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Greenhouse gas management and related activities — Framework including principles and requirements for assessing and reporting investments and financing activities related to climate change

Gestion des gaz à effet de serre et activités associées — Cadre comprenant les principes et les exigences pour l'évaluation et la déclaration des investissements et des activités de financement au regard du changement climatique

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Foreword

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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).

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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 7, *Greenhouse gas management and related activities*.

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

0.1 The impact of financiers' actions on the achievement of climate goals

Every financing or investment decision has an impact, whether positive or negative, on the climate and/or can in turn be affected by climate change. This dual impact is considered as a "double materiality", i.e. how climate change affects the value of a company and how a company's activities have an impact on the climate by reducing greenhouse gas (GHG) emissions in the real economy, reducing vulnerability to the impacts of climate change and increasing resilience.

To achieve the goals of the 2015 Paris Agreement[12] and to maintain stability in the financial system, the world needs to transition to a low-carbon and climate-resilient economy. To support this transition, there is a need to undertake a vast reallocation of the investee capital from high-carbon to low-carbon assets, assets with negative emissions and assets that are resilient in the short, medium and long term.

In addition to promoting financing for an already de-carbonized or low carbon activity (e.g. in the area of renewable energy), it is important to promote financing for transition actions towards the de-carbonization of GHG emitting industries and sectors as well, as a part of climate finance contributing to the mitigation of climate change. Climate transition finance should be considered as financing for businesses on a transition path towards achieving the ambition of the Paris Agreement and the reduction target of each country based on the Paris Agreement. While green investments expand across borders worldwide, transition pathways aligned with the Paris Agreement can differ from region to region and from country to country, depending on the industrial structure, and/or the role played in the overall global value chain. Therefore, "financing for a transition" should adopt an inclusive and flexible approach that can be applied to various circumstances of countries and regions without excluding specific sectors, industries or technologies from its scope, and further details should be considered by each country or region based on its respective circumstances.

Financiers have a key role to play in this transformation because their day-to-day decisions can influence the behaviour of "investees" (e.g. companies, clients, borrowers) in the real economy. Such an influence can include capital and research and development expenditure plans, the decision to retire (or not) high-carbon assets, or other aspects of corporate strategies. Similarly, financiers can influence the investment decisions of their clients due to their potentially broad-ranging roles as creditors, financial advisors or asset managers. The day-to-day decisions of financiers can have both positive and negative consequences on the achievement of climate goals.

Most financiers manage their assets without an explicit objective or specific strategy related to climate change. These financiers' decisions and related actions can affect investees that have an impact on the climate and can be exposed to climate-related risks. Any resulting effect, which can be thought of as unintentional, can have positive or negative consequences both for the climate and for the assets of the financiers. This document refers to these financiers as "financiers without climate objectives".

In contrast, some financiers explicitly aim to support climate goals either by setting explicit objectives or by creating specific strategies related to climate change. This document refers to these financiers as "financiers with climate objectives". These financiers influence investees through "climate actions" that will lead to mitigation of climate change or enhancement of adaptation, including but not limited to:

— the use of voting rights associated with share ownership;

— the use of influencing power as creditors;

— setting conditionality associated with lending or security issuance;

— making preferential financing available for targeted activities that face a financing gap;

— conducting policy advocacy.

The finance sector's active role in supporting the global concerted efforts to achieve international climate goals has been acknowledged in Article 2.1c of the Paris Agreement[12] and by the following non-exhaustive list of organizations and initiatives:

— the United Nations (United Nations Environmental Programme Inquiry, Non-state Actors Zone for Climate Action platform hosted by UN Climate Change);

— the Organization for Economic Cooperation and Development (OECD):

— the G20 (Green Finance Study Group);

— the European Commission through the Action Plan on Financing Sustainable Growth (2018)[16]; the Guidelines on Reporting Climate-related Information (2019)[17], the Non-Financial Reporting Directive (2014)[18] and the Non-Binding Guidelines on Non-Financial Reporting (2017)[19];

— various financial supervisors and central banks across the world who joined forces in the Network for Greening the Financial System (NGFS);

— the UN Principles for Responsible Banking;

— the UN-convened Net-Zero Asset Owner Alliance.

