

Understanding ESG and its relevance in Real Estate

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1. INTRODUCTION

Have you considered the importance of taking sustainability into account in business today?

In addition to meeting environmental, social, and governance (ESG) requirements such as regulations that have emerged in recent years, like the Sustainable Finance Disclosure Regulation (SFDR), there are other reasons:

a) You want to attract investors

The global professionally managed real estate investment market is estimated to grow from \$9.6 trillion in 2019 to \$10.5 trillion in 2020, and to reach \$14 trillion by 2025. (Real Estate Market Size, MSCI, 2020/21)

- 79% of respondents agree that the way the company manages ESG risks and opportunities is a decisive factor in making investment decisions. (PwC's 2021 Global Investor Survey)
- 60% of those interviewed for the CBRE 2021 Global Investor Intent Survey said they have already adopted ESG criteria. (ESG & Real Estate: Top 10 Things Investors Need to Know. CBRE Research, 2021)

b) You want that your buildings having a good performance

New technologies such as data automation systems provide the data needed to manage building operations better.

Portfolios that use technology provide their owners and operators with better insights into building performance, giving them the confidence to make data-driven decisions, identify discrepancies, and find cost-saving opportunities and capital investment projects to create efficiencies.

As a result, buildings with operational performance tracking tools perform better.



c) You want to be well-recognized in the market

In addition to meeting the demands of climate and environmental change, ESG integration creates value for society by adhering to practices that address social and ethical issues, promoting a positive impact.

Furthermore, a commitment to sustainability enhances a company's image as ethical attitudes and socio-environmental responsibility are increasingly demanded and recognized as differentiators.

Sustainability reporting is an excellent way for a company to position itself, publicize its positive impacts, and gain greater visibility and recognition.

d) You want to retain talent in your company

A Morgan Stanley survey found that Millennials are two to three times more likely to want to work for organizations that share their values, particularly when it comes to environmental and social issues.

Meeting these expectations will become even more critical as millennials take over the workforce. This underlines the importance of positioning in the face of climate and social challenges.

2. ESG OVERVIEW

ESG corresponds to the words environmental, social, and governance. The term emerged in the 2000s, as mentioned in the report "Who cares wins," supported by the UN and produced by financial institutions to try to resolve the issue of integrating environmental, social, and governance aspects in asset management.

This led to a change in the concept from **shareholders** to **stakeholders** (interested parties).

Stakeholders are those who have a significant interest in a company and the potential to influence or be influenced by the operations and performance of the business. They can be employees, customers, suppliers, investors, the community, and the government. (Investopedia, 2023)

The emergence of this public has put pressure on organizations to consider not only the interests of the shareholders but also the interests of the stakeholders to promote a positive impact on society.



Thus, this new global configuration (shareholders -> stakeholders) gave rise to a demand encompassing social, environmental, climate, and ethical issues in business management.

Therefore, it is expected that construction and the real estate sector, as well as other sectors, adapt to incorporate socio-environmental and corporate responsibilities at the center of their management, mainly because the construction industry has a great weight in a country's economy.

DID YOU KNOW...

The materiality assessment for sustainability reporting, a vital process for identifying significant environmental, social, and governance (ESG) aspects, is driven by its stakeholders?

Their involvement helps to prioritize relevant sustainability issues, ensuring that the report focuses on what is truly important to the organization and its broader community.

The aspects addressed by ESG can be:

ENVIRONMENTAL: relating to actions that have an impact and must be minimized and/or repaired in order to preserve the environment and ensure life on earth, such as the consumption of natural resources, emission of greenhouse gases, use of raw materials and waste disposal.

Environmental aspects:

- Climate change;
- Water and energy management;
- Pollution and waste;
- Soil use and quality;
- Deforestation;
- Environmental risks and accidents.

SOCIAL: addresses matters that influence society, such as company policies related to customers, labor rights, diversity, equity, and involvement with the local community.

Social aspects:

- Human rights;
- Labor conditions;
- Health, safety and well-being;
- Diversity, equity and inclusion;
- Education and social development;
- Relationship with stakeholders.



CORPORATE GOVERNANCE: organizes management principles and processes; emphasizes the development of an ethical culture in the company and ensures compliance with laws and regulations.

