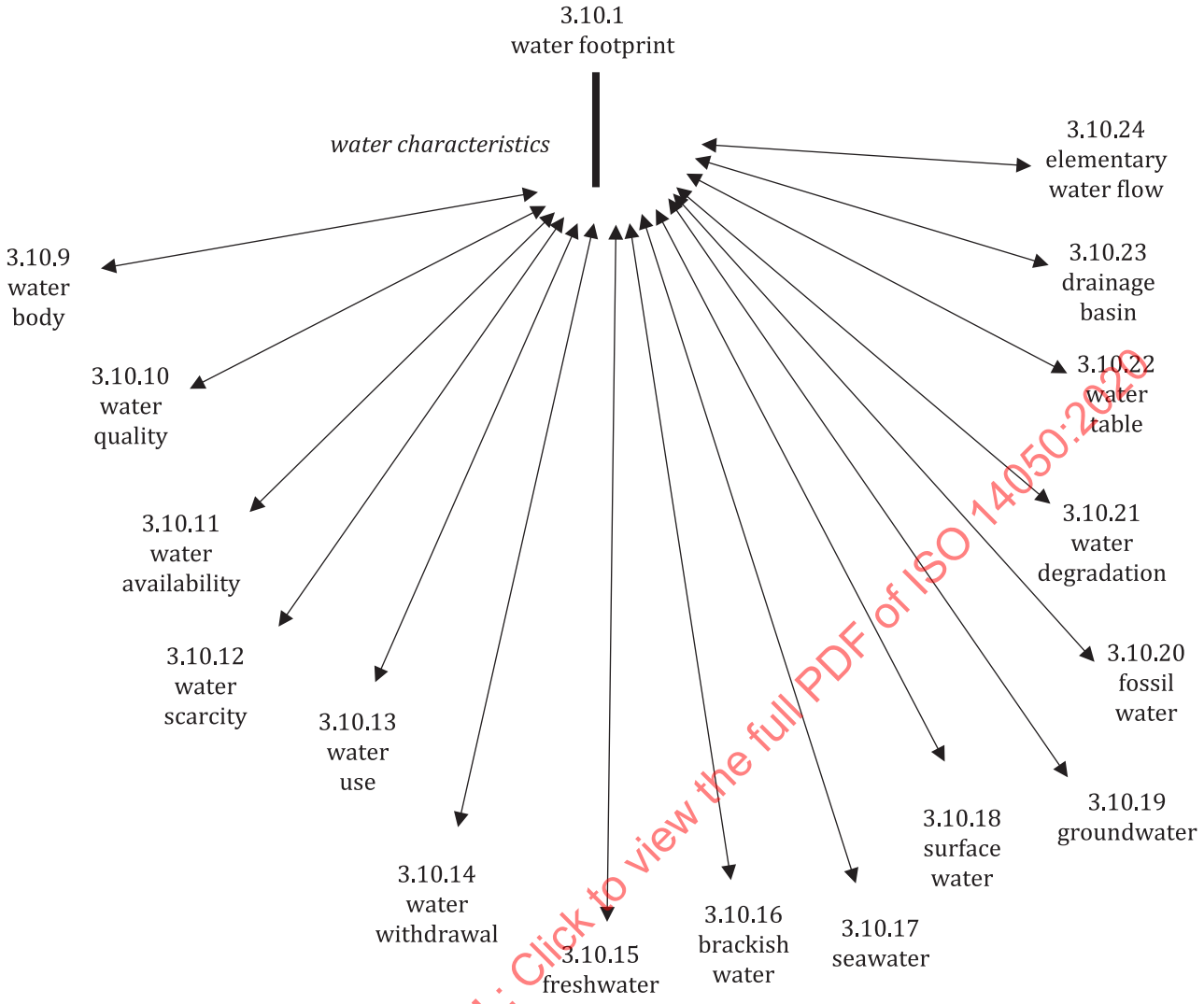


Figure A.24 — Terms relating to water footprint — 2

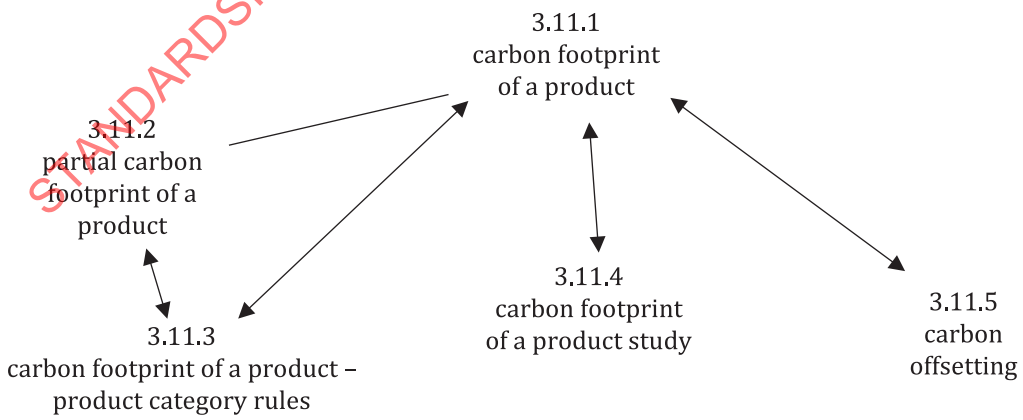


Figure A.25 — Terms relating to carbon footprint

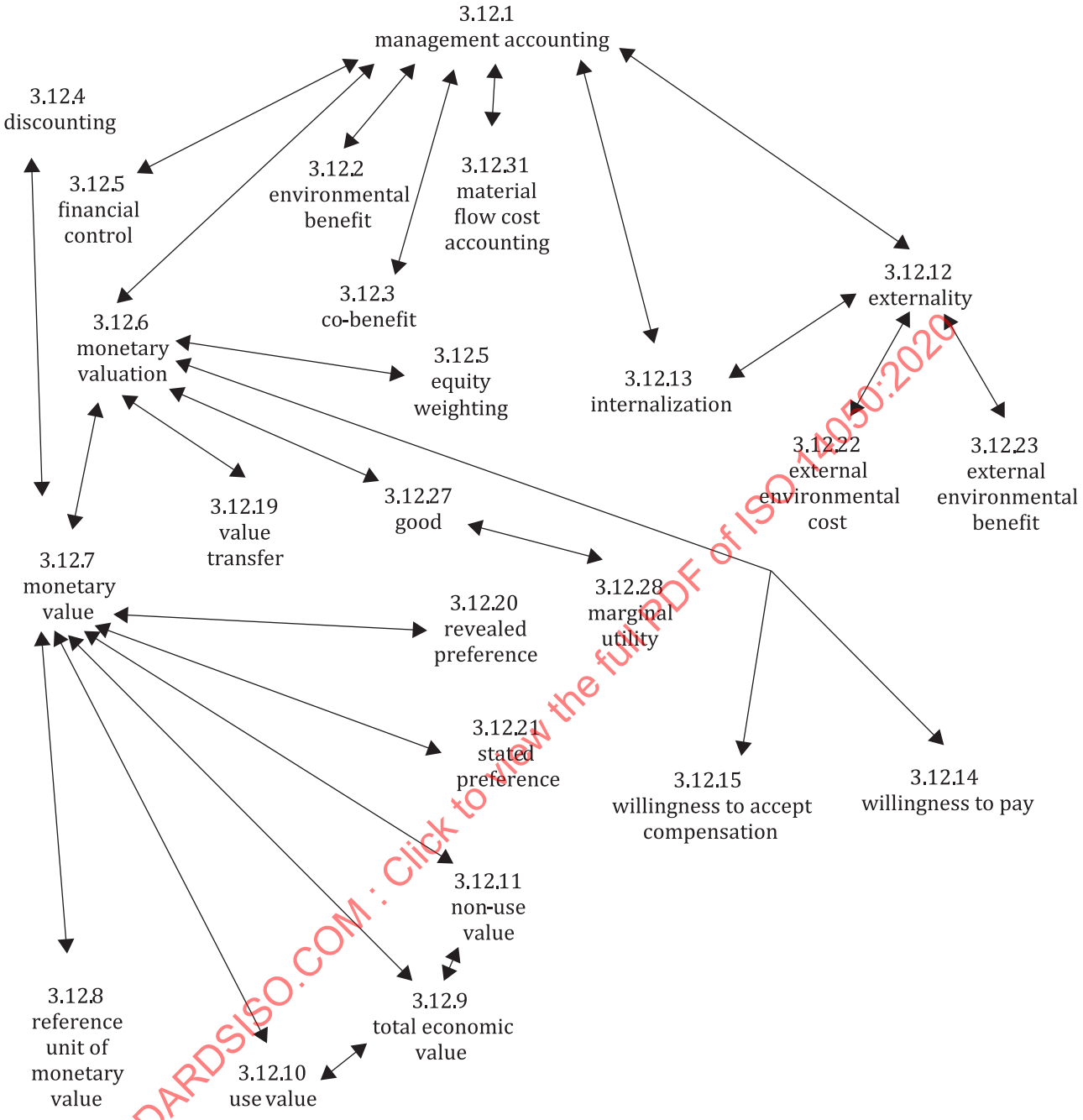


Figure A.26 — Terms relating to economy and finance — 1

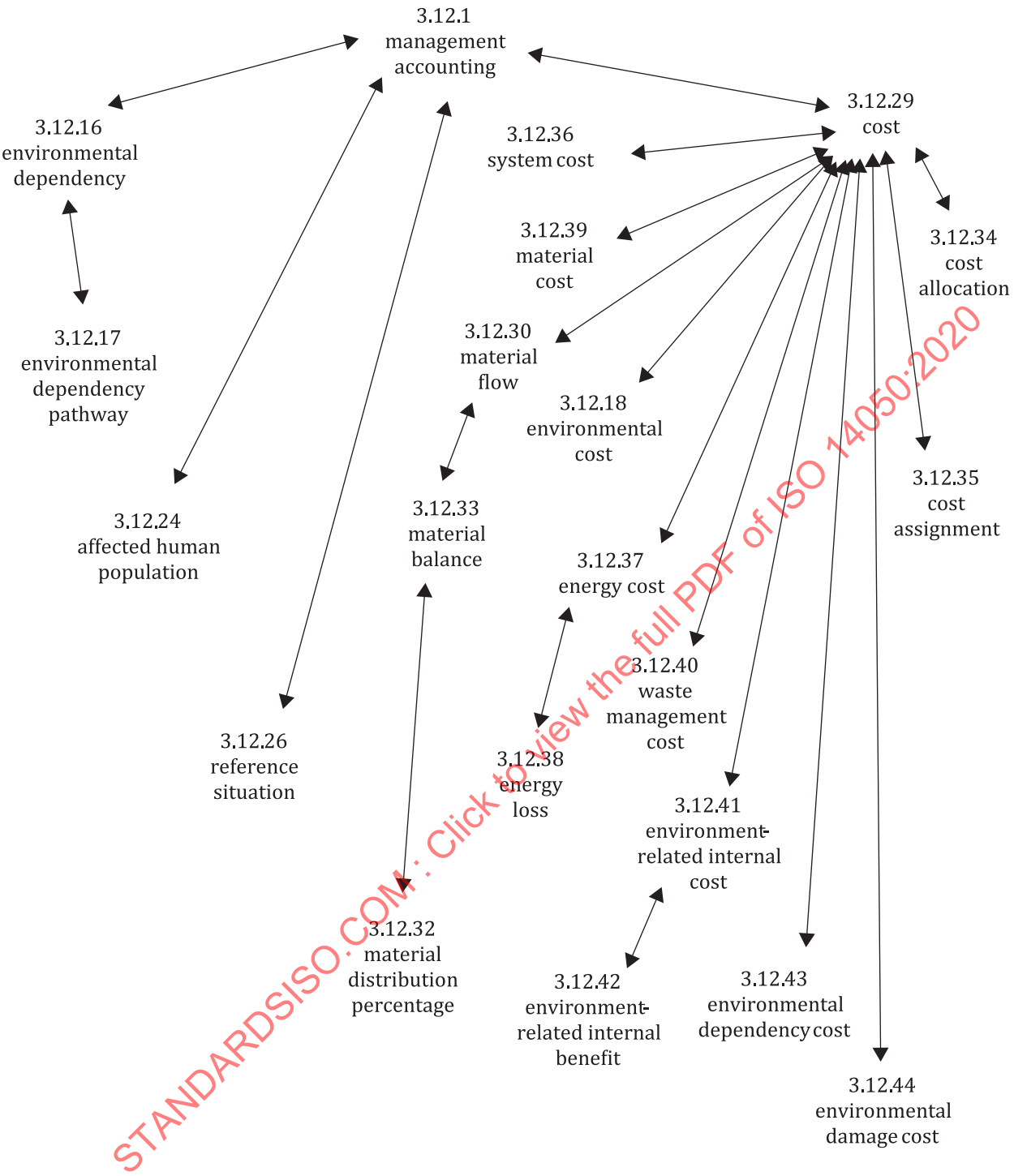


Figure A.27 — Terms relating to economy and finance — 2

Bibliography

[1] ISO 704:2009, *Terminology work — Principles and methods*

[2] ISO 10241-1, *Terminological entries in standards — Part 1: General requirements and examples of presentation*

[3] ISO 10241-2, *Terminological entries in standards — Part 2: Adoption of standardized terminological entries*

[4] ISO 14001, *Environmental management systems — Requirements with guidance for use*

[5] ISO 14004, *Environmental management systems — General guidelines on implementation*

[6] ISO 14005, *Environmental management systems — Guidelines for a flexible approach to phased implementation*