In this context, this document provides principles, requirements and guidance to define, monitor, assess and report on financial institutions' actions related to climate change and their respective contribution to the achievement of the climate goals. The framework can be applied by financiers who undertake deliberate climate actions, as well as by financiers without climate objectives or strategies.

For financiers with climate objectives, the framework is built around the theory of change (TOC) approach, illustrated in Figure 1.

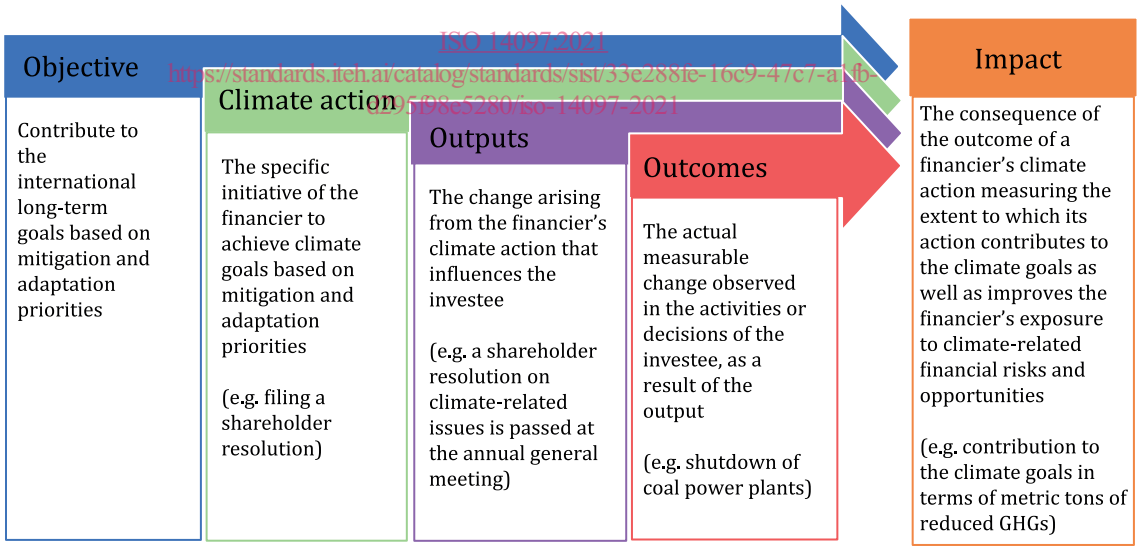

Figure 1 — Theory of change approach

The TOC process depends on defining all of the necessary and sufficient conditions required to bring about a given long-term outcome and impact. The TOC explains the intended path the climate action will take to achieve the (expected) impact. This is done by describing the causal linkages between the objective established by the financier, the climate action the financier plans to take to achieve the objective, the output(s) of the action and finally the outcome that will lead to the impact.

For financiers without climate objectives, the framework describes how to disclose on the GHG emissions changes of investees in their financial portfolio and the decisions and actions taken that can relate to the investees who are responsible for an increase or decrease in emissions.

0.2 The financial implications of climate change for the finance sector

For the finance sector, both the transition to a low-carbon emission and climate-resilient economy and the negative impact arising from environmental upheavals and civil society preferences can influence asset valuation and thus result in risks and opportunities for financiers.

In 2016, the G20's Financial Stability Board (FSB) initiated a private sector-led group, the Task Force on Climate-Related Financial Disclosures (TCFD), which explored these climate-related risks and opportunities and developed a set of high-level recommendations regarding their disclosure of the assessment and management of climate-related risks and opportunities.

These climate-related risks and opportunities for the finance sector have also been acknowledged by many financial regulators and supervisory authorities across the world, including the European Commission, the G20 and the NGFS.

Following the release of the TCFD recommendations in 2017[13], a number of methodological, reporting and disclosure frameworks have been and are in the process of being produced by various organizations to facilitate stakeholders to measure and report on climate-related risks and opportunities.

In this context, this document contributes to the implementation of the TCFD recommendations[13], by providing guidance on the disclosure of the identification, assessment and management of climate-related risks and opportunities and related climate actions.

