

Integrating ESG factors in equity investing

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Abstract

This project aimed at developing an effective methodology to incorporate Environmental, Social, and Governance (ESG) factors into equity investment process of Brasil Capital, a Brazilian asset management company. The project was divided in three phases. The first phase was a research about ESG Integration practices, with its relevant factors, issues, source of information, and tools and techniques. The second phase was an analysis on Brasil Capital: corporate profile, investment decision processes, culture, organizational structure, and its adherence to an ESG integration. The third phase consists of a guide to the integration of ESG factors into Brasil Capital investment decision process, with recommendations and next steps.

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1. Objective

The objective of this project is to develop an effective method to integrate Environmental, Social, and Governance (ESG) factors into the investment process at Brasil Capital¹. The importance of responsible investing has increased significantly in the past decade and is gradually becoming a mainstream investment practice, primarily given ESG factors importance in portfolio's risk and return profile.

2. Methodology

To integrate ESG in Brasil Capital's equity investment process, the following steps were taken and are detailed throughout this report:

ESG Integration Research Phase

- Review ESG investment guidance, terminology, and debate
- Review academic studies on ESG integration motivations and performance
- Assess of current efforts and capabilities in RI

Brasil Capital Analysis Phase

- Understand the organization and its investment process
- Assess the company's current efforts and capabilities

ESG Integration Implementation Phase

- Create the methodology and responsibilities for ESG Integration
- Launch the Pilot Project
- Document recommendations/Next Steps

3. Introduction

The concept of sustainable development ends up generating a series of consequences in the corporate environment. Among them is the concept of socially responsible investment. It predicts that the investor who adheres to it not only has the expected financial return, but also that environmental, ethical, and social issues will be addressed by the companies in which he or she invested (Pereira et. al., 2017).

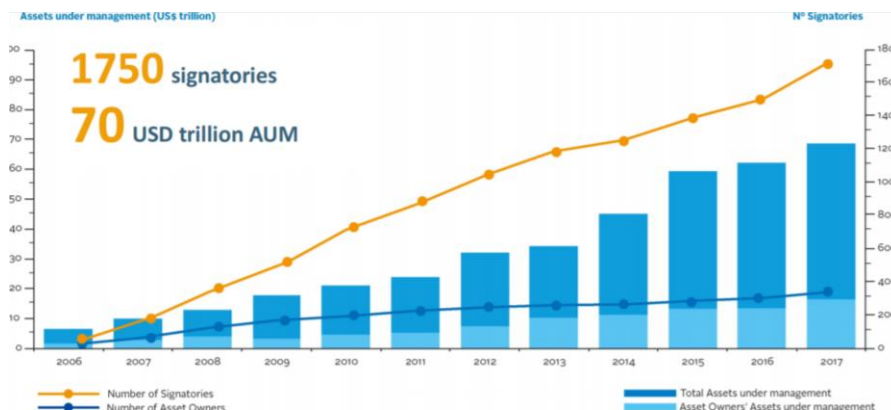
¹ <http://brasilcapital.com/>

The growth of the concept of Socially Responsible Investment (SRI)/Responsible Investment (RI) has generated a need to establish parameters for the definition of global best practices. Consequently, the United Nations (UN) created and launched the Principles for Responsible Investment (PRI) in 2006, aiming at providing a better understanding of this new modality of investments (Almeida et. al.,2017).

Signatories of PRI believe in contributing not only to good corporate citizenship, but also to a more stable, sustainable, and inclusive global economy. These principles are not prescriptive, aiming at helping investors to include ESG factors in their decision-making process (Pereira et. al., 2017). The number of PRI signatories has been significantly growing in the last 10 years (see Figure 1).

PRI is a voluntary initiative aimed at encouraging investors from all over the world to incorporate social, environmental, and corporate governance variables into their investment analysis. The signatories commit themselves to develop norms that regulate shareholder rights and promote transparency and standardization of social and environmental information integrated into financial reports (Mattarozzi & Trunkl, 2008).

Figure 1- ESG Integration Awareness is growing: PRI signatories and total assets under management



Source: PRI

SRI investors advocate their methodology enhances the intangible and long-term value of a corporation, since it presupposes environmental and social management coupled with effective corporate governance. This can protect the corporation from a possible destruction of value caused by liabilities of this nature (Pereira et. al., 2017).

According to Mattarozzi and Trunkl (2008), over time, the financial sector will assume its role as the driver of sustainable practices and implements policies for this purpose in its areas of credit, investment, and others.

Financial institutions have adhered to initiatives beyond the PRI mentioned above, such as the Equator Principles, and have created other instruments to encourage sustainable practices that reach beyond competitive advantage goals (Mattarozzi & Trunkl, 2008).

