

Green bonds:

Financial instruments for
accessing capital and financing
the energy transition

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Introduction

Introduction

Green bonds are fixed-income financial instruments used to raise capital to fund projects that benefit the environment, such as projects relating to renewable energy, energy efficiency, clean transportation, and green buildings. These activities, directly or indirectly, help support the energy transition—the global energy sector’s transition from fossil-based energy sources to renewable energy sources—in order to limit the global temperature rise to 1.5 degrees Celsius above pre-industrial levels.¹

Because the debt raised in a green bond offering is earmarked for specified purposes, green bonds are known as “use-of-proceeds” bonds. The proceeds (or an equivalent amount) from these bonds can be used to finance or refinance new and/or existing eligible green projects, in part or in full.²



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Introduction

Since the European Investment Bank issued the world's first Climate Awareness Bond in 2007, green bonds have raised more than US\$2 trillion in financing.³

Green bonds aim to offer an effective way to finance the energy transition, which will likely require unprecedented capital over the coming decades. The 2015 Paris Agreement called on developed countries to commit \$100 billion a year to counter the effects of climate change and meet the short-term goals of the agreement.⁴

According to the International Monetary Fund, achieving the Paris Agreement's goals will require as much as \$6 trillion of annual spending on climate mitigation and adaptation until 2050.⁵ Climate mitigation intends to reduce greenhouse gas emissions or enhances greenhouse gas sinks, while climate adaptation intends to moderate the

impacts caused by climate change.⁶

Although green bonds are an important funding source for renewable energy projects (one type of climate mitigation), they currently represent less than 3% of global bond market issuances.⁷ That presents a potentially untapped opportunity to access new sources of capital through environmental, social, and governance (ESG) lenders and investors. However, these stakeholders expect reporting relating to green bonds to have both reliable data and an increasingly demonstrable environmental impact that differentiates them from not only conventional bonds but also previously issued green bonds.

In this article, we'll look at where the green bonds market stands today and how investors and regulators are responding. We'll then walk through five ways you may enhance disclosure of the use-of-proceeds from a green bond issuance.



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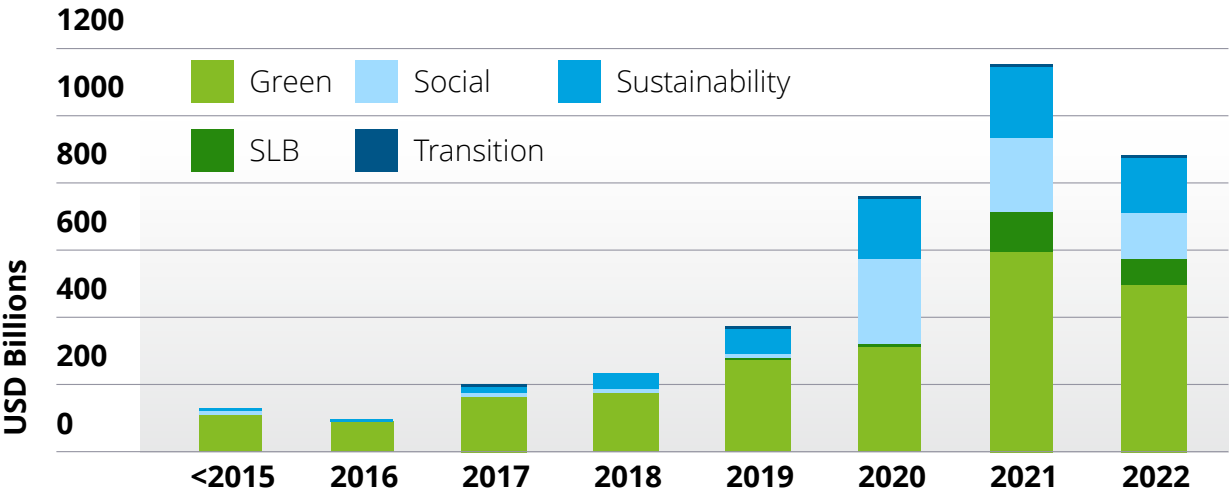
Increasing demand for green bonds



Increasing demand for green bonds

Issuance of green and other types of sustainability-related use-of-proceeds bonds has surged in the past few years. A recent Climate Bonds Initiative analysis found that most of the volume has been from green bonds, although social and sustainability bonds have also seen notable increases in recent years (figure 1).

