BIMx Academy guide · Intermediate

ESG and green bonds

This track explains what ESG means, how companies report sustainability information, and how green, social and sustainability bonds work. You will walk through the practical steps of a green bond issue from the issuer's perspective, then look at the same topics through the eyes of an investor who wants to avoid greenwashing. The content is for educational purposes only and does not constitute investment advice.

5 chapters | 1 h 10 min reading time | Issuers and investors

CHAPTER 1 OF 5

What ESG means

The environmental, social and governance pillars, why they matter to companies and investors, and what double materiality means.

The three letters: E, S and G

ESG stands for Environmental, Social, Governance. It describes a set of non-financial factors that can affect both a company's long-term performance and the effects the company has on people and the environment. ESG is not a single rule or a specific standard, but an analytical lens used by companies, investors, banks and public authorities.

DEFINITION

ESG

An analytical framework that assesses how an organization manages risks and opportunities related to the **environment** (E), its relationships with **people and the community** (S), and **the way it is run and controlled** (G).

Pillar	What it covers	Example topics and indicators
E – Environmental	Impact on the climate and natural resources	Greenhouse gas emissions, energy and water use, waste, pollution, biodiversity
S – Social	Relationships with employees, customers, suppliers and the community	Occupational health and safety, fair pay, professional training, customer data protection, human rights in the supply chain
G – Governance	How the company is managed, controlled and overseen	Board independence, executive pay, shareholder rights, anti-corruption policies, audit and internal control, transparency

Why ESG matters

For a **company**, ESG topics are often “hidden” financial risks: a drought can cut production, a workplace accident can halt operations, and weak governance can lead to fraud or a loss of trust among partners. Managing them carefully can lower costs, ease access to financing and strengthen the company's reputation.

For an **investor**, ESG information complements traditional financial analysis. It helps identify risks that do not yet appear on the balance sheet, as well as companies that are better prepared for changes in regulation, technology or consumer preferences.

- **Access to capital:** more and more international lenders and institutional investors ask for ESG data before granting loans or buying securities.
- **Supply chains:** large customers, including those in the European Union, may ask suppliers for information on emissions or working conditions.
- **Risk management:** extreme weather events, energy prices and regulatory changes directly affect costs.
- **Reputation and talent:** employees and consumers pay increasing attention to how responsibly companies behave.

Double materiality, explained simply

A topic is material if it is important enough to be managed and reported. In sustainability, importance can be viewed from two directions, hence the term **double materiality**.

DEFINITION

Double materiality

The principle that a sustainability topic is relevant either because it **affects the company financially** (financial materiality, the “outside-in” perspective), or because **the company's activities have a significant impact on people or the environment** (impact materiality, the “inside-out” perspective), or both.

Perspective	Key question	Main users
Financial materiality	How does this topic affect the company's revenue, costs, assets or access to financing?	Investors and creditors
Impact materiality	How does the company affect people, the community and the environment?	Society, employees, communities, authorities, and investors too

EXAMPLE

Hypothetical example: “Podgoria Verde SA”

A winery with revenue of MDL 120 million is assessing the topic of **water**. Financial materiality: a severe drought could cut the harvest by 20%, meaning revenue about MDL 24 million lower. Impact materiality: the company uses 150,000 m^3 of water a year for irrigation in an area where local wells are running low. The topic is material from both perspectives, so the company should manage and report it. All figures are illustrative.

Useful clarifications

- ESG is not philanthropy: sponsorships are welcome, but what really matters is how the company runs its core business.
- Material topics differ from one sector to another: for a bank, governance and data protection may weigh more than water use.
- A good ESG score does not guarantee higher returns, and a poor score does not automatically mean a bad investment.
- The pillars are interconnected: strong governance makes environmental and social commitments more credible.

TIP

The first practical step

Start with a short list of 5–10 topics that may be relevant to your sector and assess each one from both perspectives of double materiality. Involve employees, customers and lenders in the discussion.

Key takeaways

- ESG stands for environmental (E), social (S) and governance (G), and it is an analytical lens, not a single standard.
- ESG topics can represent real financial risks and opportunities for companies.
- Double materiality combines the topic's impact on the company with the company's impact on people and the environment.
- Material topics depend on the sector, and governance gives credibility to the other two pillars.

CHAPTER 2 OF 5

Sustainability reporting

The main international reporting frameworks, Scope 1, 2 and 3 emissions, and the indicators used to measure ESG performance.

What a sustainability report is

ESG information becomes useful only if it is **comparable, verifiable and consistent** from one year to the next. That is why companies use reporting frameworks that set out which topics to disclose, how to measure indicators, and how to explain strategy, risks and targets.