In June 2003, ten major world banks launched the Equator Principles, a set of standards based on the social and environmental policies of the World Bank and its private investment arm, the International Finance Corporation (IFC) (Mattarozzi & Trunkl, 2008). The purpose was to assess the social and environmental risks associated with project financing and consultancy over US\$ 10 million. Banks attempt to classify socio-environmental risks by addressing issues that involve biodiversity conservation, pollution levels, among others. All banks that adhere to the Equator Principles apply social and environmental questionnaires in order to be granted credit. The questionnaires are a way to classify the risks of the projects, and those projects that presents higher risk will be followed more frequently (Almeida et. al.,2017).

4. ESG Integration Research Phase

4.1 Responsible Investment

PRI defines responsible investment as an approach to investment that recognizes the relevance ESG practices, metrics, and analysis to investors. It recognizes that the generation of long-term sustainable returns is dependent on ESG factors proper managed by corporations (UN/SDG, 2016).

There are many ways to approach implementation of the UN PRI. The six principles of the PRI framework are listed in Appendix 1 along with suggestions for implementation.

Within this overarching definition, responsible investment is generally considered as including:

- the incorporation of ESG issues into investment decisions;
- active ownership (voting and engagement);
- a commitment to transparency; and,
- a commitment to constructive engagement with public policy.

RI is increasing its importance in the financial market, reflecting a growth in awareness regarding the impact of ESG factors on the financial value of assets. It is shifting away from the paradigm to focus only on short-term financial returns towards creating longer-term value that protects shareholder value, achieves risk reduction, and identifies business opportunities.

RI is increasing and is estimated to become a mainstream activity across financial services value chain. For instance, the 2014 Eurosif Sustainable and Responsible Investment Study found that in Europe, all responsible investment strategies have grown at double-digit rates between 2011 and 2013, faster than the broad European investment market (Eurosif, 2014).

4.2 ESG issues

An exhaustive or definitive list of ESG topics does not exist, as these issues are constantly evolving and changing according to macrotrends and new challenges.

It is difficult to predict when potential ESG issues can arise. There are many examples of ESG issues occurring abruptly, taking investors by surprise. The financial consequences can be extremely detrimental.

In addition, ESG issues can be interlinked and their cumulative impact is significantly greater than an issue addressed in isolation. For example, climate change is usually considered an environmental issue, but it has significant impact on the health and wellbeing of society (social issues) and on the economy of a country suffering from its negative impacts (economic issue).

ESG information has become more detailed, sophisticated, and quantifiable in recent years. As such, this extra layer of data can now be used effectively in investment analysis and factored into risk analysis, financial models, and projections to aid with investment decisions.

4.2.1 Environmental issues

Issues that arise from, or impact on, ecosystems and ecosystems services. Examples of environmental information are provided below (PRI):

Environmental factors:

- Climate change
- Water scarcity and security

- Energy security
- Deforestation
- Biodiversity loss
- Land use

Environmental data:

- Total greenhouse gas emissions
- Total energy consumption
- Energy efficiency
- Total waste
- Total environmental fines and regulatory actions
- Number of spills
- Environmental disclosures and policies
- Raw material sourcing

Environmental ratios:

- Water intensity (e.g. water consumption per unit of measure such as EBITDA, assets, or sales)
- Greenhouse gas intensity (e.g. emissions per unit of measure such as EBITDA, assets, or sales)
- Energy intensity (e.g. energy use per unit of measure such as EBITDA, assets, or sales)

Appendix 2A presents a description of relevant environmental factors.

4.2.2 Social issues

Issues relating to the rights, well-being, and interests of people and communities. Examples of social information are provided below (PRI):

Social factors:

- Health and safety
- Labor management
- Community concern factors
- Supply chain standards
- Labor relations factors

- Product liability/safety factors
- Trade practices factors
- Community involvement factors
- Human capital development
- Privacy and data security

Social data:

- Number of workplace safety violations
- Number of community protests or incidents
- Number and cost of product recalls

Social ratios:

- Percentage of women in workforce
- Percentage of women in management
- Lost time incident rate
- Unionization rate
- Employee turnover rate

Appendix 2B presents a description of relevant social factors.

4.2.3 Corporate Governance issues

Issues that arise from, or impact on, the management and governance of a company. Examples of corporate governance information are provided below (PRI):

Corporate Governance factors:

- Board accountability factors
- Internal control factors
- Financial disclosure factors
- Shareholder rights factors
- Corporate litigation factors
- Remuneration factors
- Business ethics
- Anti-competitive practices
- Corruption and instability

Corporate Governance data:

- Number of board meetings
- Board meeting attendance
- Number of audit committee meetings

Corporate governance ratios:

- Percentage of independent directors
- Percentage of women on the board
- Average CEO to worker pay

Appendix 2C presents a description of relevant corporate governance factors.

