



Environment

Green and sustainable finance

Investment is essential for development and, increasingly, we are hearing that economies now need green and sustainable finance. *So what exactly are these types of investment, and why do we need them?*



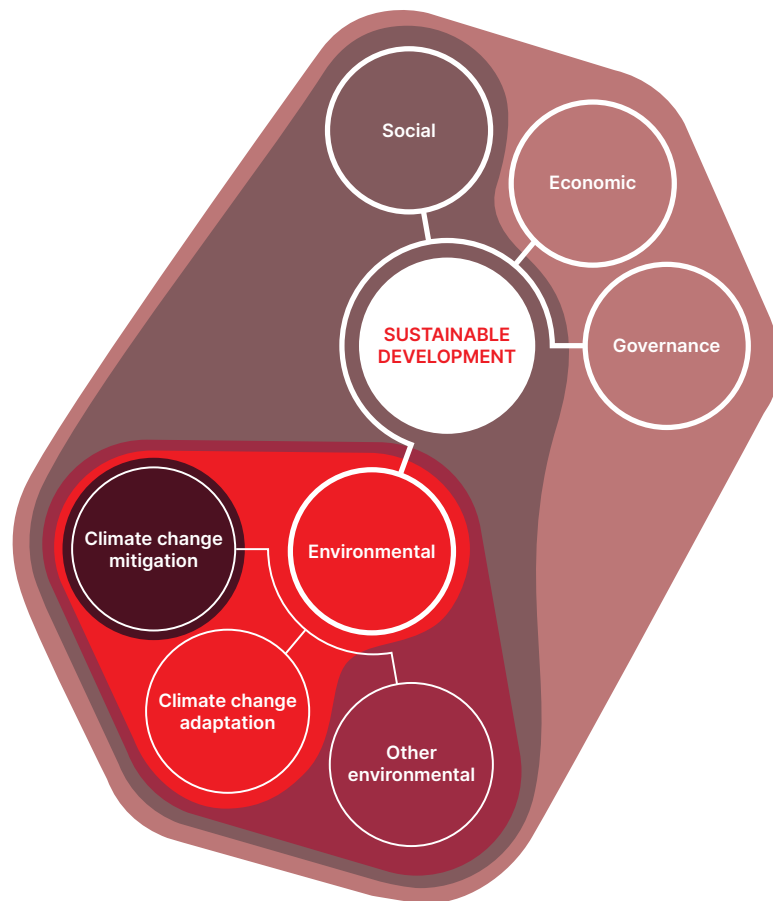
Green finance is one of a number of terms used to describe activities related to the two-way interaction between the environment and finance and investment. It has become a familiar expression over the last decade, partly due to the creation of many national green investment banks and a rapidly growing green bond market. But green finance is closely associated with related concepts, such as climate finance and sustainable finance. A good description of what each refers to is given by the United Nations Environment Programme¹:

- **Sustainable finance** includes environmental, social, governance and economic aspects.
- **Green finance** includes climate finance but excludes social and economic aspects.
- **Climate finance** is a subset of environmental (green) finance.

Sustainable finance is therefore the broadest term, covering all financing activities that contribute to sustainable development.

¹ United Nations Environment Programme, [Definitions and Concepts – Background Note](#), UNEP 2016.

Linkages between climate, green and sustainable finance



Note: Colour-coded by grouping Source: Inspired by UNEP



The investment needed to fix today's sustainability challenges is twofold: it should both "finance the green", i.e. invest in environmentally friendly solutions, and "green the finance" by reorienting the financial system. An example of *financing the green* is the estimated USD 53 trillion that the International Energy Agency says should be invested in the world energy sector by 2035 to prevent life-threatening climate change. Conversely, *greening the finance* can be exemplified by the New Climate Economy's analysis which shows that this systemic change will require funding to the tune of USD 90 trillion. In short, green and sustainable finance is needed on a massive scale.

ISO is developing a series of standards to underpin and catalyse green and sustainable finance.



