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Bio-based products — Sustainability criteria

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National foreword

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Biobasierte Produkte - Nachhaltigkeitskriterien

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European foreword

This document (EN 16751:2016) has been prepared by Technical Committee CEN/TC 411 “Bio-based products”, the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2016, and conflicting national standards shall be withdrawn at the latest by October 2016.

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

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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Introduction

Bio-based products from forestry and agriculture have a long history of application, such as paper, board and various chemicals and materials. The last decades have seen the emergence of new bio-based products in the market. Some of the reasons for this increased interest lie in the bio-based products' benefits in relation to the depletion of fossil resources and climate change. Bio-based products may also provide additional product functionalities. This has triggered a wave of innovation with the development of knowledge and technologies allowing new transformation processes and product development.

Acknowledging the need for common standards for bio-based products, the European Commission issued mandate M/492[1)], resulting in a series of standards developed by CEN/TC 411, with a focus on bio-based products other than food, feed and biomass for energy applications.

The standards of CEN/TC 411 "Bio-based products" provide a common basis on the following aspects:

— Common terminology;

— Bio-based content determination;

— Life Cycle Assessment (LCA);

— Sustainability aspects;

— Declaration tools.

It is important to understand what the term bio-based product covers and how it is being used. The term 'bio-based' means 'derived from biomass'. Bio-based products (bottles, insulation materials, wood and wood products, paper, solvents, chemical intermediates, composite materials, et cetera) are products which are wholly or partly derived from biomass. It is essential to characterize the amount of biomass contained in the product by for instance its bio-based content or bio-based carbon content.

The bio-based content of a product does not provide information on its environmental impact or sustainability, which may be assessed through LCA and sustainability criteria. In addition, transparent and unambiguous communication within bio-based value chains is facilitated by a harmonized framework for certification and declaration.

This European Standard has been developed with the aim to identify sustainability aspects applicable to all bio-based products, covering all three pillars of sustainability (environmental, social and economic). Though the scope of CEN/TC 411 excludes food, feed and energy, sustainability of biomass and bio-based products should follow the same principles irrespective of their use. All LCA-related topics are covered by EN 16760 *Bio-based products - Life Cycle Assessment*.

The concept of Sustainable Development expresses the shared concerns about the state and sustainability of environmental, economic and social dimensions of today and tomorrow's world. The journey towards sustainability finds sustainable production and consumption at its very heart. It also relates to the social responsibility of organizations and the objective to improve social and environmental performances along with sustained economic profitability – all in the perspective to contribute notably to greater human well-being.

The criteria of this European Standard can either be directly used by an operator or can be used in proprietary schemes and standards which cover sustainability aspects.

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1) A Mandate is a standardization task embedded in European trade laws. M/492 Mandate is addressed to the European Standardization bodies, CEN, CENELEC and ETSI, for the development of horizontal European Standards for bio-based products.

By defining a common framework, this European Standard will allow the provision of information on sustainability aspects for the following uses:

— for an economic operator to communicate along the supply chain on the sustainability aspects of the biomass used as input to the bio-based product;

— for an economic operator to assess and manage sustainability aspects of its operation, and to report in a consistent manner along the supply chain;

— for economic operators in a supply chain (see Figure 1 below) to exchange and share information on the sustainability aspects of the processes and bio-based products with a common framework and understanding (B2B communication); and

— for a programme operator to develop certification schemes to assess the sustainability of the biomass used as input to the bio-based products or of the bio-based part of the bio-based product.

NOTE This European Standard refers to the bio-based part of products only. Without the use of relevant product standards it is not possible to make a claim for the whole product.

The way indicators are addressed will differ according to the use.

Figure 1 illustrates the scope of this European Standard.

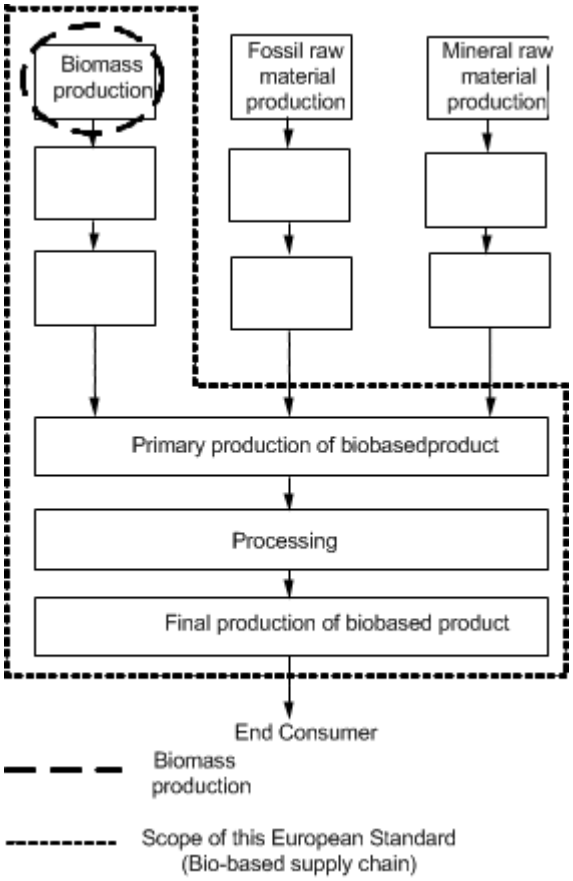

Figure 1 — Illustration of the scope of this European Standard

1 Scope

This European Standard sets horizontal sustainability criteria applicable to the bio-based part of all bio-based products, excluding food, feed and energy, covering all three pillars of sustainability; environmental, social and economic aspects. If the product is partly bio-based, this European Standard can only be used for the bio-based part since it does not address non-bio-based (fossil, mineral) parts of a product.