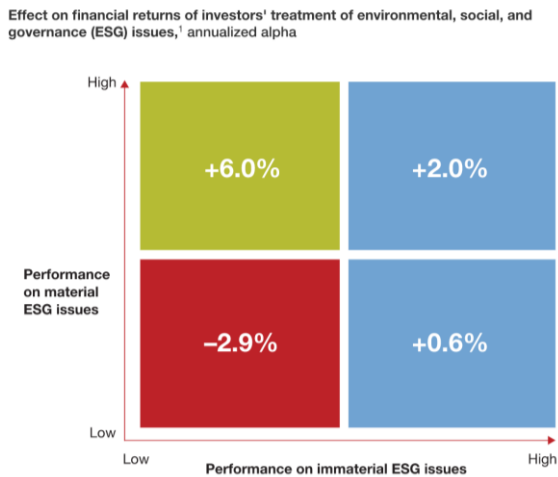
4.3 Materiality

Considering that there is an extensive list of ESG factors, when integrating them into the investment process, it is crucial to focus on what is relevant and material. The term materiality is usually adopted and it is resultant from the concept of material information on accounting (i.e., relevant factors that are likely to have a material impact on the longer-term value of a company) (CFA, 2014). Examples of material factors include environmental risks in utilities (software providers do not face greater exposure to that), supply chain labor standards in clothing manufacturers (financial services industry do not face such challenge) (CFA, 2015).

ESG factors could also include issues that are not material to the target company, but that could reflect investor's values and beliefs, and/or protection against reputational risk (CFA, 2014).

According to a recent study using the materiality framework of the Sustainability Accounting Standards Board (SASB), companies that focuses on addressing only its material ESG factors outperform those that consider material and immaterial issues by 4% and outperform those that address neither by approximately 9% (see Figure 2) (McKinsey&Company, 2016).

Figure 2 – Focus on material ESG factors drives higher returns



Source: McKinsey & Company (2016)

SASB Materiality Assessment

SASB has defined materiality ESG factors for each sector through an intensive process and is advancing its disclosure in 10-K filings (McKinsey & Company, 2016). SASB’s materiality process is based on ESG issues potential impact on business (financial condition, operating performance, and/or risk for the industry), and are reviewed by market specialists. The evaluation of the materiality sustainability issues in each industry developed by SASB is presented in Appendix 3.

MSCI’s Materiality Mapping Framework

The MSCI ESG Ratings model considers only issues that are consider material for each industry. Each year, MSCI defines 37 key ESG factors and weight them by industry based on MSCI’s materiality mapping framework. Six to ten key environmental and social material issues by industry are identified, based on how these issues that can create significant risks and opportunities (MSCI, 2017). Corporate Governance factors are assessed for all companies, and weighted based on each industry’s relative impact. Issues and weights undergo a review and feedback process each year (MSCI, 2017). MSCI’s 2017 key issues by industry and sub-industry are presented in Appendix 4.

Bloomberg Materiality Assessment

Bloomberg developed a methodology to identify information that meets its stakeholder’s demand by beginning with the larger universe of potentially relevant factors and metrics identified in the GRI framework. However, for one specific stakeholder group—the investors—Bloomberg

adopted SASB's standards reflecting the application of a U.S. regulatory definition of materiality (Bloomberg, 2016).

4.4 Reasons for ESG analysis

Consideration of ESG issues by investors can add value to the investment process. At a company level, ESG analysis can increase securities analysis, as it requires a greater depth of understanding of a company's operations. Through the prism of ESG analysis, investors can gain greater insight into a company's culture, operating efficiency, products and services, use of intangible assets, capital deployment, and strategic positioning. ESG analysis also demands a more thorough assessment of environmental, human capital, and corporate governance risk factors.