This document can also be used to correlate climate performance and financial performance.

0.3 How to approach this document

As mentioned, a financier has financial and other objectives underpinning its business activities. In relation to climate change, the financier can have different motivations for integrating climate-related issues in its investment and lending processes. Objectives can include, but are not limited to:

a) understanding and managing climate change risks and leveraging opportunities;

b) contributing to the achievement of climate goals through the influence they have on investees.

This document provides the following requirements and related guidance for the processes implemented to achieve these objectives. Depending on its objectives, the financier applies the clauses indicated for the following purposes.

— Managing climate change risks and leveraging opportunities: Clause 5 provides requirements and guidance on the identification, assessment and disclosure of climate change risks and opportunities.

— Understanding its contribution to the achievement of climate goals: Clause 6 provides a framework to identify, monitor and assess the impact of climate action and estimate the GHG emissions associated with investment, as well as for financing activities related to investees for which no climate action is carried out.

NOTE See Annex A for a flow chart on the different clauses and subclauses of this document.

A financier's business decisions can be driven only by financially related objectives (or at least no climate objectives). However, these financier decisions can also have an impact on the climate and, consequently, on the achievement of its climate goals, as well as exposing its business to climate-related risks. In this instance, the financier shall follow Clause 7 to understand the GHG emissions changes and trends associated with the investees in its portfolio and Clause 5 for disclosing climate-related risks.

Since the framework can be used for a variety of purposes, and also by financiers without climate objectives or strategies, it is important to note that conformity does not equate to high ambition or success with regard to climate actions. Users of the framework are encouraged to observe this caveat in their reporting to third parties.

Clause 9 recommends verification and validation as the preferred approaches for conformity assessment.

Greenhouse gas management and related activities — Framework including principles and requirements for assessing and reporting investments and financing activities related to climate change

1 Scope

This document specifies a general framework, including principles, requirements and guidance for assessing, measuring, monitoring and reporting on investments and financing activities in relation to climate change and the transition into a low-carbon economy. The assessment includes the following items:

— the alignment (or lack thereof) of investment and financing decisions taken by the financier with low-carbon transition pathways, adaptation pathways, and climate goals;

— the impact of actions through the financier's investment and lending decisions towards the achievement of climate goals in the real economy, i.e. mitigation (greenhouse gas emissions) and adaptation (resilience);

— the risks to owners of financial assets (e.g. private equities, listed stocks, bonds, loans) arising from climate change.

To support the financier's assessment of the impact of investment and lending decisions, this document provides guidance for the financier on how to:

— set targets and determine metrics to be used for tracking progress related to the low-carbon transition pathways of investees;

— determine low-carbon transition and adaptation trajectories of investees;

— document the causality or linkage between its climate action and its outputs, outcomes and impacts.

This document is applicable to financiers, i.e. investors and lenders. It guides their reporting activities to the following third parties: shareholders, clients, policymakers, financial supervisory authorities and non-governmental organizations.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

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

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
climate goals
international long-term goals based on mitigation and adaptation priorities

Note 1 to entry: International climate goals are defined under the Paris Agreement.

Note 2 to entry: The Paris Agreement defines the following mitigation and adaptation goals: a) holding the increase in the global average temperature to well below 2 °C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1,5 °C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of *climate change* (3.2); b) increasing the ability to adapt to the adverse impacts of climate change and foster climate *resilience* (3.5) and low greenhouse gas emissions development, in a manner which does not threaten food production; c) making finance flows aligned with a pathway towards low greenhouse gas emissions and climate-resilient development.

[SOURCE: Paris Agreement[12], Article 2.1]

3.2
climate change
change in climate that persists for an extended period, typically decades or longer

[SOURCE: Intergovernmental Panel on Climate Change (IPCC)[15], modified]

3.3
climate change mitigation
human intervention to reduce the emission sources or enhance the sinks of greenhouse gases (GHGs)

[SOURCE: ISO 14080:2018, 3.1.2.1, modified — The word "emission" has been added to the definition.]

3.4
climate change adaptation
adaptation to climate change
process of adjustment to actual or expected climate and its effects

EXAMPLE Changes to human infrastructure and/or some natural systems to reduce the impacts of increased/decreased rainfall, higher temperatures, scarce water or more frequent storms.