[7] ISO 14006, *Environmental management systems — Guidelines for incorporating ecodesign*

[8] ISO 14008, *Monetary valuation of environmental impacts and related environmental aspects*

[9] ISO 14015, *Environmental management — Environmental assessment of sites and organizations (EASO)*

[10] ISO 14020, *Environmental labels and declarations — General principles*

[11] ISO 14021, *Environmental labels and declarations — Self-declared environmental claims (Type II environmental labelling)*

[12] ISO 14024, *Environmental labels and declarations — Type I environmental labelling — Principles and procedures*

[13] ISO 14025, *Environmental labels and declarations — Type III environmental declarations — Principles and procedures*

[14] ISO 14026, *Environmental labels and declarations — Principles, requirements and guidelines for communication of footprint information*

[15] ISO/TS 14027, *Environmental labels and declarations — Development of product category rules*

[16] ISO 14031, *Environmental management — Environmental performance evaluation — Guidelines*

[17] ISO 14033, *Environmental management — Quantitative environmental information — Guidelines and examples*

[18] ISO 14034, *Environmental management — Environmental technology verification (ETV)*

[19] ISO 14040, *Environmental management — Life cycle assessment — Principles and framework*

[20] ISO 14044, *Environmental management — Life cycle assessment — Requirements and guidelines*

[21] ISO 14045, *Environmental management — Eco-efficiency assessment of product systems — Principles, requirements and guidelines*

[22] ISO 14046, *Environmental management — Water footprint — Principles, requirements and guidelines*

[23] ISO/TR 14047, *Environmental management — Life cycle assessment — Illustrative examples on how to apply ISO 14044 to impact assessment situations*

[24] ISO/TS 14048, *Environmental management — Life cycle assessment — Data documentation format*

[25] ISO/TR 14049, *Environmental management — Life cycle assessment — Illustrative examples on how to apply ISO 14044 to goal and scope definition and inventory analysis*

[26] ISO 14051, *Environmental management — Material flow cost accounting — General framework*

[27] ISO 14052, *Environmental management — Material flow cost accounting — Guidance for practical implementation in a supply chain*

[28] ISO 14055-1, *Environmental management — Guidelines for establishing good practices for combatting land degradation and desertification — Part 1: Good practices framework*

[29] ISO/TR 14062, *Environmental management — Integrating environmental aspects into product design and development*

[30] ISO 14063, *Environmental management — Environmental communication — Guidelines and examples*

