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Environmental performance evaluation — Green debt instruments —

Part 3: Taxonomy

Évaluation de la performance environnementale — Titres de créance verts —

Partie 3: Taxinomie

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Foreword

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

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*, Subcommittee SC 4, *Environmental performance evaluation*.

A list of all parts in the ISO 14030 series can be found on the ISO website.

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

This document provides a taxonomy of eligible projects, assets and supporting expenditures for use by issuers and originators of green debt instruments. Projects, assets and supporting expenditures included in this document are assumed to be eligible as long as any specific thresholds or criteria are met and any applicable exclusions are respected. The taxonomy addresses sector criteria, rationale for eligibility, potential environmental benefits and environmental performance indicators.

NOTE In this document, the wording "projects, assets and supporting expenditures" used together or individually has the same meanings and covers all projects, assets and supporting expenditures financed by a bond, a loan or other debt instrument.

The objective of the taxonomy is to identify projects, assets and supporting expenditures that contribute to one or more environmental objectives, while doing no significant harm (DNSH) to other environmental objectives. Issuers, borrowers or lenders are informed by:

a) the taxonomy of eligible projects, assets and supporting expenditures that are anticipated to contribute to climate change mitigation, including guidance on DNSH assessments (see Clause 5);

b) guidance on climate change adaption by economic sector (see Annex A);

c) examples of thresholds and exclusions that may be applied to specific economic sectors (see Annex B);

d) guidance on other suitable taxonomies (see Annex C).

Users of this document can apply threshold values and exclusions identified in the taxonomy in Annex B or the taxonomy selected by the user (see ISO 14030-1:2021, 5.1, and ISO 14030-2:2021, 5.1). If a different taxonomy is used, threshold values are explained and justified.

Subclause 5.4 provides sector examples for the taxonomy nominated projects, assets and supporting expenditures.

This document encourages the mitigation and adaptation pathway forward to contribute to a low-carbon and resilient society. Economic activities can themselves contribute to environmental objectives or can enable other activities to contribute to environmental objectives.

Within the taxonomy, eligible investment categories and subcategories are either:

— economic activities that can be decarbonized or that support decarbonization; or

— projects, assets and supporting expenditures that can enable improved environmental performance in another economic activity and are performed to avert a substantial negative impact on the environment.

The taxonomy facilitates decision-making on what economic activities are sustainable, with the aim of helping investors to identify sustainable investment opportunities. It is intended that the green taxonomy presented in this document will serve as a holistic tool that captures all relevant environmental objectives. Although most requirements relate to climate mitigation or climate adaptation, this document addresses other environmental aspects, issues and objectives relevant to each included sector.

This document recognizes that all sectors must become more climate resilient to achieve adaptation objectives and avoid maladaptation. As a result, the adaptation approach is a set of guiding principles and qualitative screening criteria which can be applied in any sector. However, to be included in the taxonomy, an economic activity must also avoid significant harm to the six other environmental objectives (see 5.3).

This document recognizes that all sectors must become more climate resilient. As a result, the do no significant harm (DNSH) section of each table in the taxonomy includes a set of considerations for addressing issues related to the eligible project and asset categories.

To provide guidance for projects, assets and supporting expenditures that are being financed with the specific purpose of promoting adaptation, this document includes guidance for adaptation by sector in Annex A.

This document defines sector categories or subcategories and describes the rationale for their inclusion in the taxonomy. It provides examples of thresholds and exclusions in Annex B.

Different types of finance support projects, assets and supporting expenditures that contribute to environmental or sustainable development objectives. In this taxonomy, debt instruments may either finance the acquisition, manufacture, development, distribution, operation and maintenance or refinance the listed projects, assets and supporting expenditures. The taxonomy provides a framework for classifying all potential projects, assets or supporting expenditures against a comprehensive set of environmental objectives. In addition, all eligible projects, assets and supporting expenditures have to consider the state of the local environment.

The objective of the taxonomy is to identify activities with positive environmental benefits.

It may be used as a separate resource or by users of ISO 14030-1 and ISO 14030-2 who can:

— select this document as their taxonomy and refer to its tables when establishing environmental performance indicators;

— adopt thresholds and exclusions detailed in Annex B.

This document requires issuers to evaluate and avoid harm to related environmental aspects.