Note 1 to entry: In human systems, adaptation seeks to moderate or avoid harm to human livelihoods or exploit beneficial economic *opportunities* (3.13).

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

[SOURCE: ISO 14090:2019, 3.1, modified — The term "climate change adaptation" has been made the preferred term, the example has been added, and "to human livelihoods" and "economic" have been added to Note 1 to entry.]

3.5
resilience
adaptive capacity (3.6) of an organization in a complex and changing environment

Note 1 to entry: Intergovernmental Panel on Climate Change (IPCC)[15] defines resilience as "capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity and structure, while also maintaining the capacity for adaptation, learning and transformation".

[SOURCE: ISO Guide 73:2009, 3.8.1.7, modified — Note 1 to entry has been added.]

3.6
adaptive capacity
ability of systems, institutions, humans and other organisms to adjust to potential damage, to take advantage of *opportunities* (3.13) or to respond to consequences

[SOURCE: Intergovernmental Panel on Climate Change (IPCC)[15]]

3.7
financier
investor (3.8) and *lender* (3.10)

3.8
investor
individual or organization holding equity or debt categorized as financial assets, including but not limited to asset owners (e.g. pension funds, insurance companies), asset managers and banks

EXAMPLE A fund holding an equity share is one of the investors of the company that issued the share.

3.9
investment
allocation of resources to achieve defined objectives and other benefits

Note 1 to entry: Investments relate to three different types: a) real assets (e.g. factory, mine, building); b) financial assets (e.g. any form of debt, equity or other financing); c) intangible assets (e.g. assets related to research and development).

3.10
lender
individual or organization that loans money to a borrower to finance consumption or *investment* (3.9), on the expectation of repayment on contractual terms, usually within a stated period and with interest payment

3.11
investee
organization other than *financiers* (3.7) that implements its activities using equity or debt *investments* (3.9), the latter categorized as liabilities

EXAMPLE A company issuing a bond is the investee of the bond *investor* (3.8).

3.12
client
professional or non-professional stakeholder of a *financier* (3.7) that subscribes to its financial products (e.g. *investment* (3.9)/insurance products, savings accounts) or institutional *investor* (3.8) that uses the financier's services

3.13
opportunity
situation from which an organization can derive benefit

Note 1 to entry: In this document, the focus is on opportunities that arise from *climate change* (3.2), i.e. the positive impacts related to climate change (e.g. new markets, new or improved supply chains, research and development and technology development)

Note 2 to entry: Opportunities for an organization can be a result of taking action to adapt to the physical impacts of climate change and to mitigate climate change (e.g. efforts to improve resource efficiency and cost savings, the adoption and utilization of low-emission energy sources, the development of new products and services, building *resilience* (3.5) along the supply chain).

Note 3 to entry: Opportunities for an organization can arise from the implementation of climate policy

Note 4 to entry: Opportunities for an organization can arise from expanding, evolving or emerging markets and from *contributions* (3.16) to the organization's sustainability. Opportunities can include: new products, services, customers and markets; reputational benefits; supply chain security; improved resilience; improved processes; and innovation. Opportunities can be identified across value chains and their respective enabling environments.

Note 5 to entry: Climate-related opportunities will vary depending on the region, market and industry in which an organization operates.

3.14
share in total financing
quantitative indicator measuring the weight of a *financier* (3.7) or category of financiers in the total amount of financing received by an *investee* (3.11)

Note 1 to entry: Share in total financing can relate to the share in the total debt or total liabilities accounted on the balance sheet of the investee or the share in the flow of financing received during any defined period of time.

EXAMPLE Bank A holds 80 % of the outstanding debt of a company. Bank B holds 30 % of the debt raised by the company in the past six months. The shares in total financing related to "outstanding debt of a company" and "debt raised by the company in the past six months" are respectively 80 % and 30 %.

3.15
climate action
initiative of a *financier* (3.7) to achieve *climate goals* (3.1) based on mitigation and adaptation priorities

Note 1 to entry: Climate action intends to a) reduce or prevent emissions of greenhouse gases or enhance removals, and b) reduce vulnerability, maintain and increase the *resilience* (3.5) from, and increase the *adaptive capacity* (3.6) of, human and ecological systems to adverse *climate change* (3.2) impacts.