This European Standard can be used for two applications; either to provide sustainability information about the biomass production only or to provide sustainability information in the supply chain for the bio-based part of the bio-based product.

This European Standard sets a framework to provide information on management of sustainability aspects.

This European Standard cannot be used to make claims that operations or products are sustainable since it does not establish thresholds or limits.

This European Standard can however be used for business-to-business (B2B) communication or for developing product specific standards and certification schemes.

2 Normative references

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

EN 16575 *Bio-based products - Vocabulary*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 16575 and the following apply.

3.1
activity under direct control
activity conducted by or subcontracted by the economic operator

3.2
biodiversity
biological diversity
variability among living organisms from all sources, including, inter alia, terrestrial, marine and other aquatic ecosystems, and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems

[SOURCE: Convention on Biological Diversity (CBD), United Nations (1992)]

3.3
chain-of-custody
system by which a connection is made between information or claims concerning raw materials or intermediate products and claims concerning final products, including all the stages from the raw material production up until the release of the final product for consumption

[SOURCE: EN 16214-1:2012, 2.16]

3.4
child labour
work that deprives children of their childhood, their potential and their dignity, and that is harmful to their physical and mental development

Note 1 to entry: It refers to work that:

- is mentally, physically, socially or morally dangerous and harmful to children; and
- interferes with their schooling by:
  - depriving them of the opportunity to attend school;
  - obliging them to leave school prematurely; or
  - requiring them to attempt to combine school attendance with excessively long and heavy work.

[SOURCE: International Labour Organization]

3.5
criterion
requirement that describes what is to be assessed

Note1 to entry: A criterion adds meaning and operability to a principle without itself being a direct measure of performance.

Note 2 to entry: A criterion is characterized by a set of related indicators.

[SOURCE: ISO 13065:2015, 3.11, modified: Note 3 deleted]

3.6
direct effects
measurable environmental, social and economic effects under the direct control of the economic operator and caused by the process being analysed

Note 1 to entry: Direct effects applicable in this European Standard are included under the criteria and indicators.

Note 2 to entry: Other potential effects may be added to the consideration when an international consensus standard is established for the effect.

[SOURCE: ISO 13065:2015, 3.12, modified: Notes 1, 2 and 4 deleted and in Note 1 *within the scope of this International Standard are considered* replaced by *applicable in this European Standard are included*]

3.7
economic operator
individual or organization that has ownership or control of one or more processes of the supply chain for the bio-based product

[SOURCE: ISO 13065:2015, 3.13, modified: *bioenergy supply chain* replaced by *supply chain for the bio-based product*]

3.8
ecosystem
system of complex interactions between communities of plants, animals, microorganisms and their environment, which functions as a unit

[SOURCE: ISO 13065:2015, 3.14]

3.9
ecosystem services
benefits that people and other living organisms obtain from ecosystems, including provisioning, regulating, supporting, and cultural services

[SOURCE: Millennium Ecosystem Assessment, 2005. Ecosystems and Human Well-being: Synthesis.Island Press, Washington, DC, modified: *and other living organisms* added.]

3.10
environment
surroundings in which an organization operates, including air, water, land, natural resources (including biotic and abiotic resources), flora, fauna, humans and their interrelation

[SOURCE: EN ISO 14001:2004, 3.5, modified – *(including biotic and abiotic resources)* added and Note 1 to entry deleted]

3.11
food security
physical and economic access, at all times, to sufficient, safe and nutritious food to meet dietary needs and food preferences for an active and healthy life

[SOURCE: FAO Glossary Water for Food and Ecosystems 2005]

3.12
forced or compulsory labour
work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily

[SOURCE: International Labour Organization]

3.13
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

Note 1 to entry: A list of greenhouse gases with their recognized global warming potentials is provided in Annex A of ISO/TS 14067:2013.

Note 2 to entry: Water vapour and ozone are anthropogenic as well as natural greenhouse gases but are not included as recognized greenhouse gases due to difficulties, in most cases, in isolating the human-induced component of global warming attributable to their presence in the atmosphere.

[SOURCE: ISO/TS 14067, 3.1.3.1, modified: Note 1 to entry has been modified]

3.14
greenhouse gas emission
GHG emission
release of a greenhouse gas to the atmosphere

Note 1 to entry: The common phrase "over a specified time period" has been omitted because the time period for a Carbon Footprint of a Product (CFP) is determined by the life cycle of the product; the term "total" has been omitted because a CFP allows for the quantification of emissions relevant to footprint calculation.

[SOURCE: ISO/TS 14067:2013, 3.1.3.5, modified – *released* moved to the subject as *release* to replace *mass*.]