The taxonomy focuses on activities within sectors. For this reason, environmental aspects are evaluated at the level of projects and assets. If buildings or materials are needed to finance the projects and assets, the evaluation is made at the level of the different potential environmental aspects, taking into account the life cycle perspective, including all upstream and downstream resource flows.

The taxonomy's objective is to identify eligible projects, assets and supporting expenditures. Users of this document, or of another appropriate taxonomy, will obtain greater confidence that interested parties will consider financed projects, assets and supporting expenditures to be green.

To substitute high carbon intensity processes, some technologies can be implemented. The best available option should be taken in light of various circumstances of countries and regions.

Users of this document can adopt:

— thresholds and exclusions from Annex B;

— local, regional or international regulations;

— provisions found in other taxonomies.

Figure 1 outlines the relationship between the four parts of the ISO 14030 series.

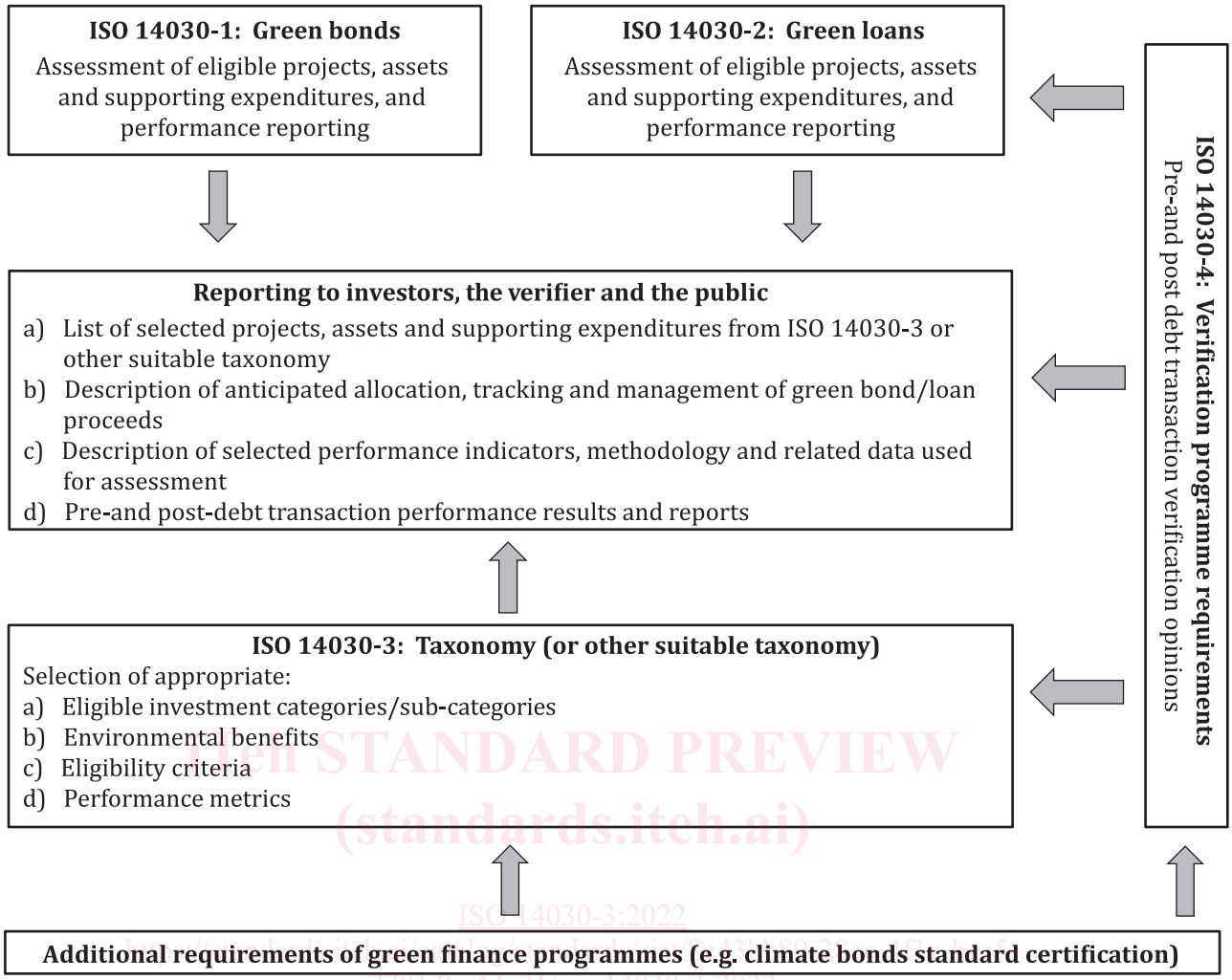

Figure 1 — Relationship between the parts of the ISO 14030 series

Environmental performance evaluation — Green debt instruments —

Part 3: Taxonomy

1 Scope

This document defines a taxonomy of eligible investment categories for designation as green debt instruments, including bonds and loans.