Note 2 to entry: The initiative refers to a decision made by the financier or a group of financiers to exercise its influence in a way that aims at achieving climate goals. It can be a specific investment/lending decision, a permanent change in the investment/lending strategy, policy and processes of the financier(s), or actions that aim at mobilizing other financiers to weigh in and use their influence.

Note 3 to entry: The achievement is characterized by changes in the real economy that are aligned with climate goals.

EXAMPLE Use of shareholder voting rights to support a climate-related resolution, changes in the climate-related conditions associated with the provision of a loan (see Annex B for more examples).

Note 4 to entry: Climate action(s) can be collective or individual.

Note 5 to entry: A climate action can consist of multiple activities (e.g. providing finance, sending letters to *investees* (3.11), having bilateral meetings, exercising shareholder rights) substantiating a general action (e.g. shareholder engagement).

[SOURCE: ISO 14080:2018, 3.1.1.1, modified — The definition has replaced "initiative to achieve climate change measures or goals based on mitigation and/or adaptation priorities under climate change policies", "of greenhouse gases" has been added to Note 1 to entry, and Notes 2 to 5 to entry and the example have been added.]

3.16
contribution
overall effect of a *financier's* (3.7) actions on the achievement of *climate goals* (3.1)

Note 1 to entry: Climate contribution accounts for the effect caused by both a) climate passive decisions and b) deliberate *climate actions* (3.15) driven by an objective that supports the achievement of climate goals.

Note 2 to entry: For *climate change mitigation* (3.3), it is usually expressed in GHG emission units. For *climate change adaptation* (3.4), it may be expressed in terms of financial metrics, e.g. the reduction of the costs incurred by climate-related natural disasters.

Note 3 to entry: Contribution can be positive or negative.

3.17
output of the climate action
change(s) arising from *a financier's* (3.7) *climate action* (3.15) that influences the *investee* (3.11) decision making

Note 1 to entry: The output can be quantitative or qualitative.

EXAMPLE The available equity for an emerging clean technology is dramatically increased; a shareholder resolution on climate-related issues is passed at the annual general meeting; a legal process on climate-related issues has been started.

3.18
outcome of the climate action
actual measurable change(s) observed in the activities of an *investee* (3.11), as a result of the *output of the climate action* (3.17)

Note 1 to entry: The outcome is measured as an effect of the *financier's* (3.7) influence in the activities of the investee.

3.19
impact of the climate action
consequence of an outcome, which measures the extent to which the *climate action* (3.15) contributes to the *climate goals* (3.1)

Note 1 to entry: For mitigation, the impact of the climate action is usually measured in physical units such as tons of GHG emission reductions.

Note 2 to entry: The impact of the climate action can lead to a decrease in the *financier's* (3.7) exposure to climate-related financial risks and *opportunities* (3.13).

3.20
target
<for a financier> measurable outcome and impact a *financier* (3.7) intends to achieve with its *climate action(s)* (3.15) with the ultimate goal being to maximize the financier's impact given available market *opportunities* (3.13)

Note 1 to entry: A mitigation target for a financier is considered science-based when it aims for a change in the *investee's* (3.11) behaviour, contributing to reducing GHG emissions in the real economy at a scale and pace that is commensurate with *climate goals* (3.1).

Note 2 to entry: To achieve the target, the financier can carry out one or several climate actions.

Note 3 to entry: A target can be set at the portfolio level and cascaded into individual climate actions. It can be set for an individual climate action or a series of climate actions.

3.21
investee target
measurable outcome and impact of *investee* (3.11) activities

3.22
external factor
factor affecting outputs, outcomes and impacts, but that is beyond the scope of influence of the *climate actions* (3.15) and/or activities of a *financier* (3.7)

EXAMPLE 1 The removal of a coal-based power plant from the *investment* (3.9) plan of the *investee* (3.11) as a consequence of a new public policy prohibiting operation of coal-based power plants.

EXAMPLE 2 Non-governmental organization pressure; changes in technology prices; subsidies; natural disasters; locked out strikes.