DEFINITION

Sustainability reporting

The structured, usually annual, disclosure of information about an organization's impacts, risks, opportunities, policies, targets and indicators in the environmental, social and governance areas. It can be a separate report or a section of the annual report.

A good report is not limited to success stories. It also explains where the company missed its targets, what methodology it used for its calculations and what data is still missing.

The main international frameworks

Framework	Who develops it	Main focus	Intended users
GRI Standards	Global Reporting Initiative, an independent international organization	The organization's impact on the economy, the environment and people; organized into universal, sector and topic standards	A broad range of stakeholders
IFRS S1 and IFRS S2	International Sustainability Standards Board (ISSB), part of the IFRS Foundation	Financially relevant sustainability information; S1 sets the general requirements, S2 focuses on climate-related risks and opportunities	Investors, creditors and other providers of capital
ESRS (in the context of the CSRD)	European standards developed with technical support from EFRAG and adopted by the European Commission	Reporting based on double materiality, applied to companies within the scope of the Corporate Sustainability Reporting Directive (CSRD)	Investors and a broad range of stakeholders

The ISSB standards build on the structure of the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures), organized into four areas:

- **Governance** – who oversees sustainability risks and opportunities;
- **Strategy** – how they affect the company's business model and plans;
- **Risk management** – how they are identified, assessed and monitored;
- **Metrics and targets** – what is measured and what goals the company has committed to.

WARNING

Applicability varies by jurisdiction

The fact that a framework exists does not mean it is mandatory for every company. Each jurisdiction decides whether and how to adopt these standards, and requirements can change over time. Always check the applicable legislation and the specific requirements of your lenders or partners.

Greenhouse gas emissions: Scope 1, 2 and 3

The most widely used environmental indicator is the carbon footprint, expressed in tonnes of CO_2 equivalent (tCO_2e). The classification of emissions into three “scopes” comes from the **GHG Protocol**, the greenhouse gas accounting standard that is widely used, including by the reporting frameworks above.

Category	What it includes	Examples
Scope 1 – direct emissions	Emissions from sources owned or controlled by the company	Burning natural gas in the company's own boilers, fuel for its own fleet, industrial processes
Scope 2 – indirect emissions from energy	Emissions associated with energy purchased and consumed	Purchased electricity, heat or steam
Scope 3 – other indirect emissions	Emissions from the value chain, upstream and downstream	Production of purchased raw materials, transportation by third parties, employee travel, use of sold products

TIP

Scope 3 is often the largest

For many companies, value chain emissions far exceed direct emissions, but they are also the hardest to measure because they depend on data from suppliers and customers. Estimates should be accompanied by an explanation of the methodology.

Indicators and a numerical example

- **Environmental:** Scope 1, 2 and 3 emissions; energy use (MWh) and the share of renewable energy; water use (m^3); waste generated and recycled (tonnes).
- **Social:** number of employees and staff turnover; workplace accident rate; training hours per employee; gender pay gap.
- **Governance:** share of independent board members; existence of anti-corruption policies and whistleblowing channels; compliance incidents.

EMISSIONS INTENSITY

Intensity = Emissions (tCO_2e) / Revenue (MDL million)

Relating emissions to revenue makes it possible to compare companies of different sizes and to track progress even as the business grows.

EXAMPLE

Hypothetical example: "Termo-Plast SA"

A packaging manufacturer has revenue of MDL 250 million. Its estimated emissions are: Scope 1 = 3,000 tCO_2e (natural gas and its own fleet), Scope 2 = 2,000 tCO_2e (electricity), Scope 3 = 15,000 tCO_2e (raw materials and transportation). Scope 1+2 intensity is 5,000 / 250 = **20 tCO_2e per MDL million**. Total emissions are 20,000 tCO_2e, of which Scope 3 accounts for 75%. If next year revenue rises to MDL 300 million while Scope 1+2 emissions stay at 5,000 tCO_2e, intensity falls to about 16.7 tCO_2e per MDL million. The figures are illustrative.

Key takeaways

- Sustainability reporting makes ESG information comparable, verifiable and consistent over time.
- GRI focuses on impact, IFRS S1/S2 on information relevant to investors, and ESRS, in the context of the CSRD, on double materiality.
- Scope 1 = direct emissions, Scope 2 = purchased energy, Scope 3 = the rest of the value chain.
- Intensity indicators, such as emissions per MDL million of revenue, allow comparisons across years and between companies.
- Whether a standard applies depends on the jurisdiction and on the specific requirements of lenders.

Green, social and sustainability bonds

The types of labeled bonds, the four components of the ICMA Green Bond Principles and the categories of eligible projects.