Figure 1: Green and other types of sustainability-related bond issuance volume, 2015–2022



Source: [Climate Bonds Initiative](#)

According to *Environmental Finance*, the number of bond funds that invest most of their assets in “green, social, sustainability, and sustainability-linked” bonds rose from 75 in 2021 to 88 in 2022.⁸





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Green bond guidelines and standards



Green bond guidelines and standards

So far, no single universally accepted standard for issuing green bonds has emerged. The most widely used guidelines may be the Green Bond Principles, which are published by the International Capital Markets Association (ICMA).

The Climate Bonds Standard and Certification Scheme from the Climate Bonds Initiative provides definitions for “green” that are sector-specific, and some sector definitions are more comprehensive and prescriptive than others. Issuers may choose to align with the Green Bond Principles and/or the Climate Bonds Standard, which are commonly used across many jurisdictions internationally, based on their project types and sustainability goals.

Furthermore, there are numerous jurisdictional approaches on what needs to be in place to issue a green bond. One such example, the Association of Southeast Asian Nations (ASEAN) Green Bonds Standards, is based on the Green Bond Principles and emerged in 2018 to support green bond

issuances in Southeast Asia.⁹ By comparison, in 2021, Chinese financial regulators announced an updated Green Bond Endorsed Project Catalogue,¹⁰ which defines and lists qualifying green bond projects.

Yet another example is the Council of the European Union and the European Parliament which, in February 2023, announced a provisional agreement for the creation of green bond standards.¹¹ These standards are intended to establish transparency, reporting, and external review requirements that align to the existing European Union (EU) taxonomy, reinforcing the region’s prescriptive approach to determining which projects are considered green.

By comparison, in the United States, the Securities and Exchange Commission (SEC) has sought feedback on disclosure rules for companies that use green bonds and other climate-related financing instruments.¹²



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Growing scrutiny from investors and regulators



Growing scrutiny from investors and regulators

Green bond standards can contribute to reliable, comparable, and relevant information to help investors evaluate opportunities in the green bond market. However, they may still fall short of addressing concerns about greenwashing or misleading claims about the environmental benefits of a project. Research from *Environmental Finance* reveals that although 71% of green bond investors say impact reports are crucial, 60% believe the ones they're getting are inadequate.¹³

For their part, regulators are stepping up scrutiny of sustainable investing claims. The SEC, for instance, released two proposals that aim to enhance disclosures on mutual funds, exchange-traded funds (ETFs),¹⁴ and similar vehicles that pertain to ESG.¹⁵

Investors are accelerating action and transparency around climate and ESG. According to Russell Investments, 92% of asset managers incorporate ESG in their investment assessments.¹⁶ Investors can play an important role in this ESG conversation and have the potential to drive market demand for green bond investments. Asset owners are an especially important group of investors, as many have established their own net-zero commitments and goals.



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Growing scrutiny from investors and regulators

For example, as of September 2022, the Net-zero Asset Owner Alliance, a group of institutional investors committed to transitioning their investment portfolios to net-zero GHG emissions by 2050, recorded membership representing more than \$10 trillion assets under management.¹⁷

Against this backdrop, issuers may find scrutiny coming from the secondary market. This may come from asset managers who seek to place the green bonds in their green bond financial instruments—such as mutual funds and ETFs—as their clients increase allocations to green bonds through these instruments. In the past, it may have been enough for a portfolio manager to simply confirm that each of the portfolio's underlying bonds align with its original green bond framework.

However, as investor expectations evolve, and depending on the prospectus of the fund itself, a portfolio manager may need to illustrate and verify whether each underlying bond issuance reasonably aligns with, or satisfies, the objectives under the originally stated green bond framework; and that the green bond framework objectives align with any green objectives outlined in the fund prospectus as well.