3.23
science-based mitigation target
target (3.20) adopted by *investees* (3.11) to reduce GHG emissions in line with the scientifically defined level of decarbonization required by *climate change mitigation* (3.3) goals

3.24
trajectory
expected future outcome and GHG emissions pathway of an *investee* (3.11) against which changes in emissions or outcomes are measured

Note 1 to entry: There are different types of trajectories: a) the business as usual trajectory, which is the expected future outcome and related GHG trajectory of the investee before *climate action* (3.15) takes place; b) the targeted trajectory, which is the expected outcome and related GHG trajectory resulting from climate action; and c) the science-based trajectory, which is an expected future outcome and related GHG trajectory in line with the scientifically defined level of decarbonization required by *climate change mitigation* (3.3) goals.

Note 2 to entry: The business as usual trajectory can be considered as the baseline trajectory for comparison and monitoring purposes.

3.25
transition risk
risk related to the transition to a lower-carbon economy

Note 1 to entry: The transition risk is related to policy/political initiatives, legal and regulatory obligations, contractual obligations, technology and market changes to address mitigation and adaptation requirements related to *climate change* (3.2).

Note 2 to entry: Transition risk results in varying levels of impact on the financial performance and reputation of the *financier* (3.7).

Note 3 to entry: Transition risks are related to current and anticipated policy constraints and incentives in relevant jurisdictions, technology changes and availability, and market changes.

[SOURCE: Task Force on Climate-Related Financial Disclosures (TCFD)[13]]

3.26
physical risk
risk resulting from event-driven (acute) or longer-term shifts (chronic) in climate patterns associated with *climate change* (3.2)

Note 1 to entry: Physical risks can have financial implications for organizations, such as direct impact to assets and indirect impacts on supply chains owing to changes in water availability, sourcing and quality, food security, and for organizations' premises and operations, supply chain, transport needs and employee safety owing to extreme temperature changes.

Note 2 to entry: Acute physical risks refer to those risks that are event-driven, including increased severity of extreme weather events, such as cyclones, hurricanes or floods.

Note 3 to entry: Chronic physical risks refer to longer-term shifts in climate patterns (e.g. sustained higher temperatures) that can cause sea-level rise or chronic heat waves.

3.27
climate change risk
risk related to *climate change* (3.2) that includes, but is not limited to, *transition risk* (3.25) and *physical risk* (3.26)

3.28
validation
process for evaluating the reasonableness of the assumptions, limitations and methods that support a statement about the outcome of future activities

[SOURCE: ISO 14064-3:2019, 3.6.3]

3.29
verification
process for evaluating a statement of historical data and information to determine if the statement is materially correct and conforms to criteria

[SOURCE: ISO 14064-3:2019, 3.6.2]

3.30
material
information capable of influencing the decisions of intended users

[SOURCE: ISO 14064-3:2019, 3.6.8]

3.31
disclose
reveal data to those not routinely authorized to have it

Note 1 to entry: Disclosure is the act or an instance of disclosing.

[SOURCE: ISO/TS 14265:2011, 2.13, modified — Note 1 to entry has been added.]

4 Principles

4.1 General

The principles are the basis for, and will guide the application of, the requirements and guidance in this document.

4.2 Description of principles

4.2.1 Relevance

Activities, data, information, scenarios and methodologies used are appropriate for assessing and disclosing the impact of the financier's climate action, its related portfolio targets, and its exposure to climate-related risks and opportunities.

4.2.2 Consistency

Apply, use and/or disclose assumptions, methodologies, current and historical data, and scenarios in a way that enables comparable results over time and meaningful monitoring of the outputs, outcomes and impacts of the financier's climate action, the portfolio targets its climate action is supporting, and the reporting on climate-related risks and opportunities.

4.2.3 Completeness

Include all relevant climate actions that contribute (positively or negatively) to the achievement of climate goals and/or the mitigation of climate-related risks.

4.2.4 Conservativeness

When the use of assumptions is required, measure or define the output, outcome and impact of the climate action, such that assumptions do not overestimate positive impact and do not underestimate negative impact, and that the assessment of comparable alternatives produces a result that is cautiously moderate.