Building tomorrow's finance

As industrial sectors such as renewable energy, energy efficiency, green building and recycling have grown, investors have been attracted by the ethos of ethical and environmental investments, as well as the promise of healthy financial returns in a booming sector of the economy. These initially “niche” green investors are becoming more and more mainstream, leading to the explosion of tools and methods to identify what constitutes green and sustainable investment types and practices. The result is a confusing and fragmented array of proprietary standards.

Against this background, ISO is developing a series of standards to underpin and catalyse green and sustainable finance. These will help to provide structure, transparency and credibility for investments in environmental projects and programmes. ISO has already begun publishing standards to meet these needs within three ISO technical committees (TCs): ISO/TC 207, *Environmental management*, ISO/TC 322, *Sustainable finance*, and ISO/TC 309, *Governance of organizations*.

Safeguarding green and sustainable finance

- ISO 32210 (framework for sustainable finance)
- ISO 14007 (environmental costs and benefits)
- ISO 14008 (monetary valuation of environmental impacts)
- ISO 14097 (assessing and reporting investments related to climate change)



Sustainable foundations

ISO 32210, *Sustainable finance – Guidance on the application of sustainability principles for organizations in the financial sector*, is the first standard developed by ISO/TC 322. Designed to provide both a foundation and overarching structure in the field of sustainable finance, it embeds and melds environmental, social and governance (ESG) practices within finance and serves as a framework in which the related International Standards for green finance can be developed.

ESG is the familiar term used by investors and the wider business community to assess the sustainability of investments and business activities.

ESG criteria relate to the full business value chain from conception of products/services through production to end use and lifetime impacts.



In the context of greenhouse gas emissions, this covers scope 1, 2 and 3 emissions.

Examples of ESG criteria include:

- **Environmental (E)** – climate change, natural resource depletion and environmental degradation (including land use change, habitat loss and species loss)
- **Social (S)** – working conditions (including slavery and child labour), local communities, conflict, health and safety, employee relations and diversity
- **Governance (G)** – executive pay, bribery and corruption, political lobbying and donations, board diversity and structure, and tax strategy

ISO 32210 sets out the rationale for sustainable finance and provides the inspiration, guidance and principles for this rapidly developing field. It applies to many types and sizes of organization in the financial sector, such as financial institutions, insurers, investors, asset owners and asset managers. The standard delivers practical benefits such as building market confidence, providing credibility and embedding sustainability across organizations.

ISO 32210 goes hand in hand with ISO/TR 32220, *Sustainable finance – Basic concepts and key initiatives*, a recently published technical report that sets out the fundamental building blocks of sustainable finance. With terms falling under five broad categories, this handy guidebook can be used by anyone wanting to navigate through the maze of jargon and rules of sustainable finance. Used together, these two documents provide a solid and streamlined foundation for a successful organization.

The last decade has seen a steady rise in public demand for organizations to be transparent about their ESG performance, including their contributions to local economies. Currently in development, ISO/TS 32211 will help organizations worldwide meet the target by enhancing their uptake of sustainability reporting. Supporting users of ISO 32210, this future technical specification will assist with the implementation of sustainable finance products and services, as well as the fair promotion and transparent reporting of sustainability performance.



Accounting for natural capital

Environmental aspects are an organization's interactions with the environment, while its *environmental impacts* are the consequences of these interactions. An impact can be positive or negative. Aspects and impacts are found throughout the finance cycle, both within the projects funded by green finance and the organizations involved in these processes. Determining the monetary value is therefore essential to understand, and then manage, the risks and opportunities associated with them in a cost-effective way.

ISO 14008, *Monetary valuation of environmental impacts and related environmental aspects*, is the world's first internationally agreed reference for assessing the economic value of an organization's environmental aspects and impacts. It combines economic analyses with environmental management in a standardized manner using a harmonized set of tools. The standard, developed by ISO/TC 207, uses the terminology of ISO 14001 on environmental management systems to help users quickly and easily access its content.