Governance aspects:

- Governance system;
- Compliance;
- Risk, crisis, and contingency plan management;
- Security and data protection;
- Transparency in the disclosure of data and accountability;
- Act with ethical and moral principles. For example, anti-corruption.

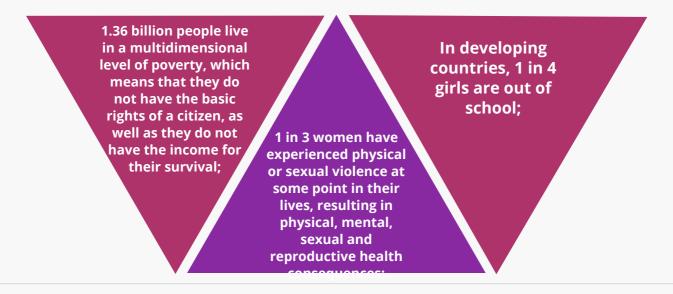
In addition to gaining investor confidence, earning customer loyalty, reducing operating costs, and improving asset management, implementing ESG aspects can promote a more just, dignified, and sustainable world.

Considering these aspects makes the company recognize its role and how it can positively impact society.

It is the achievement of economic growth in harmony with socio-environmental responsibility.

3. UNITED NATIONS (UN) ESG DATA

What does the UN data reveal on the ESG issues?





Women earn 77 cents for every dollar men earn for the same work;

80% of wastewater is discharged into networks without receiving adequate treatment;

The world has lost 70% of its wetlands (swamps) in the last century;

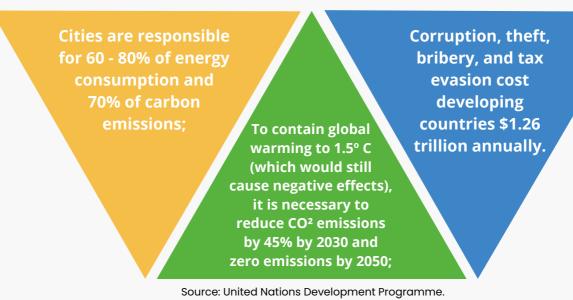
Water stress already affects 2 billion people and is expected to grow; 844 million lack access to clean water:

2.3 billion people do not have basic sanitation;

2.6 billion people
living in
developing
countries do not
have constant
access to
electricity;

The sea level has risen by 20 cm since 1880 and is predicted to rise by 30 cm - 122 cm by 2100; In 2018, 4.2 billion people lived in cities. The projection for 2050 is that this number will increase to 6.5 billion;





In this context, businesses are a great vehicle to generate positive impacts:

- 1) Companies are made up of people;
- **2)** People promote activities that can change the environment in which they live. So why not choose activities that have a positive impact on society?

Especially when talking about the **construction industry**: **one of the economy's most significant sectors**, **responsible for moving trillions of dollars annually**.

Therefore, the capacity for transformation and impact that this sector can generate on society is very high. At the same time, there are also several gaps to be filled that can be seen as opportunities for improvement and mutual benefit (company-society), as seen below.

4. BUILDINGS AND CONSTRUCTION

The construction industry is one of the essential activities for economic and social development, being responsible for modifying the environment for the implementation of resources for the benefit of society, such as infrastructure for energy generation, basic sanitation, communications, transport, and urban spaces, in addition to the execution of public and private buildings, to provide housing, work, education, health, and leisure. (Agopyan, 2011 - Sustentabilidade na Construção Civil)



However, **it causes significant environmental impacts**, either by consuming large amounts of natural resources, generating large amounts of solid waste, or emitting large quantities of CO².

The great challenge of the sector is to conciliate a production activity with less aggressive methods to the environment, taking action in a way that leads to sustainable development.

Although the sector is vital for developing a country, it is still moving slowly, given the world's housing shortage, and the number of people living in cities is predicted to increase by 54% by the year 2050.

Real estate development has a long way to go, which means there are many opportunities to positively impact society.

For a better understanding of its economic representation in the world in parallel with how much the sector can still improve, we list some data from the survey carried out by the McKinsey Global Institute:



The global construction market is predicted to grow by US\$8 trillion by 2030;



The sector's productivity improvement potential is 50-60%;



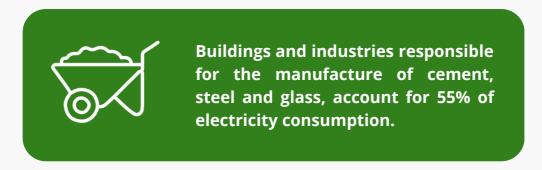
It's an industry that evolves very slowly over time.