Labeled bonds: the basic idea

Legally and financially, a green bond works like any other bond: the issuer receives money from investors, pays coupons and repays the face value at maturity. The difference lies in the **commitment on the use of proceeds** and in the **transparency** the issuer takes on.

DEFINITION

Green bond

A debt security whose proceeds are used exclusively to finance or refinance, in whole or in part, **eligible projects with clear environmental benefits**, following a transparent process of selection, management and reporting.

As a rule, the credit risk of a green bond is the issuer's risk, not the risk of the financed project: the investor is paid from the cash flows of the company as a whole. The exceptions are special structures, such as asset-backed bonds or project finance, where payment may depend on specific assets.

Four main types

Type	What it finances	Key mechanism	ICMA reference guidance
Green	Projects with environmental benefits	Use of proceeds	Green Bond Principles
Social	Projects with positive social outcomes for target populations	Use of proceeds	Social Bond Principles
Sustainability	A mix of green and social projects	Use of proceeds	Sustainability Bond Guidelines
Sustainability-linked	General corporate purposes	Financial characteristics (for example, the coupon) depend on meeting performance targets	Sustainability-Linked Bond Principles

The first three types are use of proceeds instruments: what matters is what the money is spent on. **Sustainability-linked** bonds work differently: the money can be used for any general purpose, but the issuer commits to key performance indicators (KPIs) and sustainability performance targets. If the targets are not met, the coupon usually increases.

ADDITIONAL COST OF A SUSTAINABILITY-LINKED BOND

Additional annual cost = Issue size × Coupon step-up

The coupon step-up applies only if the target is not met by the observation date set out in the prospectus.

The ICMA Green Bond Principles

ICMA (International Capital Market Association) publishes the Green Bond Principles, voluntary guidelines widely used in international markets. They are not law, but good practices that increase transparency and investor confidence. The principles have four core components:

01

Use of proceeds

Proceeds are allocated to eligible green projects, clearly described in the issue documentation, with environmental benefits that are assessed and, where possible, quantified.

02

Process for project evaluation and selection

The issuer explains its environmental objectives, its eligibility criteria and how it identifies and manages the social and environmental risks of the projects.

03

Management of proceeds

The net proceeds are tracked separately (in a sub-account, sub-portfolio or through an equivalent internal mechanism), and the issuer states how it temporarily invests any amounts not yet allocated.

04

Reporting

The issuer publishes up-to-date information on the use of proceeds, at least annually until full allocation, as well as on the expected impact of the projects.

TIP

Two key recommendations

In addition to the four components, the principles recommend that the issuer publish a **green financing framework** (Green Bond Framework) and obtain an **external review**, for example a second-party opinion. Both are covered in detail in the next lesson.

Eligible project categories

The ICMA principles provide an indicative, non-exhaustive list of green project categories. They include:

- renewable energy (for example, solar or wind farms);
- energy efficiency (building renovation, equipment upgrades, smart grids);
- pollution prevention and control;
- sustainable management of living natural resources and land use (including sustainable agriculture);
- terrestrial and aquatic biodiversity conservation;
- clean transportation (electric, public and non-motorized transport);
- sustainable water and wastewater management;
- climate change adaptation;
- circular economy adapted products, production technologies and processes;
- green buildings certified to recognized standards.

For social bonds, typical categories include affordable basic infrastructure, access to essential services such as healthcare and education, affordable housing, employment generation (including through SME financing), food security and socioeconomic advancement and empowerment.

EXAMPLE

Hypothetical example: "EnergoSud SA"

The company issues **MDL 50 million** in green bonds and allocates the proceeds as follows: MDL 30 million for a solar farm (renewable energy), MDL 15 million for energy efficiency upgrades at a factory and MDL 5 million for electric delivery vehicles (clean transportation). Alternatively, it could issue an MDL 50 million sustainability-linked bond with a 9% coupon that rises by 0.25 percentage points if it does not cut emissions by 30% by the observation date: the additional cost would be 50,000,000 × 0.0025 = **MDL 125,000 per year**. The figures are illustrative.

Key takeaways

- Green, social and sustainability bonds are defined by their use of proceeds; sustainability-linked bonds are defined by performance targets tied to their financial characteristics.
- The credit risk of a standard green bond is, as a rule, the issuer's risk.
- The Green Bond Principles have four components: use of proceeds, project evaluation and selection, management of proceeds, and reporting.
- The ICMA principles are voluntary and recommend a green financing framework and an external review.
- Eligible categories include renewable energy, energy efficiency, clean transportation, water, green buildings and the circular economy.