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Types of ESG financial instruments

Green bonds aren't the only ESG financial instruments. Here's a breakdown of the most common ones:

Use-of-proceeds bonds

- **Green bonds** finance projects that have clear environmental benefits such as energy, building, or cropland efficiency.
- **Social bonds** finance projects that create a positive social benefit such as education, housing, or health.
- **Sustainability bonds** finance projects that combine social and environmental benefits—e.g., sustainable development goals or socially responsible investments.
- **Transition bonds** finance projects that support the transition to net-zero. They often originate from high-polluting industries like mining, steel, and cement.

KPI-linked

- **Sustainability-linked bonds and loans** are forward-looking, performance-based instruments. The proceeds from these instruments are intended to be used for general purposes. They have coupon step-up/step-downs linked to achieving sustainability performance targets as measured against predefined key performance indicators, or KPIs.



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Common guiding principles and standards

ICMA Green Bond Principles

- Principles-based (i.e., not prescriptive requirements)
- Widest use among issuers
- Three project categories: green, social, and sustainability

Climate Bonds Initiative

- Certification scheme
- Detailed sector-specific eligibility criteria
- Project eligibility determined by alignment to goals of the Paris Agreement

Proposed EU Green Bond Standard

- Voluntary standard published by the European Commission
- Political agreement reached on the EU Green Bond Standard
- Of funds raised by the bond, 85% are allocated to economic activities that align with the EU Taxonomy Regulation

ASEAN Green Bond Standard

- Voluntary standard for Southeast Asian countries
- Developed based on ICMA principles
- Provides additional guidance on the application of financial instruments (green, social, sustainability, etc.)



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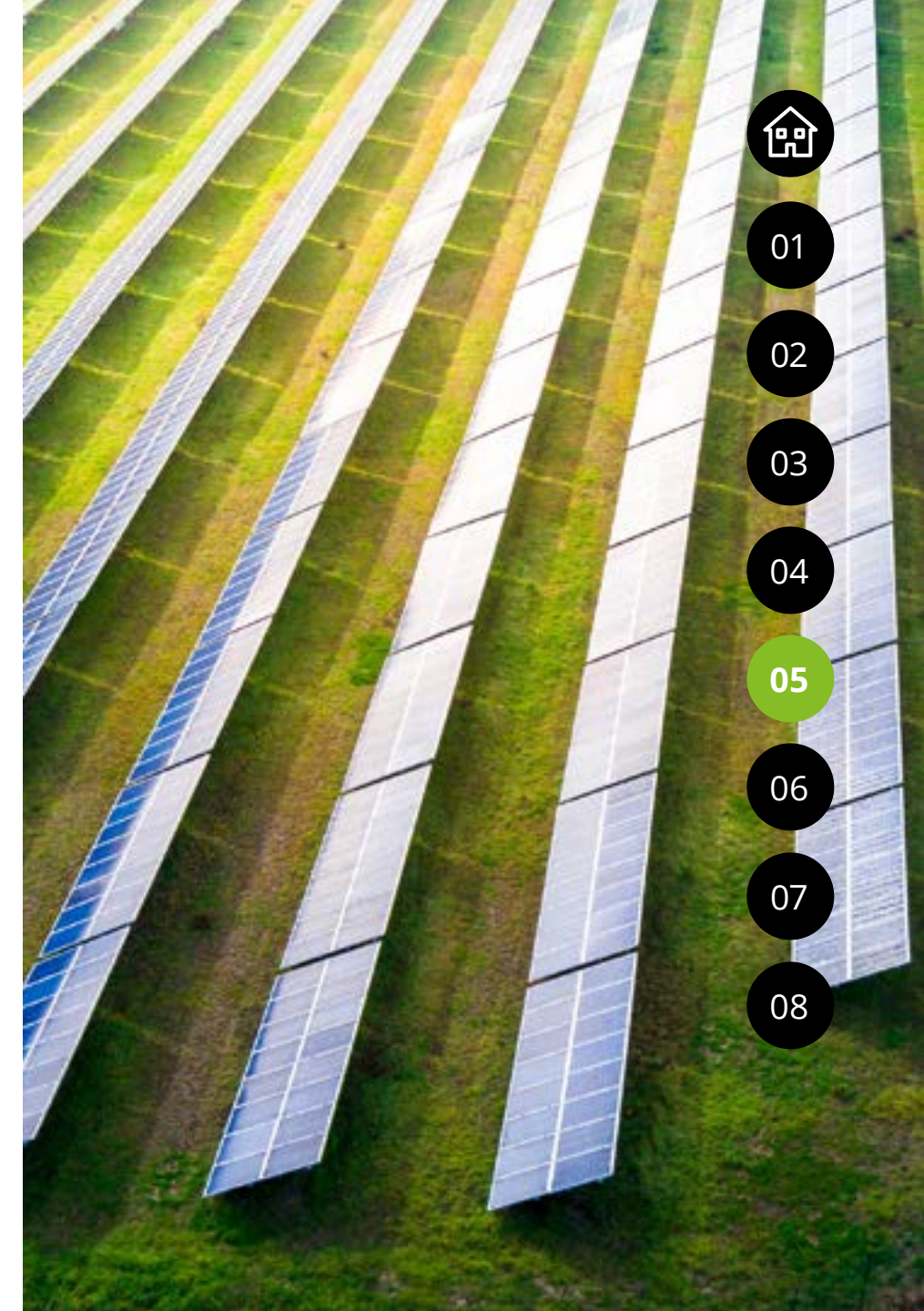
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Five potential ways to boost the credibility of a green bond