3.15
indicator
quantitative, qualitative or binary variable that can be measured or described to assess an aspect of a defined criterion

[SOURCE: ISO 13065:2015, 3.27, modified: *in response to* replaced by *to assess an aspect of.*]

3.16
intermediate product
intermediate
output from a unit process that is input to other unit processes that require further transformation within the system

[SOURCE: EN ISO 14040:2006, 2.23]

3.17
land use
total arrangements, activities and inputs undertaken in a certain land cover type

Note 1 to entry: The term land use is also used in the sense of the social and economic purposes for which land is managed (e.g. grazing, timber extraction and conservation).

[SOURCE: IPCC Fourth Assessment Report (2007)]

3.18
land use change
change in the use or management of land by humans, which may lead to a change in land cover

[SOURCE: IPCC Fourth Assessment Report (2007), modified: Note 1 to Entry deleted.]

3.19
land use rights
form of land tenure, whether formal or informal, including customary rights or traditions

Note 1 to entry: There is great variability in land use rights in different parts of the world as they relate to systems of ownership and property rights.

[SOURCE: ISO 13065:2015, 3.29]

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

[SOURCE: EN ISO 14040:2006, 3.1]

3.21
organization
company, corporation, firm, enterprise, cooperative, authority, or institution, or part or combination thereof, whether incorporated or not, public or private, that has its own functions and administration

Note 1 to entry: For organizations with more than one operating unit, a single operating unit may be defined as an organization.

[SOURCE: EN ISO 14001:2004, 3.16, modified – "cooperative" has been added]

3.22
principle
aspirational goal that governs decisions or behaviour

Note 1 to entry: A principle can be characterized by a set of criteria.

[SOURCE: ISO 13065:2015, 3.34, modified: Note 1 added.]

3.23
procedure
specified way to carry out an activity or a process

Note 1 to entry: Procedures can be documented or not.

Note 2 to entry: When a procedure is documented, the term "written procedure" or "documented procedure" is frequently used. The document that contains a procedure can be called a "procedure document."

[SOURCE: EN ISO 9000:2005, 3.4.5]

3.24
process
set of interrelated or interacting activities which transforms inputs into outputs

Note 1 to entry: Inputs to a process are generally outputs of other processes.

[SOURCE: EN ISO 9000:2005, 3.4.1, modified – Note 2 and 3 to entry have been omitted]

3.25
protected area
clearly defined geographical space, recognized, dedicated and managed, through legal means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values

Note 1 to entry: This does not include Ecological Focus Areas as defined in European Common Agriculture Policy, since these are arable land.

[SOURCE: International Union for Conservation of Nature (IUCN), modified: Note 1 to entry added]

3.26
raw material
feedstock
primary or secondary material that is used to produce a product

Note 1 to entry: Secondary material includes reused, recycled or recovered material.

[SOURCE: ISO 14040:2006, 3.15, modified: Feedstock added as a second term, the words *reused or recovered* added to Note 1 to entry.]

3.27
stakeholder
any individual, group, organization, or authority that can affect or be directly affected by the operation under consideration

[SOURCE: ISO 13824:2009, 3.20, modified – Wording aligned to the context of this European Standard]

3.28
stakeholder engagement
process where stakeholders are provided opportunity to comment and where the economic operator provides a documented response to any grievance of substantial relevance to the sustainability of the bio-based product presented by stakeholders

3.29
subcontracted activity
activity undertaken by a subcontractor, being an organization or operator that undertakes aspects of e.g. harvesting, collecting, processing, handling, storage, transport or distribution of the products, co-products, or waste on behalf of the economic operator, on a contractual basis, either paid or non-paid

3.30
supply chain
linked set of resources and processes that begins with the production of raw material and extends through the manufacturing, processing, handling and delivery of products to the purchaser

Note 1 to entry: The supply chain may include vendors, manufacturing facilities, logistics providers, internal distribution centres, distributors, wholesalers and other entities involved in the manufacturing, processing, handling and delivery of the goods and their related services.

Note 2 to entry: Adapted from ISO 28001:2007.

[SOURCE: EN 16214-1:2012, 2.75]

3.31
sustainable development
development that meets the needs of the present without compromising the ability of future generations to meet their own needs

Note 1 to entry: Sustainable development is about integrating the goals of a high quality of life, health and prosperity with social justice and maintaining the earth's capacity to support life in all its diversity. These social, economic and environmental goals are interdependent and mutually reinforcing. Sustainable development can be treated as a way of expressing the broader expectations of society as a whole.

[SOURCE: ISO 26000:2010, 2.23]

3.32
sustainability
goal of sustainable development

3.33
sustainability aspect
social, economic or environmental impact that can be caused by activities, products, or services of an economic operator

3.34
water availability
extent to which humans and ecosystems have sufficient water resources for their needs

Note 1 to entry: Water availability depends on the location and timing. The temporal and geographical coverage and resolution for evaluating water availability should be determined at the goal and scope phase.

Note 2 to entry: Water quality can also influence availability, e.g. if quality is not sufficient to meet users' needs.

Note 3 to entry: Land and water management (e.g. forestry, agriculture, conservation of wetlands, hydropower) can modify water availability (e.g. regulating river flows and recharging groundwater).

Note 4 to entry: If water availability only considers water quantity, it is called water scarcity.