In addition, check out the global ESG data from the buildings & construction industry, starting with the environmental aspect.

a) Environmental Aspect

The buildings and construction industry data from the 2020 Global Status Report for Buildings and Construction are:



They emit 38% of CO² into the atmosphere, being:

28% responsibility of buildings;

10% by construction industry;

According to the International Energy Agency (IEA), these are necessary for the sector to achieve emission neutrality by 2050:

- Buildings reduce direct emissions by 50% (use of generators, consumption of natural gas and LPG);
- And 60% for indirect emissions for the construction (electricity consumption generated by concessionaires).



These data highlight the importance and urgency of a threepronged strategy to:

Reduction of energy demand from the built environment;

2

Decarbonization of the energy sector;

3

Strategy for materials that reduce their life cycle carbon emissions.

While GHG emissions from construction have increased by 50% since 1990, they have the potential to be reduced by 61% by 2050.

For this, energy efficiency is the key, as it can reduce the emission of greenhouse gases by 40%.

In addition, investment in retrofit is an excellent ally against global warming and contributes to developing efficient and sustainable building operations.

a) Green Buildings (GBs)

Green buildings
have about 20%
lower
maintenance
costs than normal
commercial
buildings;
(USGBC)

GBs are able to reduce greenhouse gas emissions by more than 30%; (USGBC)

GBs can consume up to 30% ~ 80% less energy than conventional buildings, according to researchers.



Research by Deutsche Hypo has defined green or sustainable real estate as buildings that "are characterized by the efficient use of resources, including energy, water, and materials, thus reducing their harmful impact on human health and the environment."

Sustainability should encompass both new construction and existing properties. It can contain the entire lifecycle of a given building – from construction materials through the lifespan to reuse after the installation is demolished. (Deutsche Hypo)

Policies in different parts of the planet are being made to help reduce CO² emissions and other environmental impacts, such as the European Union's plan to become climate neutral by 2050 and the city of São Paulo with PlanClima SP.

Therefore, there is and will be a market for green buildings.

The key is whether the company's leadership can reconcile economic development with environmental stewardship. If not, it could fall behind and lose credibility.

b) Social Aspect

One of the significant problems that construction faces is the accident rate and the need for more specific training for workers.

Below are some data for better visualization of what has been happening in practice:



Falls account for 34% of construction deaths - eliminating them would save 300 lives a year (USA, Losi & Gang 2022);



Injury and illness rates in construction were 24% higher on average than across all industries (USA, 2020);





In the USA, Latino construction workers die at a disproportionate rate due to falls and employers' "willful" violations of health and safety laws; (Law Office of Nicholas E. Tzaneteas, New York)



The Occupational Safety and Health Administration (OSHA) estimates that homebuilders save \$4 to \$6 for every \$1 invested in safety programs;



67% of construction workers think standards are higher for productivity than safety; (Autodesk, 2021)



64% of fatalities in the construction industry are caused by the "Fatal Four": falls, electrocution, crushing, and being hit by an object. (OSHA)

According to recent statistics, contractors mainly blame lack of training and unskilled workers.



But there are also positive facts worth mentioning: some companies, for example, have already promoted social development by fostering education for employees and communities through local partnerships.

Additionally, many organizations already have diversity and inclusion programs in place. However, there is still much to be done in terms of equity and equality. For example, women are still a minority in leadership positions and are paid less than men for the same work, according to some research.

c) Corporate Governance Aspect

Corruption is the most aggravating factor regarding corporate governance in the civil construction sector; see its numerous cases already reported.

The last time Transparency International included industries sectors in its Bribe Payers Index (2011), construction ranked first for all types of bribery (small, large, and private).

According to the article **"The Cost of Corruption in Construction (2021)"** by RICS - Royal Institution of Chartered Surveyors:

"Corruption can occur at all stages of a project, from inception to completion.

The choice of what to build and where to build can be influenced by the private interests of public officials and landowners, especially where planning instruments are weak or easily amended."