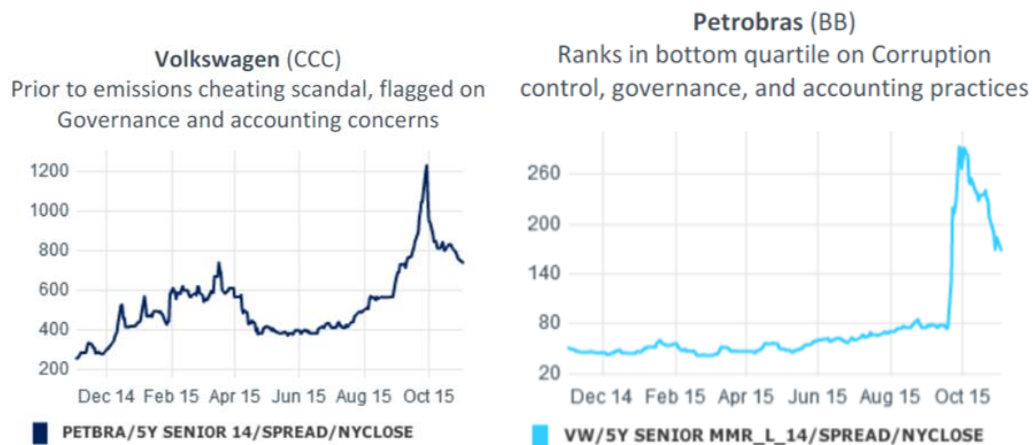
From a macro perspective, ESG megatrends elucidate long-term investment themes and assist with idea generation. As such, understanding ESG megatrends can have a positive impact on decisions related to long-term asset allocation, as well as geographic and industry diversification. ESG megatrends includes: price of externalities, fiduciary duty, corporate governance risk, availability of data and analytics, universal owner principles, increasing demand for RI, and intangible factors. A detailed description of these ESG megatrends is available at Appendix 5.

Investors are choosing to integrate ESG factors for a range of reasons:

- Regulation: Regulators mandate alignment regarding controversial weapons, executive pay, ESG reporting, etc.
- Fiduciary Duty: ESG factors should be integrated to account for all risks (accidents, shutdowns, frauds, strikes, etc.) and opportunities.
- Pricing externalities: Costs of many industrial activities, which are currently not factored into the price of goods and services, are increasingly acknowledged, and they may begin to be priced and internalized as 'inputs' into the production, impacting the company's balance sheet.
- Reputational risk: ESG integration aligns investments with outcomes investors/clients want to see in the world.
- Enhance long-term risk-return: ESG issues change the investment landscape over long holding periods. ESG helps to understand exposure to long term systematic risks factors, such as: weather patterns, data scarcity, data security, and skills shortage.
- Align with investors/client values: ESG integration aligns investments with outcomes investors/clients want to see in the world.

- Integrate ESG as a risk factor: Assess management quality and limit surprises and event risks, such as accidents, shutdowns, fraud, and strikes. MSCI presented some recent examples of how its ratings/analysis anticipated ESG risks for Volkswagen emission scandal and Petrobras “Lava a Jato” corruption prosecution, as presented in Figure 3 below.

Figure 3 – ESG as a risk factor



Source: MSCI (2017)

4.5 ESG initiatives, regulation and commitments

The world is changing, and currently global megatrends (population growth, demographic shifts, economic growth, pressure on resources, and urbanization) are influencing businesses. And with change often comes regulation. The anticipation and implementation of regulatory changes have real impacts on capital allocation decisions, particularly where there is uncertainty regarding regulatory decisions.

Regulation can present both risks and opportunities to industries and individual companies. A key task for a responsible investment professional is to be aware of policy changes and to ascertain the impact of these changes on their investments. For multinational companies, it’s not only about local regulation changes but how changes within the different jurisdictions they operate in can aggregate up to influence company-wide policy.

It is important to understand how regulations can influence the growth of the responsible investment industry; key ESG regulations that have been established over the past two decades around the world are listed in Appendix 6.

Responsible investment-related legislation and soft law initiatives in Brazil, where Brasil Capital conduct its business, are listed in Appendix 7.

It is important to mention that international commitments and initiatives can better inform how particular countries respond to environmental risks and opportunities, showing the direction responses to global megatrends, and providing business with greater certainty by defining frameworks or codes for dealing with ESG issues (PRI, 2016). Several commitments and initiatives are described in Appendix 8.

According with CFA Institute, several principles, standards, and initiatives could be adopted as a reference point for investors considering the integration of ESG factors, including (CFA, 2015):

- PRI (mentioned earlier),
- Equator Principles (mentioned earlier),
- UN Global Compact,
- OECD Guidelines for Multinational Enterprises,
- International Labor Organization Declaration on Fundamental Principles and Rights at Work,
- SA 8000 (auditable social certification standards for decent workplaces), and
- ISO 26000 (guidance on how businesses and organizations can operate in a socially responsible way).

CFA Institute also states that there are organizations working to promote ESG considerations into the investment process, which includes (CFA, 2015):

- Global Sustainable Investment Alliance (including USSIF and Eurosif),
- GRI (formerly, Global Reporting Initiative),
- Sustainability Accounting Standards Board (SASB),
- World Resources Institute (WRI),
- International Integrated Reporting Council (IIRC),
- CDP (formerly, Carbon Disclosure Project),
- Accounting for Sustainability,
- Global Impact Investing Network (GIIN), and
- International Corporate Governance Network (ICGN).