[SOURCE: ISO 14046:2014, 3.3.16]

3.35
water scarcity
extent to which demand for water compares to the replenishment of water in an area, e.g. a drainage basin, without taking into account the water quality

[SOURCE: ISO 14046:2014, 3.3.17]

4 General requirements

4.1 General

This clause contains overarching requirements that shall be fulfilled when applying this European Standard.

All criteria in this European Standard shall be addressed for the biomass production (see Figure 1). This European Standard may also be used for other operations along the bio-based product supply chain, by addressing all of the criteria. For a criterion to be addressed, a response shall be given to each indicator regarding activities under the direct control of the economic operator. This information may be based on, for example, existing certification schemes for biomass, or explanation on compliance with legislation.

When addressing indicators, the procedures and measures taken should be supported by quantitative metrics when relevant.

If indicators are not relevant/not applicable on objective grounds for the operations considered, it shall be justified.

If indicators are neither relevant nor possible to apply for the operations considered, it shall be documented and justified in a transparent manner.

An indicator is relevant if it is part of or affected by the process within the reporting boundaries.

Explanation shall be provided to address an indicator, if information is not available.

It should be noted that the economic operator can be active in any part of the supply chain producing or selling the bio-based product.

4.2 Reporting boundaries

Reporting boundaries should be defined in accordance with the position or role of the economic operator in the supply chain and the intended use of this European Standard by the economic operator.

The reporting boundaries selected shall be justified and documented. Any exclusion of a process or part of a process under the direct control of the economic operator, (e.g. raw material selection, processing or waste disposal) from the reporting boundaries shall be justified. Processes under direct control include activities conducted by or subcontracted by the economic operator.

4.3 Time periods

The assessment of sustainability aspects shall cover the relevant time period for the operations considered. The time periods selected for one operation can vary depending on the indicators.

The choice of time periods for data collection shall consider the potential bias of intra- and inter-annual variation and, if relevant, use values representing the trend over the selected periods.

In case of biomass production, the selected time period shall consider the crop rotation period.

EXAMPLE The crop rotation period can vary from a few months in paddy crops to more than 100 years in long-rotation forestry.

The time periods selected shall be documented and justified.

4.4 Information recording and handling

4.4.1 Biomass feedstock type and origin

When using primary biomass feedstock to produce the bio-based product(s), the type (species) and the origin (e.g. territorial unit within a country, water body) shall be documented. In case terrestrial biomass is obtained from land with high biodiversity value (e.g. highly biodiverse grasslands or partly wooded areas with high degree of biodiversity) and/or from land with high carbon stock (e.g. wetlands and peat bogs), the land type shall be specified. For marine biomass the FAO Major Fishing Areas code shall be specified at subdivision level.

When using secondary feedstock or waste to produce the bio-based product(s), the type (e.g. used cooking oil, recycled fibres) shall be documented.

4.4.2 Transparency

The data, information sources and assumptions used shall be documented and justified in a transparent manner.

4.4.3 Information recording

Economic operators shall maintain records and documentation of procedures described to address indicators in this European Standard.

4.4.4 Transmission of information

A chain-of-custody may be used to transmit information through the supply chain. If a chain-of-custody system is used, the economic operator shall disclose which chain-of-custody system(s) is/are adopted. Such system should be recognized and widely accepted, internationally, regionally or nationally.

4.4.5 Confidentiality

When data are made available in order to demonstrate the compliance with this European Standard, the maintenance of the confidentiality of data shall be ensured. The economic operator is responsible for clarifying what data are confidential and that the receiving party is responsible for not sharing received confidential data with third parties.

4.5 Science-based approach

Decisions are preferably based on natural science. If this is not possible or adequate due to the type of indicator, other scientific approaches (e.g. from social and economic sciences) may be used or international conventions may be referred to. If neither a scientific basis exists nor a justification based on other scientific approaches or international conventions is possible, then, as appropriate, decisions may be based on value (e.g. moral or ethical) choices. Such choice should be documented.

NOTE The different scientific approaches are often complementary to each other.

5 Environmental criteria

5.1 General

This European Standard defines principles, criteria and indicators to provide information on how the economic operator is managing the identified sustainability aspects. When the economic operator reports on quantifiable data, an appropriate functional unit should be used and the choice documented.

For an example of a reporting template and some further guidance on how to respond to the indicators, see Annex A.

NOTE ISO 13065:2015 on sustainability criteria for bioenergy contains informative annexes that includes many examples on how to respond to similar indicators within that context. Many of those examples could also be relevant for a user of this European Standard. Recognize, however, that the set of principles, criteria and indicator differ between the standards even if there are large similarities.

5.2 Climate protection and air quality

5.2.1 General

Climate change and air pollution are very different phenomena, but their causes are similar: the release of emissions to air (GHG and pollutants) from a variety of sources and activities.

5.2.2 Principle

Principle: Promote good air quality and reduce GHG emissions.

5.2.2.1 GHG emissions and removals

Criterion: The economic operator provides information on how greenhouse gas (GHG) emissions and removals related to their operations are managed.

5.2.2.1.1 Indicator: Describe procedures taken to identify GHG emissions and removals related to their operations. List the identified emission sources and removals and quantify them if possible.