To better understand the magnitude of the problem, more data is provided below (The Cost of Corruption in Construction, 2021):

Corruption is more significant in developing countries, but developed countries are not immune to it either;

97% of UK midmarket construction companies admitted feeling at risk of violating Anti-Money Laundering and Bribery legislation;

Without significant interventions, by 2030, up to \$5 trillion could be lost annually to corruption in construction around the world.

In 2016, the Brazil-based Odebrecht group signed what has been described as **the world's most significant leniency agreement** with US and Swiss authorities, in which it confessed to corruption - which benefited political parties - and paid US\$2 6 billion in fines.

Finally, the RICS study emphasizes that corruption has relevant negative impacts on the entire sector and that the exact quantification of the total losses caused by the problem is almost impossible to measure.

This is because the very nature of the practice makes it difficult to uncover all cases of corruption and determine their full impact. Estimates range from 10% to 30% of the project cost and up to 45% in developing countries.

In the UK, construction companies are estimated to lose over £1.8 billion annually due to invoice fraud.

In Ethiopia, the national government managed to save US\$ 3.5 million and six months of work on constructing a rural road. This was thanks to a project review requested by the local Construction Sector Transparency Initiative (CoST) branch.



IN CONCLUSION

With all of this ESG data in hand, it is possible to imagine the potential for societal improvement if these aspects were implemented in the construction industry.

This would result in economic growth in line with socio-environmental responsibility, benefiting everyone and strengthening the company's image.

5. REAL ESTATE INVESTMENTS

According to the State Street Advisors report, research on the importance of essential elements of ESG investing concluded that:

- 79% of investors cited ethical parameters and values;
- 78% cited positive environmental or social impacts;
- 77% cited a belief that ESG factors play a key role in broader financial performance;
- 76% cited compliance with regulations and legal requirements.

The growing pressure from investors for transparency and data disclosure to assess business practices only reinforces that environmental, social, and governance considerations will be increasingly present in corporate and investment management, not to mention existing ESG regulations such as the Sustainable Finance Disclosure Regulation (SFDR) and the Corporate Sustainability Reporting Directive (CSRD), which make ESG disclosure mandatory.

In addition, **sustainability indices** such as the Dow Jones Sustainability Index or the ISE B3 - Corporate Sustainability Index have emerged worldwide as an alternative to measure how sustainable a company's management is.

An appropriate parameter for ESG funds for the real estate market is the **GRESB** - Global Real Estate Sustainability Benchmark - the global ESG benchmark for the real estate market, and the disclosure of sustainability reporting by companies, where they typically publish their sustainability practices such as goals, targets, and outcomes, and partner institutions such as the Net Zero Asset Manager Initiative **(NZAM).**



According to the Harvard Business Review (2020):

- Focusing on ESG aspects can help management reduce capital costs and improve company valuation;
- Good ESG practices result in better operational performance;
- Positive action and transparency on ESG issues can help companies protect their valuations as more regulators and global governments demand ESG disclosures.

A **higher GRESB score**, for example, provides a stronger case for investment than underperforming companies, and especially over those that avoid ESG altogether.

In this way, the selection of assets that make up the investment portfolio has been influenced by organizations that prioritize management models that are socially and environmentally responsible, have good corporate governance, are resilient to change, and have good growth prospects.

As a result, ESG investment funds are booming. Thus, the issue is no longer just a trend to become an increasingly vital reality in the market. Integrating these aspects in asset management is essential for investors as it allows access to sustainable portfolios.

Therefore, investing in assets with ESG characteristics has gained more support from investors and fund managers who have identified opportunities by focusing on companies with sustainable practices.





6. FROM THEORY TO PRACTICE: WHERE TO START?

The first step to implementing the practices in the company is to create the **Sustainability Committee.** And what would that be?

A committee is a group formed by senior management, with great importance and responsible for critical actions, where its central objective will be to facilitate the integration of sustainability into the organization's strategy to ensure that decision-making takes into account the ESG approach and thus promotes a positive impact on society.

Applying ESG factors is a process that involves the top management through employees, customers, suppliers, investors, and other interested parties - the so-called **stakeholders**.

With the stakeholders defined, it is necessary to create and identify in the materiality matrix the essential points that they described, and that must be taken into account in the development of the strategy for implementation in the company.

To be successful, senior leadership must be committed to change and to the implementation of these principles.