This document categorizes economic sectors and establishes criteria for determining the eligibility of projects, assets and supporting expenditures. It provides guidance on adaptation by sector in Annex A. It provides examples of thresholds and exclusions in Annex B.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 13065, *Sustainability criteria for bioenergy*

ISO 14030-1:2021, *Environmental performance evaluation — Green debt instruments — Part 1: Process for green bonds*

ISO 14030-2:2021, *Environmental performance evaluation — Green debt instruments — Part 2: Process for green loans*

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*

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

International Finance Corporation (IFC) Performance Standard 6, *Biodiversity Conservation and Sustainable Management of Living Natural Resources*

3 Terms, definitions and abbreviated terms

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 14030-1, ISO 14030-2 and the following apply.

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

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

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

3.1.1 Terms related to economy and finance

3.1.1.1
debt instrument
obligation that enables a party to raise funds by promising to repay a *lender* (3.1.1.5) in accordance with the terms of a contract

3.1.1.2
green debt instrument
debt instrument (3.1.1.1) whose net proceeds or an amount equivalent to the net proceeds will be exclusively applied to finance or re-finance in part or in full new or existing eligible projects, assets and supporting expenditures

3.1.1.3
issuer
entity responsible for fulfilling the contractual obligations of the bond or other *debt instrument* (3.1.1.1)

3.1.1.4
borrower
person or company who has contracted a loan

3.1.1.5
lender
institution or other entity that makes funds available to a *borrower* (3.1.1.4) with the expectation that those funds will be repaid

Note 1 to entry: In the context of this document, the term "lender" is generic and includes all financial organizations who make loans to individuals, small- and medium-sized enterprises, independently to the investees.

Note 2 to entry: "Lenders" may include chartered banks, insurance companies, cooperative banks, crowdfunding companies, revolving credit companies, Islamic banks, individuals and solidarity-based finance providers.

3.1.2 Terms related to the environment

3.1.2.1
environment
surroundings in which an organization operates, including air, water, land, natural resources, flora, fauna, humans and their interrelationships

Note 1 to entry: In this document, the phrase "in which an organization operates" should be understood as "inherent to or affected by the eligible projects, assets or supporting expenditures associated with the *green debt instrument* (3.1.1.2)".

[SOURCE: ISO 14001:2015, 3.2.1, modified — Notes 1 and 2 to entry have been deleted and a new Note 1 to entry has been added.]

3.1.2.2
ecosystem
dynamic complex of plant, animal and micro-organism communities, and their non-living *environment* (3.1.2.1) interacting as a functional entity

EXAMPLE Deserts, coral reefs, wetlands, rain forests, boreal forests, grasslands, urban parks, cultivated farmlands.

Note 1 to entry: Ecosystems can be influenced by human activity.

[SOURCE: ISO 14008:2019, 3.1.6]

3.1.2.3
ecosystem service
benefit people obtain from *ecosystems* (3.1.2.2)

Note 1 to entry: These are generally distinguished into provisioning, regulating, supporting and cultural services. Ecosystem services include the provisioning of goods (e.g. food, fuel, raw materials, fibre), regulating services (e.g. climate regulation, disease control), and non-material benefits (cultural services) (e.g. spiritual or aesthetic benefits). The supporting services are necessary for the production of all other ecosystem services (e.g. soil formation, nutrient cycling, water cycling) and are also referred to as "ecosystem functions".

Note 2 to entry: Ecosystem services are sometimes called "environmental services" or "ecological services".

[SOURCE: ISO 14008:2019, 3.2.11]

3.1.2.4
protected area
geographically defined area which is designated or regulated and managed to achieve specific conservation *objectives* (3.1.4.1)

3.1.3 Terms related to environmental impacts

3.1.3.1
impact
result of a change or existing condition that may be adverse or beneficial

[SOURCE: ISO 15392:2019, 3.17, modified — "neutral" has been deleted after "adverse".]