5.2.2.1.2 Indicator: Describe the measures taken to reduce GHG emissions listed under 5.2.2.1.1.

5.2.2.2 Air quality

Criterion: The economic operator provides information on how emissions to air are managed with the objective to promote good air quality.

When responding to the indicators below, include consideration of safe and appropriate use and risk management measures regarding chemicals (including controlled use of plant protection, fertilizers and biocides).

5.2.2.2.1 Indicator: Describe the procedures taken to identify air pollutant sources and emissions. List the relevant air pollutant sources and emissions identified.

5.2.2.2.2 Indicator: Describe the measures taken to reduce the air pollutant emissions listed under 5.2.2.2.1.

5.3 Water

5.3.1 General

Water conservation encompasses the policies, strategies and activities to manage fresh water as a sustainable resource to protect the water environment and to meet current and future human demand.

Water quality refers to the chemical, physical and biological characteristics of water. It is a measure of the condition of water relative to the requirements of one or more biotic species and or to any human need or purpose.

5.3.2 Principle

Principle: Conserve and protect water resources.

5.3.2.1 Water quality and quantity

Criterion: The economic operator provides information on how quality and quantity of water withdrawn and released are addressed.

When responding to the indicators below, include consideration of safe and appropriate use and risk management measures regarding chemicals (including controlled use of plant protection, fertilizers and biocides).

5.3.2.1.1 Indicator: Describe procedures taken to identify potential impacts on water quality and quantity. Impacts to water quantity and quality should consider impacts to water sources and receiving bodies.

5.3.2.1.2 Indicator: Describe measures taken to address the impacts on water quality and quantity identified under 5.3.2.1.1.

NOTE An important aspect is to avoid entry of pollutants into water bodies.

5.4 Soil

5.4.1 General

Soil conservation encompasses the policies, strategies and activities to manage soil quality, productivity and erosion.

5.4.2 Principle

Principle: Protect soil quality and productivity.

5.4.2.1 Soil quality, productivity and erosion

Criterion: The economic operator provides information on how soil quality (e.g. organic matter and nutrients content in soil), productivity and erosion are addressed.

When responding to the indicators below, include consideration of safe and appropriate use and risk management measures regarding chemicals (including controlled use of plant protection, fertilizers and biocides).

5.4.2.1.1 Indicator: Describe procedures taken to identify potential impacts on soil quality, productivity and soil erosion forces. List the relevant identified soil impacts.

5.4.2.1.2 Indicator: Describe measures taken to address those impacts on soil quality, productivity and soil erosion forces.

NOTE In agriculture, crop rotation is an important aspect to report on related to soil productivity.

5.5 Biodiversity

5.5.1 General

An ecosystem is a dynamic system of complex interaction of e.g. plant, animal, and microorganism communities and the non-living environment. Human beings are an integral part of ecosystems.

Biodiversity is the source of many ecosystem goods, such as food and genetic resources, and changes in biodiversity can influence the supply of ecosystem services.

Protecting biodiversity contributes to maintaining ecosystem services.

5.5.2 Principle

Principle: Promote the positive and reduce the negative impacts on biodiversity.

5.5.2.1 Biodiversity within the area of operation

Criterion: The economic operator provides information on how biodiversity values are addressed within the area of operation and the environment directly influenced by the economic operator.

NOTE This criterion also relates to the consequences of the use of genetically modified organisms and potentially invasive species on biodiversity.

5.5.2.1.1 Indicator: Describe procedures to identify potential impacts on biodiversity. List the identified impacts on biodiversity.

NOTE Potential impacts on biodiversity can include impacts on ecosystems, habitats and identified rare, threatened and vulnerable species of local, regional or global importance.

5.5.2.1.2 Indicator: Describe measures taken to promote positive and reduce negative impact on the biodiversity.

5.5.2.2 Biodiversity protected areas

Criterion: The economic operator provides information on biomass removal from those areas designated as biodiversity protected areas under applicable national laws and regulations.

5.5.2.2.1 Indicator: List and document necessary permits obtained from the management authorities for operations in the protected areas, including a map showing:

a) the location of the designated biodiversity-protected area where biomass removal is allowed; and

b) the area where the economic operator removes biomass.

5.5.2.2.2 Indicator: Describe measures taken to respect the biodiversity goals of the protected area, as described by the management authority.

NOTE "Management authority" is the designated legal authority or institution responsible for the management and regulation of a protected area.

5.6 Energy and material resources

5.6.1 General

Efficient use of energy and material resources are means to save resources and reduce depletion of non-renewable resources.

5.6.2 Principle

Principle: Promote efficient use of energy and material resources and the prevention of resource depletion.

5.6.2.1 Efficient use of energy and material resources

Criterion: The economic operator provides information on how energy and material efficiency related to their operations are addressed.

Information can be provided e.g. related to volume of production or comparing your process or product with a similar option, using a functional unit.

5.6.2.1.1 Indicator: Describe measures taken to address energy efficiency.

5.6.2.1.2 Indicator: Describe measures taken to address material efficiency.

5.6.2.2 Use of renewable energy and material resources

Criterion: The economic operator provides information on use of renewable and non-renewable resources.

5.6.2.2.1 Indicator: Describe measures taken to promote use of renewable energy and material resources.

5.7 Waste

5.7.1 General

Waste minimization strategies emphasize prioritizing options for reuse, recycling or recovery over disposal options, wherever possible.