[31] ISO 14064-1, *Greenhouse gases — Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals*

[32] ISO 14064-2, *Greenhouse gases — Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of greenhouse gas emission reductions or removal enhancements*

[33] ISO 14064-3, *Greenhouse gases — Part 3: Specification with guidance for the verification and validation of greenhouse gas statements*

[34] ISO 14065, *Greenhouse gases — Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition*

[35] ISO 14066, *Greenhouse gases — Competence requirements for greenhouse gas validation teams and verification teams*

[36] ISO 14067, *Greenhouse gases — Carbon footprint of products — Requirements and guidelines for quantification*

[37] ISO/TR 14069, *Greenhouse gases — Quantification and reporting of greenhouse gas emissions for organizations — Guidance for the application of ISO 14064-1*

[38] ISO/TS 14071, *Environmental management — Life cycle assessment — Critical review processes and reviewer competencies: Additional requirements and guidelines to ISO 14044:2006*

[39] ISO/TS 14072, *Environmental management — Life cycle assessment — Requirements and guidelines for organizational life cycle assessment*

[40] ISO/TR 14073, *Environmental management — Water footprint — Illustrative examples on how to apply ISO 14046*

[41] ISO 14080, *Greenhouse gas management and related activities — Framework and principles for methodologies on climate actions*

[42] ISO 14090, *Adaptation to climate change — Principles, requirements and guidelines*

[43] ISO 15392, *Sustainability in buildings and civil engineering works — General principles*

[44] ISO/IEC 17000:2020, *Conformity assessment — Vocabulary and general principles*

[45] ISO/IEC 17029, *Conformity assessment — General principles and requirements for validation and verification bodies*

[46] ISO 19011, *Guidelines for auditing management systems*

Alphabetical index

This index contains all terms included in Clause 3. The entry terms are sorted alphabetically by each key word of the terms. Reference is to term entry number and to concept diagram (figure number) in Annex A.