Remember: implementing these factors *is not* just for public companies. ESG can (and should) be applied to all sizes and types of organizations, as the demand for sustainability integration affects everyone.

Small, medium, and large businesses can benefit from applying these aspects in their organizations.



7. REGULATIONS, STANDARDS & DISCLOSURES

In recent years, there has been a significant prioritization of the disclosure, interpretation, and application of Environmental, Social, and Governance (ESG) aspects, driven by the growing recognition of sustainability's pivotal role in shaping the future of business and society.

As environmental and social challenges escalate, an urgent need arises for robust regulations, internationally recognized standards, and mandatory disclosures to hold organizations accountable for their impacts on the planet, people, and governance practices.

These mechanisms foster transparency, responsibility, and ethical practices in business operations. By establishing clear guidelines and promoting ESG reporting, these frameworks empower entities to integrate sustainability into their core strategies, align with global goals, and contribute to positive socio-environmental outcomes.

Moreover, investors increasingly seek sustainability disclosures to gain comprehensive insights into a company's ESG performance. This enables them to assess potential risks and opportunities, making informed investment decisions that align with their values and long-term financial interests.

In this context, financial market participants, the construction and real estate industries can be influenced and supported by various regulations, standards & disclosures, some of which are listed below:

Corporate Sustainability Reporting Directive (CSRD)

The CSRD is an EU Directive that mandates EU and non-EU companies to publish regular reports detailing the social and environmental risks they face and the impact of their activities on society and the environment. It will be mandatory as of 2024.

EU Taxonomy (EUT)

The EU taxonomy is a fundamental pillar within the EU's sustainable finance framework, serving as a vital market transparency tool. Functioning as a classification system, it outlines specific criteria for economic activities that align to achieve a net-zero trajectory by 2050 while also encompassing broader environmental goals beyond climate-related aspects.

Global Reporting Initiative (GRI)

The Global Reporting Initiative (GRI), an internationally recognized independent standards organization, is crucial in helping companies, governments, and other organizations measure and disclose their impact on critical issues such as climate change, human rights, and corruption. By providing widely adopted sustainability reporting guidelines, known as the GRI Standards, GRI enables organizations to communicate their sustainability performance effectively.



REGULATIONS, STANDARDS & DISCLOSURES

Global Real Estate Sustainability Benchmark (GRESB)

GRESB is a purpose-driven, industry-led organization that provides actionable and transparent ESG data to the financial markets. Their approach is to collect, validate, assess, and independently benchmark ESG data to provide valuable business intelligence, engagement tools, and regulatory reporting solutions for investors, asset managers, and the broader industry.

International Financial Reporting Standards (IFRS)

The IFRS Sustainability Disclosure Standards, consisting of IFRS S1 (Sustainability) and IFRS S2 (Climate), are based on and integrate the TCFD Recommendations, SASB Standards, CDSB Framework, Integrated Reporting Framework, and World Economic Forum metrics. By unifying these elements, IFRS aims to establish a cohesive and transparent framework that simplifies sustainability reporting for businesses worldwide.

Net Zero Asset Managers initiative (NZAM)

With more than 315 signatories with USD 59 trillion in AUM, the Net Zero Asset Managers initiative is an international group of asset managers committed to supporting the goal of net zero greenhouse gas emissions by 2050 or sooner, in line with global efforts to limit warming to 1.5 degrees Celsius; and to helping investing aligned with net zero emissions by 2050 or sooner.

Science-based targets initiative (SBTi)

Science-based targets provide a clearly-defined pathway for companies to reduce greenhouse gas (GHG) emissions, helping prevent the worst impacts of climate change and future-proof business growth. It shows organizations how much and how quickly they need to reduce their GHG emissions.

Sustainable Finance Disclosure Regulation (SFDR)

The Sustainable Finance Disclosure Regulation (SFDR) is an European regulation that aims to promote sustainable investment and increase transparency in the financial sector. The regulation requires financial market participants (FMPs) and financial advisers (FAs) to disclose information related to the sustainability risks and opportunities of their products and services, as well as their own sustainability policies and performance.





REGULATIONS, STANDARDS & DISCLOSURES

The United Nations (UN), an intergovernmental organization established to foster international cooperation, has undertaken significant sustainability initiatives. These include:

UN Global Compact: a voluntary corporate sustainability initiative encouraging businesses to align their strategies and operations with ten universally accepted principles covering human rights, labor, environment, and anti-corruption.