Issuing a green bond

The practical steps of a green bond issue: the financing framework, the second-party opinion, allocation of proceeds, and allocation and impact reports.

Preparation: from strategy to a project portfolio

A credible green bond starts from the **company's strategy**, not from a desire to obtain a label. Investors will ask how the financed projects fit into the issuer's overall environmental objectives and whether the rest of its business contradicts the green message.

The first concrete step is to take stock of existing and planned projects that could be eligible: investments in renewable energy, energy efficiency, water or clean transportation. For each project, you estimate the cost, the timeline and the measurable environmental benefits.

DEFINITION

Green financing framework (Green Bond Framework)

A public document in which the issuer describes its sustainability strategy and how it applies the four components of the principles: eligible project categories, the selection process, management of proceeds and reporting commitments. A single framework can cover several successive issues.

The steps of an issue

01

1. Internal decision and project team

Management approves the initiative and sets up a team from finance, sustainability, legal and operations. It is decided who determines project eligibility (usually an internal committee).

02

2. Identifying eligible projects

Projects that match the green categories are selected and the required amount is estimated, including any refinancing of completed projects, with a disclosed look-back period.

03

3. Drafting the green financing framework

The document is drafted to explain the eligibility criteria, exclusions, management of proceeds and the impact indicators that will be reported.

04

4. External review

An independent reviewer analyzes the framework and issues an opinion on its alignment with market principles and the credibility of the environmental benefits.

05

5. Issue documentation and approvals

The prospectus or offering document is prepared, with a reference to the green framework, and the approvals required by the capital market legislation applicable to the issuer are obtained.

06

6. Placement with investors

The issuer and intermediaries present the issue to investors, explaining both the credit profile and the green projects.

07

7. Allocation of proceeds and reporting

Proceeds are tracked separately and allocated to projects, and the issuer periodically publishes allocation and impact reports.

External review and the second-party opinion

Under the voluntary principles, an external review is usually not mandatory, but it is strongly recommended: for many investors, its absence is a red flag. The most common form is the

second-party opinion (SPO), an opinion issued by an institution with sustainability expertise that is independent of the advisers who prepared the framework.

Type of review	What it provides	When it usually happens
Second-party opinion	Assesses the framework's alignment with the principles and the relevance of its environmental objectives	Before the issue
Verification	Confirms, against set criteria, aspects such as allocation of proceeds or impact data	Before or after the issue
Certification	Attests compliance with a recognized external standard	Before and often after the issue
Scoring or rating	Assigns a score or grade to the framework or the issue, using its own methodology	Before or after the issue

After issuance: allocation and impact

The issue does not end once the money is received. Investors follow two types of reports: the **allocation report**, which shows how much money went to each project category and how much remains unallocated, and the **impact report**, which shows the environmental results achieved or expected, together with the calculation methodology.

ALLOCATION RATE

Allocation rate (%) = Proceeds allocated to eligible projects / Net proceeds raised × 100

Amounts not yet allocated are temporarily invested according to the policy set out in the financing framework, for example in cash or deposits.

EXAMPLE

Hypothetical example: “AquaNord SA”

The company raises net proceeds of **MDL 80 million** through green bonds. After the first year, it has allocated MDL 40 million to a wastewater treatment plant and MDL 16 million to energy-efficient pumps, MDL 56 million in total. Allocation rate = 56 / 80 × 100 = **70%**, and MDL 24 million remains temporarily in deposits. In its impact report, the company estimates savings of 4,000 MWh a year; using a hypothetical emission factor of 0.4 tCO_2e/MWh, avoided emissions are 4,000 × 0.4 = **1,600 tCO_2e per year**. The figures are illustrative.

WARNING

Reputational risk

If proceeds are allocated to projects that do not match the framework, or if reports are late or missing, the issuer risks accusations of greenwashing and a loss of investor trust, even if it pays its coupons on time.

Key takeaways

- A credible green bond starts from the company's strategy and a clear portfolio of eligible projects.
- The green financing framework publicly describes the criteria, selection, management of proceeds and reporting.
- The second-party opinion assesses the framework's alignment with market principles before the issue.
- After issuance, allocation and impact reports are published together with the calculation methodology.
- Failing to honor green commitments creates reputational risk even when the bond is paid on time.

ESG from the investor's perspective

ESG investment strategies, ESG ratings and their limitations, and the signs that help you recognize greenwashing.

ESG investment strategies

There is no single way to “invest ESG.” Investors combine several approaches depending on their goals: reducing risk, aligning the portfolio with personal or institutional values, or achieving measurable impact.