accept: **willingness to accept compensation**: 3.12.15, A.26

accounting: **management accounting**: 3.12.1, A.26, A.27

—: **material flow cost accounting**: 3.12.31, A.26

accreditation: **accreditation**: 3.4.30, A.9

—: **accreditation body**: 3.4.31, A.9

action: **climate action**: 3.8.4, A.18

—: **corrective action**: 3.1.18, A.4

—: **directed action**: 3.9.21, A.21

activity: **GHG activity data**: 3.9.31

—: **greenhouse gas activity data**: 3.9.31, A.22

adaptation: **adaptation to climate change**: 3.8.5, A.18

—: **climate change adaptation**: 3.8.5

adaptive: **adaptive capacity**: 3.8.7, A.18

added: **environmental added value**: 3.4.12, A.8

affected: **affected human population**: 3.12.24, A.27

agroecosystem: **agroecosystem**: 3.8.21, A.19

allocation: **allocation**: 3.6.16, A.14

—: **cost allocation**: 3.12.34, A.27

analysis: **life cycle inventory analysis**: 3.6.3, A.14

—: **life cycle inventory analysis result**: 3.6.4, A.14

—: **sensitivity analysis**: 3.6.25, A.14

—: **uncertainty analysis**: 3.6.24, A.14

—: **water footprint inventory analysis**: 3.10.5, A.23

ancillary: **ancillary input**: 3.6.10, A.15

arable: **arable land**: 3.8.17, A.19

area: **area of concern**: 3.2.11, A.5

—: **environmental topic area**: 3.2.12, A.5

aspect: **environmental aspect**: 3.2.20, A.6

—: **product environmental aspect**: 3.5.10, A.11, A.13

assertion: **comparative assertion**: 3.7.7, A.16

—: **comparative eco-efficiency assertion**: 3.6.51, A.16

—: **GHG assertion**: 3.9.33

assessment: **conformity assessment**: 3.4.1

—: **life cycle assessment**: 3.6.2, A.14

—: **life cycle impact assessment**: 3.6.5, A.14

—: **organizational life cycle assessment**: 3.6.26, A.14

—: **vulnerability assessment**: 3.8.14, A.18

—: **water footprint assessment**: 3.10.6, A.23

—: **water footprint impact assessment**: 3.10.7, A.23

—: **cost assignment**: 3.12.35, A.27

assurance: **level of assurance**: 3.4.28, A.9

audit: **audit**: 3.1.19, A.4, A.10

—: **audit client**: 3.4.33, A.10

—: **audit conclusion**: 3.4.47, A.10

—: **audit criteria**: 3.4.44, A.10

—: **audit evidence**: 3.4.45, A.10

—: **audit findings**: 3.4.46, A.10

—: **audit plan**: 3.4.43, A.10

—: **audit programme**: 3.4.41, A.10

—: **audit scope**: 3.4.42, A.10

—: **audit team**: 3.4.35, A.10

—: **combined audit**: 3.4.38, A.10

—: **internal audit**: 3.4.40, A.10

—: **joint audit**: 3.4.39, A.10

auditee: **auditee**: 3.4.34, A.10

auditor: **auditor**: 3.4.37, A.10

authority: **local authority**: 3.2.17, A.5

availability: **water availability**: 3.10.11, A.24

avoided: **avoided GHG emission**: 3.9.16

—: **avoided greenhouse gas emission**: 3.9.16, A.21

balance: **material balance**: 3.12.33, A.14, A.27

base: **base year**: 3.9.19, A.21

baseline: **baseline**: 3.12.26

—: **baseline scenario**: 3.9.18, A.21

—: **environmental baseline**: 3.2.6, A.5

—: **GHG baseline scenario**: 3.9.18

—: **greenhouse gas baseline scenario**: 3.9.18

basic: **basic data**: 3.6.36, A.15

basin: **drainage basin**: 3.10.23, A.24

benchmark: **benchmark**: 3.2.15, A.5

benefit: **environmental benefit**: 3.12.2, A.26

—: **environment-related internal benefit**: 3.12.42, A.27

—: **external environmental benefit**: 3.12.23, A.26

biodiversity: **biodiversity**: 3.8.22, A.19

biogenic: **biogenic**: 3.8.23, A.19

—: **biogenic carbon**: 3.8.24, A.19

biological: **biological diversity**: 3.8.22

biomass: **biomass**: 3.8.25, A.19

body: **accreditation body**: 3.4.31, A.9

—: **ecolabelling body**: 3.7.2, A.16

—: **test body**: 3.4.18, A.8

—: **validation body**: 3.4.24, A.9

—: **verification body**: 3.4.4, A.8

—: **water body**: 3.10.9, A.24

boundary: **system boundary**: 3.6.8, A.14

brackish: **brackish water**: 3.10.16, A.24

capacity: **adaptive capacity**: 3.8.7, A.18

carbon: **biogenic carbon**: 3.8.24, A.19

—: **carbon dioxide equivalent**: 3.9.3, A.21

—: **carbon footprint of a product**: 3.11.1, A.25

—: **carbon footprint of a product – product category rules**: 3.11.3, A.25

—: **carbon footprint of a product study**: 3.11.4, A.25

—: **carbon offsetting**: 3.11.5, A.25

—: **partial carbon footprint of a product**: 3.11.2, A.25

category: **carbon footprint of a product – product category rules**: 3.11.3, A.25

—: **category endpoint**: 3.6.22, A.14

—: **impact category**: 3.6.18, A.14

—: **impact category indicator**: 3.6.19

—: **product category rules**: 3.7.12, A.16

—: **product category rules committee**: 3.7.14, A.16

—: **product category rules review**: 3.7.13, A.16

centre: **quantity centre**: 3.12.45

certification: **certification**: 3.4.48, A.10

CFP: **CFP**: 3.11.1

—: **CFP study**: 3.11.4

—: **partial CFP**: 3.11.2

CFP–PCR: **CFP–PCR**: 3.11.3

chain: **supply chain**: 3.5.27, A.11

—: **value chain**: 3.5.28, A.11

change: **adaptation to climate change**: 3.8.5, A.18

—: **climate change**: 3.8.3, A.18

—: **climate change adaptation**: 3.8.5