3.1.3.2
environmental impact
impact (3.1.3.1) to or conservation of the *environment* (3.1.2.1), wholly or partially resulting from eligible projects, assets or supporting expenditures

3.1.3.3
environmental benefit
gain related to the *environment* (3.1.2.1)

Note 1 to entry: A positive effect on the environment that protects or restores natural habitats or *ecosystems* (3.1.2.2), or mitigates further environmental harm.

[SOURCE: ISO 14050:2020, 3.12.2, modified — "internal and external" has been deleted from before "gain". Note 1 to entry has been added.]

3.1.3.4
indicator
quantitative, qualitative or binary variable that can be measured or described, representing the status of operations, management, conditions or *impacts* (3.1.3.1)

[SOURCE: ISO 14031:2021, 3.4.1]

3.1.3.5
environmental performance
performance related to the management of environmental aspects

[SOURCE: ISO 14001:2015, 3.4.11, modified — Note 1 to entry has been deleted.]

3.1.3.6
environmental performance indicator
EPI
indicator (3.1.3.4) that provides information about an organization's *environmental performance* (3.1.3.5)

Note 1 to entry: In this document, "organization" refers to an eligible project, asset or supporting expenditure.

[SOURCE: ISO 14031:2021, 3.4.5, modified — Note 1 to entry has been added.]

3.1.4 Terms related to environmental management

3.1.4.1
objective
result to be achieved

[SOURCE: ISO 14001:2015, 3.2.5, modified — The notes to entry have been deleted.]

3.1.4.2
environmental objective
objective (3.1.4.1) that relates to the *environment* (3.1.2.1) that is associated with eligible projects, assets and supporting expenditures

3.1.4.3
prevention of pollution
use of *processes* (3.1.4.8), practices, techniques, materials, products, services 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* (3.1.3.2)

Note 1 to entry: Prevention of pollution can include source reduction or elimination, process, product or service changes, efficient use of resources, material and energy substitution, reuse, recovery, recycling, reclamation and treatment.

[SOURCE: ISO Guide 64:2008, 2.7]

3.1.4.4
BAT
best available technique
best available technology
commercially available technology that is recognized by relevant authorities to reduce negative *environmental impacts* (3.1.3.2), including CO_2 emissions

Note 1 to entry: In some countries and regions, regional or country-based BAT directories authorized by regional/national governments or relevant authorities are available for the manufacturing sector.

3.1.4.5
circular economy
economy that is restorative and regenerative by design, and which aims to keep products, components and materials at their highest utility and value at all times, distinguishing between technical and biological cycles

[SOURCE: ISO 20400:2017, 3.1]

3.1.4.6
climate change mitigation
mitigation
human intervention to reduce greenhouse gas (GHG) emissions or enhance GHG removals

[SOURCE: ISO 14080:2018, 3.1.2.1, modified — The preferred term “mitigation” has been added, and “to reduce greenhouse gas (GHG) emissions or enhance GHG removals” has replaced “to reduce the sources or enhance the sinks of greenhouse gases (GHGs)”.]

3.1.4.7
monitoring
determining the status of a system, a *process* (3.1.4.8) or an activity

[SOURCE: ISO 14001:2015, 3.4.8, modified — Note 1 to entry has been deleted.]

3.1.4.8
process
set of interrelated or interacting activities which transforms inputs into outputs

[SOURCE: ISO 14001:2015, 3.3.5, modified — Note 1 to entry has been deleted.]

3.1.4.9
taxonomy
classification with sector criteria and a rationale for eligibility based on potential *environmental benefits* (3.1.3.3) and *environmental performance indicators* (3.1.3.6) for the described projects, assets and supporting expenditures

3.1.4.10
adaptation to climate change
climate change adaptation
adaptation
process of adjustment to actual or expected climate and its effects

Note 1 to entry: In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities.

Note 2 to entry: In some natural systems, human intervention can facilitate adjustment to expected climate and its effects.

[SOURCE: ISO 14090:2019, 3.1, modified — The preferred term “adaptation” has been added.]

3.1.4.11
certification scheme
certification system related to specified products, to which the same specified requirements, specific rules and procedures apply

Note 1 to entry: The rules, procedures and management for implementing product, process and service certification are stipulated by the certification scheme.