4.6 ESG data collection

Before performing ESG analysis, investors will collect relevant ESG information pertaining to the different levels of analysis – global megatrends, economic, industry, and company analysis. In doing this, they will usually rely on the following resources:

- Voluntary company ESG disclosures such as those found in sustainability or integrated reports;
- Mandatory company ESG disclosures such as ESG-relevant filings with financial, labor, environmental, and other regulatory bodies;
- Brokers regularly publish ESG-related reports covering thematic research as well as sector and company specific research. Increasingly, ESG information is incorporated into traditional research reports;
- ESG research and data providers supply highly relevant ESG information, databases, and insights on a wide variety of ESG factors;
- Non-governmental organizations (NGOs) often publish research and analysis on the sustainability performance of a particular company or industry sector; and,
- Research databases of archived news, media articles, and reports, as well as litigation or regulatory filings.

Appendix 9 presents PRI discussion on general advantages and disadvantages of various sources of ESG information.

Examples of important ESG data sources include:

- Institutional Shareholder Services (ISS): leading provider of ESG data and advocacy support;
- MSCI: leading provider of ESG data with over 150 analysts, including Intangible Value Assessment (IVA) ratings, overall ESG rating, and component ratings;
- CDP: formerly Carbon Disclosure Project, is an independent, non-profit organization. Its database allows investors to identify corporate risks and opportunities presented by climate change²;
- GRI reports: formerly Global Reporting Initiative, provides information on ESG material indicators of a diverse range of companies that chose to self-disclose³;
- Sustainalytics: provides in depth, comprehensive ESG data and subjective commentary by 250 analysts on companies around the world;

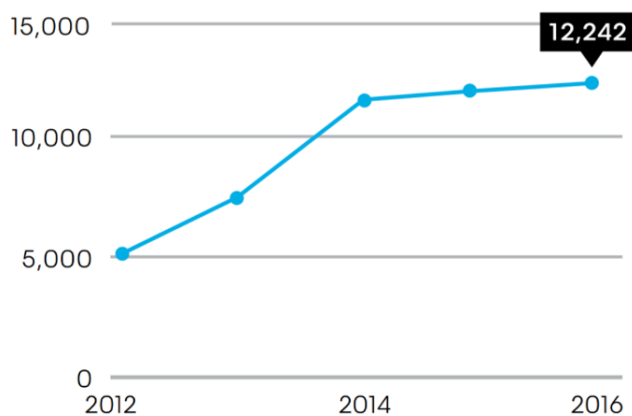
² https://www.cdp.net/en/responses?per_page=10&queries%5Bname%5D=BRF&sort_by=project_year&sort_dir=desc

³ <http://database.globalreporting.org/search/>

- Trucost S&P Dow Jones Indices ESG Analysis: leading provider of environmental data covering carbon, water, and waste;
- Bloomberg: provides access to RobecoSAM Sustainability scores. Bloomberg has been expanding its ESG data for years;
- CPA-Zicklin Index: rating the political disclosure and accountability of companies
- Oekom Research: rating agency in the field of sustainable investment, analyzing companies with regard to their environmental and social performance; and,
- Morningstar Sustainability Rating: well-known provider of investment research that also offers ESG scores for the funds.

Bloomberg ESG data, for instance, have more than doubled since 2012 (see Figure 4).

Figure 4 – Bloomberg ESG Data Usage



Source: Bloomberg (2016a)

4.7 ESG Integration Techniques

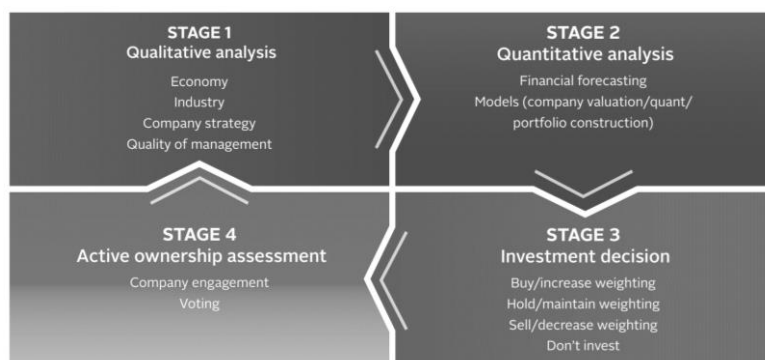
According to PRI, there are four main techniques to integrate ESG issues into investment strategies (PRI, 2016):

- **Fundamental Strategies:** Fundamental analysis is the use of real and public information to support a valuation on a given security. These valuation models generally include assumptions and forecast of financials, which can be adjusted for ESG factors.
- **Quantitative Strategies:** Quantitative analysis is the use of large samples of data aiming to find patterns that help investors pick securities. In this sense, a quantitative investor can add ESG factors in the package of factors to be analyzed statistically, which includes indicators such as profitability, cash flow, growth, capital allocation, and price momentum.