5.7.2 Principle

Principle: Promote responsible waste management.

5.7.2.1 Responsible waste management

Criterion: The economic operator provides information on how waste is managed, quantity and characterization of waste including waste classes (hazardous and non-hazardous).

5.7.2.1.1 Indicator: Describe procedures related to waste management, including consideration of handling, storing, reuse, recycling, recovery and disposal.

5.7.2.1.2 Indicator: Describe procedures taken to identify potential impacts on the environment generated by handling, storing and on-site disposal of wastes, if not already covered by other criteria and indicators. List the identified impacts.

5.7.2.1.3 Indicator: Describe measures taken to avoid or reduce and manage waste (in particular hazardous waste).

6 Social criteria

6.1 Labour rights

6.1.1 General

Labour rights declare the freedom of association and the effective recognition of the right to collective bargaining, the elimination of all forms of forced and compulsory labour; the effective abolition of child labour; and the elimination of discrimination in employment and occupation. Labour rights are defined in national law and internationally recognized conventions (e.g. International Labour Organization (ILO)).

6.1.2 Principle

Principle: Respect labour rights.

6.1.2.1 Labour rights

Criterion: The economic operator provides information on how labour rights are addressed.

6.1.2.1.1 Indicator: Describe measures taken to safeguard rights related to trade unions and collective bargaining, forced and compulsory labour, child labour and discrimination.

6.1.2.2 Working conditions

Criterion: The economic operator provides information on how working conditions are addressed.

When responding to the indicators below, include consideration of safe and appropriate use and risk management measures regarding chemicals (including controlled use of plant protection, fertilizers and biocides).

6.1.2.2.1 Indicator: Describe policies, practices and measures taken related to working conditions, including consideration of knowledge required, training, health, safety and hygiene.

6.1.2.3 Living conditions

Criterion: The economic operator provides information about the living conditions of employees at least if these are living on site.

6.1.2.3.1 Indicator: Describe measures taken to address living conditions and satisfaction of basic needs of the employees (e.g. access to drinking water, condition of housing, possibility for children to attend schools).

6.2 Land use rights and land use change

6.2.1 General

Land use rights refer to the inalienable ability of individuals to freely obtain, utilize, and possess land at their discretion, as long as their activities on the land do not impede on other individuals' rights. Land use rights include both legal land use rights and traditional land use rights. Social issues, such as food security, can arise when these rights are not respected.

6.2.2 Principle

Principle: Respect land use rights.

6.2.2.1 Land use rights and land use change

Criterion: The economic operator provides information on land use change and on how land use rights are addressed with the aim to gain free, prior and informed consent.

NOTE Respecting land use rights is especially important when considering a land use change.

6.2.2.1.1 Indicator: Describe the procedures taken for local stakeholder engagement with the aim to gain free, prior and informed consent where traditional land use rights are applicable and documented evidence of the outcomes.

6.2.2.1.2 Indicator: Describe procedures taken to identify risks of direct effect on local food security.

6.2.2.1.3 Indicator: Document any direct effects and describe measures to reduce or avoid impact on local food security.

6.3 Water use rights

6.3.1 General

Water use rights refer to the right of a user to use water from a water source, e.g. a river, stream, pond or source of groundwater. In areas with plentiful water and few users, such systems are generally not complicated or contentious. In other areas, especially arid areas where irrigation is practiced, such systems are often the source of conflict, both legal and physical. Some systems treat surface water and ground water in the same manner, while others use different principles for each.

6.3.2 Principle

Principle: Respect water use rights.

6.3.2.1 Areas with water scarcity

Criterion: The economic operator in areas with water scarcity provides information on how water availability for human consumption and food production are addressed.

6.3.2.1.1 Indicator: Describe procedures taken to identify potential impacts on water resources within the affected local community, including the impact on water quality, quantity and access for human consumption and food production. List the potential impacts identified.

6.3.2.1.2 Indicator: Describe measures taken to address the potential impacts identified in 6.3.2.1.1.

6.4 Local development

6.4.1 General

It is widely accepted today that organizations have a relationship with the communities in which they operate.

This relationship should be based on community involvement so as to contribute to community development.

Community involvement – either individually or through associations seeking to enhance the public good – helps to strengthen civil society. Organizations that engage in a respectful manner with the community and its institutions reflect and reinforce democratic and civic values.

Community involvement goes beyond identifying and engaging stakeholders in regard to the impacts of an organization's activities; it also encompasses support for and building a relationship with the community.

Above all, it entails acknowledging the value of the community. An organization's community involvement should arise out of recognition that the organization is a stakeholder in the community, sharing common interests with the community.

Issues of community development to which an organization can contribute include creating employment through expanding and diversifying economic activities and technological development. It can also contribute through social investments in wealth and income creation through local economic development initiatives; expanding education and skills development programs; promoting and preserving culture and arts; and providing and/or promoting community health services. Community development may include institutional strengthening of the community, its groups and collective forums, cultural, social and environmental programs and local networks involving multiple institutions.

The local development should take place in the respect of the local traditions and culture.

6.4.2 Principle

Principle: Promote local development.

6.4.2.1 Local development

Criterion: The economic operator provides information on how they address local development.