Five potential ways to boost the credibility of a green bond

While the market for green bonds is expected to continue to expand, given the growing awareness of the need to address the energy transition in addition to investors' desire to align their portfolios with their commitments and values, continued scrutiny and expectations around the transparency and accountability of issuers of green bonds is also anticipated. Against this backdrop, here are five steps to consider if pursuing a green bond issuance.



Five potential ways to boost the credibility of a green bond

01 | Align to voluntary green bond guidelines or standards

Green bond guidelines and standards can provide issuers the structure to determine the types of activities that are considered “green.” To determine eligible project categories, issuers generally use the guidance provided by the Green Bond Principles, the Climate Bonds Standard, or both. Issuers may also look to their issuing jurisdiction, which may have additional criteria, guidance, or requirements for green bond issuance. Other common considerations for project eligibility include the issuer’s underlying sustainability and business strategy, financing objectives, and stakeholder needs.

Consider developing and publishing the organization’s green bond framework to articulate:

- The eligible project categories and/or project types and the eligibility criteria for the use-of-proceeds from green bonds and how they align with the Green Bond Principles or a green bond standard in use.
- Processes to evaluate project eligibility and manage the proceeds.
- Commitments to investors and other stakeholders to communicate progress on use-of-proceeds and the associated environmental impacts from that financing.



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Five potential ways to boost the credibility of a green bond

02 | Focus on material ESG topics

To identify eligible projects that meet an organization's ESG goals and objectives, consider:

- Materiality guidance from standard-setting organizations, such as the International Sustainability Standards Board or Global Reporting Initiative.
- The sustainability priorities of investors, raters, rankers, and other significant stakeholders.
- Existing ESG or sustainability projects within your organization in need of funding.

The ESG topics that matter to the business, the issues that matter to stakeholders, and the sustainability project's finance priorities can all help determine which standard or framework would be well suited to meet the bond's objectives.



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Five potential ways to boost the credibility of a green bond

03 | Bring together the organization’s sustainability and finance functions

The governance component is particularly important for an effective rollout—and long-term success—of a green bond issuance. These governance components often include accounting and operational tasks that require corporate functions to formally work together, possibly for the first time.

In addition to being able to make decisions around selection of eligible projects and management of those proceeds, a multidisciplinary team has additional benefits. This cross-functional collaboration can create other benefits to the organization, including establishing or improving processes and controls of broader sustainability data.

Elevating sustainability data to the rigor of financial data can help an organization improve the reliability, comparability, and decision usefulness of its corporate ESG disclosures. The ability for the sustainability and finance departments to work together may be especially beneficial in preparation for the SEC’s proposed climate disclosure rule and other relevant regulations.