- **Smart Beta Strategies:** Smart beta strategies try to take advantage of market inefficiencies by using factors different than price, in a systematic and rules based approach. In this sense, ESG factors can be used as one of these other factors, serving as a weight in portfolio construction, both seeking to increase return or reduce risks.
- **Passive Strategies:** Passive strategy tries to track a market-weighted index or portfolio. In its most common format, passive funds replicates the performance of specified index. Investors can adjust the risk of the index to ESG factors or track an index that already count ESG as one of its factors.

PRI has also developed an ESG Integration model divided in four stages, which involve the activities listed below and presented in Figure 5 (PRI, 2016).

Figure 5: PRI's ESG Integration Model



Source: PRI (2016).

Stage 1: Qualitative analysis – Identification of relevant factors impacting a company, from a collection of information from different sources (company reports, research firms, customers, suppliers, trade associations).

Stage 2: Quantitative analysis – Analysis of effect of relevant financial factors on securities, with possible adjustments in forecasts (operational and financial) and valuation models, such as:

- Adjustment in discounted cash flow (DCF) model to account for production and revenue losses/gain, considering ESG risks;
- Adjustment in expenses, to consider factors such as carbon taxes/permits, indemnity for damages to the community or employees; and,
- Adjustment in maintenance CAPEX, to contemplate compliance with ESG regulation
- Adjustment of cost of capital to align to the ESG risk profile of the company, such as companies that issue green bonds.

Stage 3: Investment decision – Supported by stage 1 and 2, a decision - buy (or increase weighting), hold (or maintain weighting) or sell (or decrease weighting) – will be made.

Stage 4: Active ownership assessment – After the 3 stages, and with the decision to buy the security, the investor can start or support company engagements and/or inform voting.

4.8 Responsible for ESG Integration

Integrating ESG into the investment process takes time and continuous improvement (PRI, 2016). According to PRI, there are two main methods for incorporating ESG consideration into the organizational structure (PRI, 2016):

- **Integrated investment teams:** In this method, portfolio managers and investment analysts are responsible for ESG analysis and integration into overall investment analysis and decisions. In order to implement the method, training to deepen ESG understanding must be provided, and time to research ESG factors must be allocated.
- **Dedicated ESG team and investment teams:** In this method, an ESG team conducts the analysis, which is integrated by the investment teams into overall investment analysis and decisions.

The advantages and disadvantages of each of these two methods are presented in Appendix 10.

4.9 Key areas to consider when integrating ESG

Process: investment process (research, stock selection, and portfolio construction), products, risk management

To successfully integrate ESG factors in the investment process, there needs to be an understanding of the various processes that staff in investment and non-investment roles are involved in as part of their everyday work. This could include strategic, sector, stock, or daily meetings; thematic or portfolio based meetings and investment committee processes; or stock notes or reports by individual analysts.

Tools: policies/ codes of practice, training, research resources, regular meetings

To successfully integrate ESG factors in the investment process, tools currently used by the team members, as part of various processes need to be understood. These include software, models, or even policies and other guiding documents.

People: organization chart, responsibilities, attitudes, and beliefs

To successfully integrate ESG factors in the investment process, all of the relevant stakeholders need to be identified. This would consist of identifying various investment or non-investment roles at the company that are essential in successfully achieving the project objectives.

5. Brasil Capital

5.1 Overview

Brasil Capital was created in early 2008 and is an independent asset management company dedicated to long-term investments in companies traded on the Brazilian stock exchange (BM&F Bovespa). Originally focused on managing proprietary resources, the structure has been expanded and currently manages proprietary and third-party resources, including Brazilian and foreign institutional clients, individuals, and family offices (Brasil Capital, 2017).

The company is a partnership and all its members are encouraged and eligible to become partners, according to performance, meritocracy, and alignment of interests. Emphasis is placed on culture, decision-making processes, reputation, and building a solid and consistent track record. The bases of the business are ethics, transparency, owner culture, and meritocracy, with obstinacy for the best results and total respect to the client (Brasil Capital, 2017a).

5.2 People

The 14 professionals of Brasil Capital are divided in 3 key areas: Management and Analysis, Risk and Compliance, and Investor Relations. Of these professionals, 10 are executive members, of which 7 are fully dedicated to the analysis of companies (Brasil Capital, 2017b).