[SOURCE: ISO/IEC 17067:2013, 3.2]

3.2 Abbreviated terms

BAT	best available technology/best available technique
CATC	Clean Air Technology Center
CCS	carbon capture and storage
CHP	combined heat and power
CoP	coefficient of performance
CSP	concentrated solar power
DNSH	do no significant harm
EIA	environmental impact assessment
GHG	greenhouse gas
GWP	global warming potential
KBA	key biodiversity area
LCA	life cycle assessment

MSC	Marine Stewardship Council
NEDC	New European Driving Cycle
PV	Photovoltaic
SFM	sustainable forest management
T&D	transmission and distribution
WLTP	Worldwide Harmonised Light Vehicle Test Procedure

4 Principles

4.1 Precautionary principle

Significant risks to the environment, natural habitats, biodiversity, and human health and welfare are avoided, reduced and mitigated.

4.2 Evidence-based science

Methods utilize an evidence-based approach derived from peer reviewed scientific research.

4.3 Biodiversity protection

Land use activities that aim to offset carbon emissions improve environmental quality thereby promoting three types of biological diversity: genetic diversity, species diversity and ecosystem diversity. A healthy biodiversity effectively mitigates climate change.

Policies and resources are directed to promote biological diversity which comprises genetic diversity, species diversity and ecosystem diversity.

4.4 Life cycle perspective

A life cycle perspective is applied which considers all relevant stages of an activity's life cycle as well as a comprehensive set of environmental indicators.

5 Taxonomy

5.1 General

The taxonomy in this document covers the sector criteria, rationale for eligibility, potential environmental benefits and environmental performance indicators for the described projects, assets and supporting expenditures.

5.2 Use of the taxonomy

Users of this document shall apply thresholds and exclusions, in the form of numeric values, technical requirements or others. These can be those identified in Annex B or in a suitable taxonomy selected by the user.

The reason for using a suitable taxonomy other than this document should be explained and justified, e.g. by reference to national or regional legislation.

Guidance on the recognition of other suitable taxonomies is provided in Annex C.

Subclause 5.4 provides details on eligibility criteria used to determine whether nominated assets or projects are eligible to be funded by a green debt instrument (refer to ISO 14030-1:2021, 5.1) or a green loan (refer to ISO 14030-2:2021, 5.1).

Suggested impact reporting metrics shall be used for environmental performance reporting as set out in ISO 14030-1:2021, 8.2.2, and ISO 14030-2:2021, 6.5.4 and 7.5.4.4.

NOTE The content identified in 5.4 is not exhaustive.

5.3 Environmental and social evaluation

Issuers, borrowers or lenders shall evaluate projects, assets and supporting expenditures against one or more environmental objectives taking into account the precautionary principle (see 4.1), also referred to as "DNSH". Users of this document shall determine whether the projects, assets or supporting expenditures will do significant harm to any of the six environmental objectives:

a) climate change mitigation;

b) climate change adaptation;

c) sustainable use and protection of water and marine resources;

d) transition to a circular economy, waste prevention and recycling;

e) control and prevention of pollution;

f) protection and restoration of ecosystems and biodiversity.

The evaluation should determine whether the projects, assets or supporting expenditures would lead to the displacement of indigenous people or impact their historical lands. The projects, assets or supporting expenditures should also not infringe upon workers' rights under the International Labour Organization (ILO). If the evaluation identifies such impacts, the project, asset or supporting expenditures shall not be considered eligible.

NOTE Minimum social safeguards are defined in the principles and rights set out in the eight fundamental conventions identified in the ILO's Declaration on Fundamental Rights and Principles at Work[25].

The taxonomy should apply a life cycle perspective to reflect the environmental impact of manufacturing activities. This approach should consider, where applicable, the sourcing of raw materials, the use of renewable or recycled materials and end-of-life recycling, processing and manufacturing, any relevant transportation, and the end-of-life fate of the waste materials, co-products or final product, whether this is recovery, reuse, remanufacture, recycling or disposal. In addition, the use stage should be considered where appropriate. For each of the life cycle stages and environmental impacts, unintended consequences should be avoided, whereby the impact is shifted from one stage to another or to another environmental impact. Unintended consequences regarding depletion of energy or mineral resources, or other environmental impacts that arise in the course of a transition shall be addressed by the DNSH criteria (see 5.4).

Climate change mitigation shall be assessed for each activity for the sector activities given in this document, and the issuer shall document the DNSH of the other environmental aspects.

See Annex A for guidance on addressing the objective "climate change adaptation".