UN Principles for Responsible Investment (PRI): promotes incorporating environmental, social, and governance (ESG) factors into investment decisions. The Principles for Responsible Investment (PRI) were established through a partnership among global institutional investors, recognizing the increasing importance of ESG factors in investment strategies and decision-making processes.

"In signing the Principles, we as investors publicly commit to adopt and implement them, where consistent with our fiduciary responsibilities. We also commit to evaluate the effectiveness and improve the content of the Principles over time.

We believe this will improve our ability to meet commitments to beneficiaries as well as better align our investment activities with the broader interests of society.

We encourage other investors to adopt the Principles." - UN Global Compact

UN Sustainable Development Goals (SDGs): outline a comprehensive agenda addressing global challenges, aiming to eradicate poverty, protect the planet, and ensure prosperity for all by 2030.

The SDGs were built by a group "made up of 70 countries, with the participation of the most diverse stakeholders: from expert input from civil society to input from the scientific community and the United Nations system.

These are clear goals and targets for all countries to adopt according to their priorities and act in the spirit of a global partnership that guides the choices needed to improve people's lives now and in the future. It can be seen as a blueprint for governments, society, people, and academia." - UN SDGs

Complying with these initiatives enhances a company's reputation and stakeholder trust, fosters innovation, improves access to capital, and attracts socially conscious consumers, positively affecting their bottom line and long-term success.

Embracing these initiatives is essential for companies to remain relevant, resilient, and influential in today's socially and environmentally conscious world.



8. AUTHOR: CAROLINA DE ÁVILA

B.Sc. Engineering (Civil), MBA (Environment & Sustainability), GRI Certificate

I have a bachelor's degree in engineering (civil), a graduate degree in environment and sustainability, and a GRI certificate. I have been working in sustainability consulting for commercial real estate for five years. Focused on ESG strategies, I have developed an understanding of their impact on corporate management and asset performance.

As an independent ESG consultant, I support sustainability and real estate companies navigating EU regulations such as SFDR and EUT. I provide guidance and tools for data collection, disclosure, and integration of their requirements into the ESG strategy.

I also consult on ESG strategy development, ESG due diligence (company and asset levels), research & development, ESG training, and overseeing and preparing the company for its sustainability reporting. Additionally, I am a public speaker and passionate about making a positive impact by driving meaningful change in the business world.

My background and experience are a good fit for companies seeking to develop or enhance their sustainability practices and meet ESG requirements, in addition for those who are looking for ESG corporate training. I have worked on significant projects for renowned companies. Reach out to me to learn more about my work.

<u>Skills:</u> sustainability consulting, ESG strategies, sustainability reporting, research & development, ESG training, public speaking.

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9. CONCLUSION

Through education and integrating ESG aspects into business and asset management, it is possible to achieve several benefits beyond just regulation compliance. Embracing sustainable practices aligns businesses with global environmental and social concerns and provides a competitive edge in the market.

Firstly, sustainable buildings are energy-efficient and cost-effective, leading to reduced operational expenses and increased profitability in the long run. Studies have shown that green buildings have lower vacancy rates than non-green buildings.

Secondly, incorporating green features enhances the overall attractiveness of properties, attracting environmentally conscious tenants and investors willing to pay a premium for sustainable spaces.

Additionally, sustainable initiatives improve the company's reputation, fostering stakeholder trust and loyalty. By implementing eco-friendly strategies, real estate firms can contribute to a healthier environment while securing their financial success and long-term viability.

Based on that, the solutions of my work can provide the following key results:

- **1)** Positioning organizations in the market according to emerging ESG and financial requirements such as SFDR;
- **2)** Development of environmental, social, and governance practices on corporate and asset levels;
- **3)** Communication of company's actions, impacts, and results on ESG issues to the public through sustainability reporting;
- 4) Shaping the corporate culture towards sustainability;
- **5)** Spread the understanding of sustainability and the need for its application in business;
- **6)** Promoting more sustainable businesses, thus contributing to their resilience and long-term viability.







SHAPING THE REAL ESTATE TOWARDS SUSTAINABILITY

CAROLINA DE ÁVILA ESG & REAL ESTATE