Five potential ways to boost the credibility of a green bond

04 | Focus on meaningful sustainability impact

Most issuers obtain a second-party opinion of their framework during the pre-issuance process, as is recommended or required by green bond standards and frameworks. This consists of a second-party reviewer conducting independent, research-based assessments of an entity's green financing framework's alignment to *third-party* sustainability principles, standards, and taxonomies. This step includes analyzing the potential environmental benefits and impacts of the underlying eligible projects or assets described in the entity's framework.

However, even with a second-party opinion, green bonds may continue to attract scrutiny. One reason for this may be the spectrum of actual sustainability outcomes achieved through use-of-proceeds bonds remains very wide, and greenwashing accusations are common. Further, the second-party opinion providers typically do

not follow up on the actual use of the proceeds from a green bond offering to determine how closely the use of the proceeds aligns with the aspirations articulated in the entity's green financing framework.

A common emerging theme of concern across stakeholders is whether the funds allocated to these projects have measurable positive environmental impact. One way to improve a green bond's potential for measurable sustainability impact is to consider the use-of-proceeds through the lens of additionality. The Greenhouse Gas Protocol defines additionality as "a criterion for assessing whether a project has resulted in GHG [greenhouse gas] emissions reductions in addition to what would have occurred in its absence."¹⁸ While not all green bonds target projects that have the objective of GHG emissions reductions, the concept of

additionality remains useful across many project types that contribute to the energy transition. Additionality can also be a useful lens for weighing common questions, such as how much refinancing to include in the use-of-proceeds versus financing of new projects, or whether to consider a lookback period for projects that have already occurred. Because there are no rules prohibiting lookback periods, using proceeds on "additional" projects can enhance the demonstrable environmental impact.

Assurance on green bond use of proceeds reporting can enhance the confidence that investors and other stakeholders may place on how the proceeds from the issuance of the green bond were disbursed or allocated.



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Five potential ways to boost the credibility of a green bond

05 | Obtain external assurance

As with audited financial statements, external assurance of green bond use-of-proceeds reports can increase the reliability of the information reported. Once a green bond is issued, several reporting opportunities exist, depending on the green bond standard or guidelines that are utilized. Most common, and generally expected by lenders and investors, is reporting on how proceeds from the bond issuance were allocated or disbursed (use-of-proceeds report).

Some stakeholders also expect reporting on the environmental impact of the project the bond is funding, which can go a long way to address some of the aforementioned topics. Regardless of reporting requirements, the credibility of the

green bond marketplace depends, in large part, on the information being reliable. This is where assurance can come in. Furthermore, the Green Bond Principles provide *recommendations* around obtaining assurance while the Climate Bonds Standard *requires* assurance on post-issuance reporting. Generally, assurance is also required by the financial institution in connection with issuing a green bond.

Assurance on the green bond use-of-proceeds report is typically provided by the issuer's financial statement auditor. This step provides assurance that net proceeds from the issuance of the green bond (or an amount equivalent to the net proceeds) has been utilized on eligible green projects as defined in the issuing

documents. Establishing criteria that is relevant, complete, reliable, understandable, and neutral (not misleading and free from bias) and can be capable of consistent measurement for post-issuance assurance, is important early on in the process. Issuers are encouraged to get their financial statement auditors involved prior to finalizing any issuing documents.



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Helping investors finance the transition with confidence



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Helping investors finance the transition with confidence

The green bond market has grown rapidly over the past decade, mobilizing new sources of funding for projects that have clear environmental benefits. Given the ongoing interest in green financial instruments, we expect the green bond market to see continued growth. Although investors and regulators are tightening their scrutiny, a well-designed green bond framework and reliable green bond reporting can provide the transparency and quality that market participants expect, while simultaneously funding the transition to a more sustainable economy for us all.

Deloitte can advise you on your path to issuing green bonds, from the design of a robust framework to a plan to establish governance for the management of proceeds and communicating a consistent, transparent sustainability story. Our sustainability professionals can advise you on ways to create a transparent, measurable, and accountable sustainable finance strategy that can contribute meaningfully to your corporate sustainability strategy. To learn more, please contact us.