5.3 Products

Brasil Capital has two funds:

Brasil Capital FIC FIA

- Objective: generate real returns higher than the opportunity cost of their quotaholders in the medium and long term, investing in variable income assets, medium and long term, investing in variable income assets.

- Investment Policy: The fund has a long-term investment horizon, which allows a close relationship with investees and a deep knowledge of their markets. Companies are selected through fundamental strategy (described above).
- Target Audience: Exclusively qualified investors.

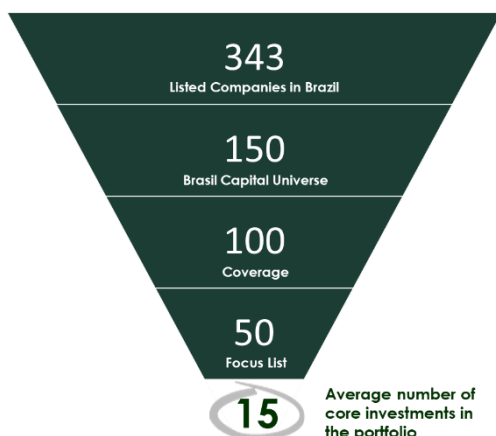
Brasil Capital 30 FIC FIA

- Objective: generate real returns higher than the opportunity cost of our quotaholders in the medium and long term, investing in variable income assets.
- Investment Policy: The fund has a long-term investment horizon, which allows a close relationship with investees and a deep knowledge of their markets. The companies are selected, mainly, through fundamentalist criteria, always using conservative assumptions and margin of safety.
- Target Audience: The fund is intended to receive investment funds from individual and corporate investors in general

5.4 Investment Process

Out of 343 listed companies in the Brazilian stock exchange, 150 companies are in their investment universe after considering float and liquidity. All sectors are eligible for investment: “Sector Agnostics”. From this 150 companies, Brasil Capital formally cover 100, and has a focus list of 50 companies from this 100, and approximately 15 companies are in Brasil Capital’s current portfolio (see Figure 6).

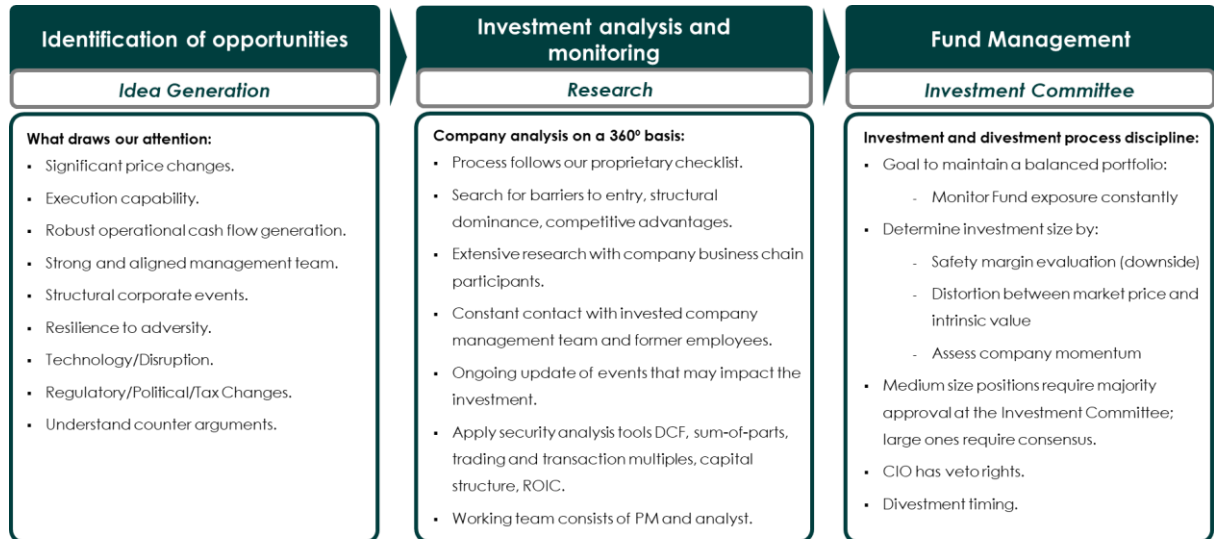
Figure 6: Brasil Capital’s Investable Universe



Source: Brasil Capital

Brasil Capital’s investment process is divided in three main steps: idea generation, research, and investment committee. The activities conducted in each step are described in Figure 7 below.

Figure 7: Investment Process



Source: Brasil Capital

5.5 Investment Strategy

Brasil Capital investment strategy’s main attributes are described below (Brasil Capital, 2017a):

Rigorous and Creative Research Process

- Brasil Capital dedicates the majority of their research efforts to primary and proprietary information, as opposed to relying on sell-side analysts and managements.
- Their research process most closely resembles that of a private equity investor rather than of a typical Wall Street analyst.
- Their investment team had more than 2,500 external research interactions over the past 12 months including companies’ competitors, suppliers, clients, industry experts, former employees, regulators, and board of directors.