6.4.2.1.1 Indicator: The economic operator may describe activities to address local development.

7 Economic criteria

7.1 Economic sustainability

7.1.1 General

Economic sustainability can be promoted by the use of various strategies for employing existing resources optimally so that a responsible and beneficial balance can be achieved over the longer term. Within a business context, economic sustainability involves using the assorted assets of the company efficiently to allow it to continue functioning profitability over time.

Also, it is important for a sustainable business to have a strategy for fair business practices in order to combat fraudulent, deceptive, or dishonest consumer or commercial business practice.

7.1.2 Principle

Principle: Produce and trade bio-based products in an economically and financially viable way.

7.1.2.1 Fair business practices

Criterion: The economic operator provides information on how fraudulent, deceptive, or dishonest consumer or commercial business practice is addressed.

7.1.2.1.1 Indicator: List of final, binding and unappealable decisions of an applicable judicial authority against the economic operator for fraudulent, deceptive, or dishonest consumer, or commercial business practice prohibited by applicable laws that remain unresolved.

7.1.2.1.2 Indicator: Describe policies and/or practices related to fair business practices (in particular, identification of risks and corresponding measures regarding fraudulent, deceptive, or dishonest consumer or commercial business practice).

7.1.2.1.3 Indicator: Keep records of risks identified in 7.1.2.1.2.

7.1.2.1.4 Indicator: Describe measures taken to reduce identified risks.

Annex A
(informative)

Reporting template and additional guidance regarding sustainability aspects

Verification:

— The compliance with this standard has been verified by: [NAME]

— First/ Second/ Third Party verification (choose option) according to ISO/EN xxx.

Table A.1 is an example of a reporting template for this European Standard that can be used in business to business communication.

Table A.1 — Example of summary report

SUSTAINABILITY PRINCIPLES and CRITERIA	**CORRESPONDING INDICATORS**	**RESPONSE**	**JUSTIFICATION/ LIST OF AVAILABLE DOCUMENTS**
ENVIRONMENTAL CRITERIA			
Climate protection and air quality			
Principle: Promote good air quality and reduce GHG emissions.			
Criterion: The economic operator provides information on how greenhouse gas (GHG) emissions and removals related to their operations are managed.	Indicator: Describe procedures taken to identify GHG emissions and removals related to their operations. List the identified emission sources and removals and quantify them if possible.		
	Indicator: Describe the measures taken to reduce GHG emissions listed under 5.2.2.1.1.		
Criterion: The economic operator provides information on how emissions to air are managed with the objective to promote good air quality.	Indicator: Describe the procedures taken to identify air pollutant sources and emissions. List the relevant air pollutant sources and emissions identified.		

SUSTAINABILITY PRINCIPLES and CRITERIA	CORRESPONDING INDICATORS	RESPONSE	JUSTIFICATION/ LIST OF AVAILABLE DOCUMENTS
	Indicator: Describe the measures taken to reduce the air pollutant emissions listed under 5.2.2.2.1.		
Water			
Principle: Conserve and protect water resources			
Criterion: The economic operator provides information on how quality and quantity of water withdrawn and released are addressed.	Indicator: Describe procedures taken to identify potential impacts on water quality and quantity. Impacts to water quantity and quality should consider impacts to water sources and receiving bodies.		
	Indicator: Describe measures taken to address the impacts on water quality and quantity identified under 5.3.2.1.1.		
Soil			
Principle: Protect soil quality and productivity			
Criterion: The economic operator provides information on how soil quality (e.g. organic matter and nutrients content in soil), productivity and erosion are addressed.	Indicator: Describe procedures taken to identify potential impacts on soil quality, productivity and soil erosion forces. List the relevant identified soil impacts.		
	Indicator: Describe measures taken to address those impacts on soil quality, productivity and soil erosion forces.		

SUSTAINABILITY PRINCIPLES and CRITERIA	CORRESPONDING INDICATORS	RESPONSE	JUSTIFICATION/ LIST OF AVAILABLE DOCUMENTS
Biodiversity			
Principle: Promote the positive and reduce the negative impacts on biodiversity			
Criterion: The economic operator provides information on how biodiversity values are addressed within the area of operation and the environment directly influenced by the economic operator.	Indicator: Describe procedures to identify potential impacts on biodiversity. List the identified impacts on biodiversity.		
	Indicator: Describe measures taken to promote positive and reduce negative impact on the biodiversity.		
Criterion: The economic operator provides information on biomass removal from those areas designated as biodiversity protected areas under applicable national laws and regulations.	Indicator: List and document necessary permits obtained from the management authorities for operations in the protected areas, including a map showing: a) the location of the designated biodiversity-protected area where biomass removal is allowed; and b) the area where the economic operator removes biomass.		
	Indicator: Describe measures taken to respect the biodiversity goals of the protected area, as described by the management authority.		