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Contacts

Suzanne Smetana

Audit & Assurance Managing Director
Sustainability and ESG Services
Deloitte & Touche LLP
ssmetana@deloitte.com

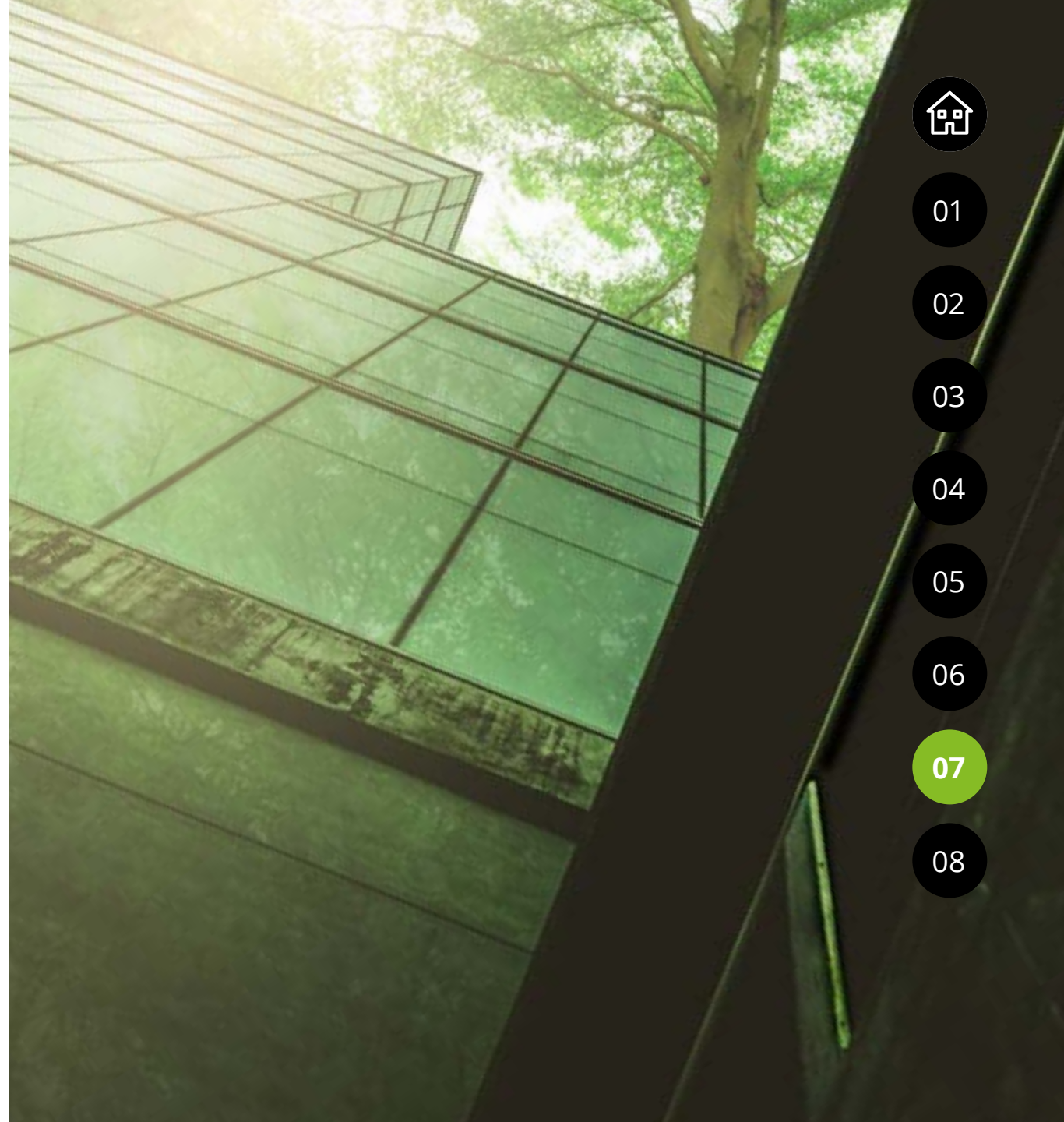
Inna Macedo

Audit & Assurance Senior Manager
Sustainability and ESG Services
Deloitte & Touche LLP
innamacedo@deloitte.com

Mel Dubin

Audit & Assurance Manager
Sustainability and ESG Services
Deloitte & Touche LLP
mdubin@deloitte.com

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