Strategy	How it works	Example
Negative screening (exclusion)	Removes certain sectors, companies or practices from the investment universe	Excluding tobacco producers or companies involved in serious human rights violations
Positive screening (best-in-class)	Selects the companies with the best ESG performance in each sector	Choosing the most energy-efficient companies in an industrial sector
ESG integration	Systematically includes ESG factors in financial analysis, alongside traditional indicators	Adjusting cost estimates for future energy prices or drought risk
Thematic investing	Focuses on sustainability-related themes	A portfolio focused on renewable energy or water
Impact investing	Intentionally seeks measurable social or environmental impact alongside a financial return	Financing affordable housing projects and reporting the number of families who benefit
Shareholder engagement	Dialogue with management and voting at general meetings to improve practices	Asking for emissions reduction targets

DEFINITION

Impact investment

An investment made with the **intention** of generating a positive, **measurable** social or environmental impact in addition to a financial return. Simply avoiding “problematic” companies is not, in itself, impact investing.

ESG ratings and their limitations

ESG ratings are assessments issued by specialized providers that try to summarize a company's ESG performance or exposure to ESG risks in a score or grade. They are useful as a starting point, but should be used with caution.

- **Different methodologies:** providers choose different topics, weightings and data sources, so the same company can receive very different scores.
- **What exactly is measured:** some ratings assess ESG risk to the company, others the company's impact on the world; the two are not the same.
- **Incomplete data:** many scores rely on information reported by the company itself or on estimates.
- **Size matters:** large companies with dedicated reporting teams may get better scores simply because they publish more information.
- **Scores are not credit ratings:** a high ESG score says nothing directly about the issuer's ability to repay its debts.

EXAMPLE

Hypothetical example: two scores, one company

"LogiTrans SA" receives 72 out of 100 from provider A, which focuses on policies and governance, and 41 out of 100 from provider B, which focuses on fleet emissions. An investor with MDL 1 million to allocate should not pick the convenient score, but read the methodologies and check the underlying data, for example emissions of 12,000 tCO_2e against revenue of MDL 400 million, or 30 tCO_2e per MDL million. The figures are illustrative.

Greenwashing: how to recognize it

DEFINITION

Greenwashing

The practice of presenting a company, product, fund or financial instrument as more sustainable than it really is, through vague, exaggerated, selective or unverifiable claims.

- Vague terms such as "eco-friendly," "nature-friendly" or "climate neutral," with no data and no methodology.
- A focus on a small, visible project while the core business remains highly polluting and has no transition plan.
- Very long-term targets with no interim targets, allocated budget or designated owners.
- No external review, or allocation and impact reports that are late or missing.
- A fund's name suggests a green theme, but the portfolio holds few assets related to that theme.
- Emissions offsetting presented as the main solution instead of actual emission reductions.

SHARE OF ASSETS RELATED TO THE STATED THEME

Share (%) = Value of theme-aligned assets / Total portfolio value × 100

A low share in a product that claims a green theme in its name or marketing materials warrants further questions.

EXAMPLE

Hypothetical example: the “Verde Plus” fund

A hypothetical fund with **MDL 100 million** in assets markets itself as a “green investment.” Looking at its list of holdings, you find that only MDL 12 million is invested in green bonds or renewable energy companies. The share is 12 / 100 × 100 = **12%**. The remaining MDL 88 million is in ordinary securities with no explicit ESG criteria. The gap between the message and the content is a classic sign of greenwashing.

An investor checklist

01

Clarify your goal

Do you want to reduce risk, avoid certain sectors or achieve measurable impact? The right strategy depends on your answer.

02

Analyze the credit first

With a green bond, the label does not replace analysis of the issuer's financial position, the maturity, the coupon and the liquidity.

03

Read the green documents

Check the financing framework, the second-party opinion and the eligible project categories, including exclusions.

04

Follow the reporting

Check whether allocation and impact reports are published on time, with concrete figures and an explained methodology.

05

Look at the big picture

Compare the financed projects with the issuer's strategy and core business, and do not rely on a single ESG rating.

WARNING

Educational content

The examples in this lesson are hypothetical and do not constitute investment advice. Before making any decision, consult the issuer's official documents and, where appropriate, a licensed adviser.

Key takeaways

- ESG strategies include negative and positive screening, ESG integration, thematic investing, impact investing and shareholder engagement.
- Impact investing requires intention and measurable impact, not just exclusions.
- ESG ratings differ between providers because of their methodologies, and they do not replace credit analysis.
- Greenwashing can be recognized by vague claims, missing data, the lack of an external review and gaps between message and content.
- A green label complements, but does not replace, financial analysis of the issuer.

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