SUSTAINABILITY PRINCIPLES and CRITERIA	CORRESPONDING INDICATORS	RESPONSE	JUSTIFICATION/ LIST OF AVAILABLE DOCUMENTS
Energy and material resources			
Principle: Promote efficient use of energy and material resources and the prevention of resource depletion.			
Criterion: The economic operator provides information on how energy and material efficiency related to their operations are addressed.	Indicator: Describe measures taken to address energy efficiency.		
	Indicator: Describe measures taken to address material efficiency.		
Criterion: The economic operator provides information on use of renewable and non-renewable resources.	Indicator: Describe measures taken to promote use of renewable energy and material resources.		
Waste			
Principle: Promote responsible waste management.			
Criterion: The economic operator provides information on how waste is managed, quantity and characterization of waste including waste classes (hazardous and non-hazardous).	Indicator: Describe procedures related to waste management, including consideration of handling, storing, reuse, recycling, recovery and disposal.		
	Indicator: Describe procedures taken to identify potential impacts on the environment generated by handling, storing and on-site disposal of wastes, if not already covered by other criteria and indicators. List the identified impacts.		

SUSTAINABILITY PRINCIPLES and CRITERIA	CORRESPONDING INDICATORS	RESPONSE	JUSTIFICATION/ LIST OF AVAILABLE DOCUMENTS
	Indicator: Describe measures taken to avoid or reduce and manage waste (in particular hazardous waste).		
SOCIAL CRITERIA			
Labour rights			
Principle: Respect labour rights			
Criterion: The economic operator provides information on how labour rights are addressed.	Indicator: Describe measures taken to safeguard rights related to trade unions and collective bargaining, forced and compulsory labour, child labour and discrimination.		
Criterion: The economic operator provides information on how working conditions are addressed.	Indicator: Describe policies, practices and measures taken related to working conditions, including consideration of knowledge required, training, health, safety and hygiene.		
Criterion: The economic operator provides information about the living conditions of employees at least if these are living on site.	Indicator: Describe measures taken to address living conditions and satisfaction of basic needs of the employees (e.g. access to drinking water, condition of housing, possibility for children to attend schools).		

SUSTAINABILITY PRINCIPLES and CRITERIA	CORRESPONDING INDICATORS	RESPONSE	JUSTIFICATION/ LIST OF AVAILABLE DOCUMENTS
Land use rights and land use change			
Principle: Respect land use rights.			
Criterion: The economic operator provides information on land use change and on how land use rights are addressed with the aim to gain free, prior and informed consent.	Indicator: Describe the procedures taken for local stakeholder engagement with the aim to gain free, prior and informed consent where traditional land use rights are applicable and documented evidence of the outcomes.		
	Indicator: Describe procedures taken to identify risks of direct effect on local food security.		
	Indicator: Document any direct effects and describe measures to reduce or avoid impact on local food security.		
Water use rights			
Principle: Respect water use rights.			
Criterion: The economic operator in areas with water scarcity provides information on how water availability for human consumption and food production are addressed.	Indicator: Describe procedures taken to identify potential impacts on water resources within the affected local community, including the impact on water quality, quantity and access for human consumption and food production. List the potential impacts identified.		
	Indicator: Describe measures taken to address the potential impacts identified in 6.3.2.1.1.		

SUSTAINABILITY PRINCIPLES and CRITERIA	CORRESPONDING INDICATORS	RESPONSE	JUSTIFICATION/ LIST OF AVAILABLE DOCUMENTS
Local development			
Principle: Promote local development.			
Criterion: The economic operator provides information on how they address local development.	Indicator: The economic operator may describe activities to address local development.		
ECONOMIC CRITERIA			
Economic sustainability			
Principle: Produce and trade bio-based products in an economically and financially viable way.			
Criterion: The economic operator provides information on how fraudulent, deceptive, or dishonest consumer or commercial business practice is addressed.	Indicator: List of final, binding and unappealable decisions of an applicable judicial authority against the economic operator for fraudulent, deceptive, or dishonest consumer, or commercial business practice that is prohibited by applicable laws that remain unresolved.		
	Indicator: Describe policies and/or practices related to fair business practices (in particular, identification of risks and corresponding measures regarding fraudulent, deceptive, or dishonest consumer or commercial business practice).		
	Indicator: Keep records of risks identified in 7.1.2.1.2.		
	Indicator: Describe measures taken to reduce identified risks.		

Some indicators may be wholly or partly covered by relevant legal requirements, national regulations or recognized best practice. One example is proven implementation of sustainable agricultural cultivation/good professional practice of agriculture, including crop rotation on all agriculturally used areas according to Council Regulation (EC) No 73/2009 Cross Compliance or according to national legislation. If the organization is certified under a voluntary system that covers one or more indicators required by this European Standard, this may be referenced in the response(s).

The level of response to the indicators should be considered in the context of undue administrative or economic burden for an economic operator. Normally larger organizations have larger possibilities to influence, although all organizations should contribute with their fair share.

As stated in 4.1, in some cases the response to an indicator may be “not relevant” or not applicable”.

EXAMPLE

Examples of such situations:

— A farmer has no employees. Therefore the indicators regarding labour rights, working conditions and living conditions are not relevant/applicable.

— A forest owner does not use any irrigation (only water is precipitation). Therefore, the indicators regarding water quantity are not relevant/applicable.

— A chemical plant is operating in an area where there is no problem with the available water resources. Therefore, the indicators regarding areas with water scarcity are not relevant/applicable.

— In aquaculture (especially in sea water) impact on soil can be diminutive/not existent. Therefore, the indicators regarding soil are not relevant/applicable.

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