So why do we need ISO 14008? Put simply, organizations need to know all costs and externalities in order to assess risks and opportunities. The standard also helps policy makers to design policies such as green taxes, compensation mechanisms or subsidies considering the current or future value of environmental damage. It also provides an essential tool for today's growing field of disclosure and reporting.

ISO 14008 is complemented by ISO 14007, *Environmental management – Guidelines for determining environmental costs and benefits*.

Once organizations have derived monetary values for environmental impacts, ISO 14007 provides guidance on using those values for cost and benefit analyses. This standard also explains how to use the concept of dependencies, i.e. how organizations depend on the environment.

With rising resource scarcity and declining ecosystem services, there is a growing business case for assessing an organization's dependencies on "natural capital". When companies see the clear environmental benefits of the natural capital they rely upon, they will make greener investment decisions and create more sustainable businesses.

Risks and opportunities

Climate change creates risks and opportunities that may affect the performance of financial institutions and the companies they invest in. With this in mind, a new frame of reference has just been developed to evaluate the impact of climate change on financing and investment. ISO 14097, *Greenhouse gas management and related activities – Framework including principles and requirements for assessing and reporting investments and financing activities related to climate change*, will offer much-needed support to organizations reporting in accordance with the recommendations of the **Task Force** for Climate-related Financial Disclosures.

The standard serves a triple objective:

- Guide investors and finance managers in identifying climate-related risks and opportunities
- Provide the data and information necessary to make informed decisions to minimize or eliminate climate-related risks, and to take advantage of the opportunities
- Enable the transition to a low-carbon economy with fewer climate risks and catalyse a greater investment in the opportunities

Green bonds and loans

Green bonds – and climate bonds in particular – have grown enormously in the past five years, as investors have become motivated to invest in environmentally beneficial projects financed by green debt instruments. With the enthusiasm for green bonds and loans, the value issued in 2019 grew by about 50 % and topped USD 250 billion by 2020.

Despite this growth, the total issuance is still far short of the sum needed to transition to a low-carbon, zero-waste economy. The numerous definitions for green bonds and loans have confused and thus deterred investors, while some bonds have proved less environmentally benign than promised. In response, ISO aims to provide harmonization, structure, transparency and credibility through its ISO 14030 series. The four-part standard helps to determine the eligibility and credibility of green bonds and loans, as well as a robust reporting mechanism for investors.

Financing green projects

- ISO 14030-1 (green debt instruments: green bonds)
- ISO 14030-2 (green debt instruments: green loans)
- ISO 14030-3 (taxonomy of green debt instruments)
- ISO 14030-4 (verification of green debt instruments)



Greening financial projects

But what defines a potential green project, asset or activity? To answer this question, a newly published standard describes the environmental criteria the borrower needs to consider. ISO 14100 provides organizations on both sides of financial transactions with guidance on determining environmental risks and opportunities associated with potentially beneficial projects, assets and activities. The standard acts as a complement to the other green finance standards by focusing on the process for environmental assessment and the content of relevant disclosures.

It is expected that ISO standards will make an important contribution to the global economy by promoting responsible action in the field of sustainable finance. Our outputs will help guide the sustainable operations of financial institutions and investees, define and classify sustainable finance activities, measure the sustainability impact, enhance transparency and ensure integrity of sustainable finance activities. The goal, ultimately, is to ensure public and private investments in financial assets that are both profitable and environmentally sound.

Financing green projects

- ISO 14100 (guidance on environmental criteria to support green finance)

About ISO

ISO (International Organization for Standardization) is an independent, non-governmental international organization with a membership of 166* national standards bodies. Through its members, it brings together experts to share knowledge and develop voluntary, consensus-based, market-relevant International Standards that support innovation and provide solutions to global challenges.

ISO has published more than 24 000* International Standards and related documents covering almost every industry, from technology to food safety, to agriculture and healthcare.

For more information, please visit www.iso.org.

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