Long-term Investment Horizon, Discipline and Patience

- Focus on gaining insight into a company’s long-term competitive position and profitability, as opposed to gathering “data points” to create near-term trading opportunities.

- Since inception, more than 63% of Brasil Capital's returns were generated in investments of three years or more.
- Frank and extensive internal debate on a recurring basis.

Concentrated Portfolio

- Exceptional investment ideas are very hard to find.
- Portfolio consists of 15 core invested companies.
- Five largest positions mostly comprise up to 50% of Fund.

Other Core Attributes:

- Develop and maintain a value added limited partner, business, and investment contact network.
- Active stance towards investment, when required to protect their investors.
- Take advantage of short-term orientation of most investors.

5.6 Investment Philosophy

As previously described, Brasil Capital's investment philosophy is based on deep fundamentalist analysis with strict risk control. The company believes in the importance of understanding, in detail, the activities of the companies they analyze, in order to identify their competitive advantages and opportunities, as well as the inherent risks of each business. With this, they seek to build a portfolio without excessive concentration in sectors and companies, privileging companies with high liquidity in the stock market that meet three fundamental pillars (Brasil Capital, 2017a):

Superior Quality Business Model

- Dominant companies, with structural competitive advantages: relevant growth potential with high return on capital, high barriers to entry in the businesses, most efficient producer, or service provider with scale and high cash flow generation.

Competent, Honest and Aligned Management

- Brasil Capital attributes great importance to high quality management teams and to the incentive structure managers are exposed to.
- Internal factors respond for a relevant part of corporate success in the long term.
- It is essential that company managers and their board of directors are strongly aligned with the interests of minority shareholders.

Margin of Safety

- Brasil Capital seeks companies that present distortions between market and intrinsic value, providing a substantial margin of safety.
- Discipline is important both to maximize gains and to manage risks, avoiding investments with permanent capital loss.

5.7 Motivations for ESG Integration

Brasil Capital's main motivations for ESG integration includes: align investments with investors/client values needs, enhance long-term risk-return as ESG helps to understand exposure to long term systematic risks factors.

6. ESG Integration Implementation

6.1 ESG Integration Methodology

In establishing a framework for ESG company analysis, it is useful to note that there are no established precepts. Integrating ESG issues in financial analysis can improve the investment decision-making process. ESG analysis provides an additional layer of factors and ratios which expands the opportunity for better scenario modelling, leading to better investment decisions.

To successfully implement ESG Integration at Brasil Capital, their internal processes, and the company motivations for that integration needed to be more deeply understood. So, after assessing the investment process currently used at Brasil Capital and reviewing what the process looks like before ESG integration, we discussed and then examined how ESG considerations could be integrated to their investment process. Considering that

- Brasil Capital dedicates most of their research efforts to primary and proprietary information, as opposed to relying on sell-side analysts and managements;
- Brasil Capital's investment team had more than 2,500 external research interactions over the past 12 months including companies' competitors, suppliers, clients, industry experts, former employees, regulators, and board of directors;
- Brasil Capital would like to conduct an ESG analysis and integrate it into their overall investment analysis and decisions;
- Brasil Capital would like to develop a deep knowledge of ESG and currently conduct only a qualitative analysis of the issues, without adjusting financial forecasts and/or valuation models (quantitative analysis); and,

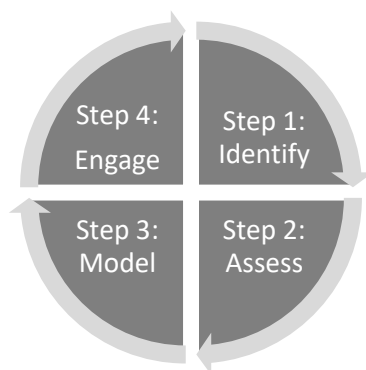
- ESG Ratings and data providers MSCI, CDP, GRI, and Bloomberg, were studied in order to understand the availability and quality of disclosure and information, and companies in which Brasil Capital had large investments did not have any information on these sources (see Appendix 11).

It is recommended that Brasil Capital:

- Should incorporate ESG into the organizational structure through their integrated investment teams;
- ESG issues and the latest ESG themes should be researched, and a training may be conducted to deepen Brasil Capital analysts understanding;
- Develop an internal ESG research/questionnaire tailored to the specific needs of their analysts, companies' ESG material issues, and ESG disclosure in Brazil; and,
- Gather relevant information from multiple sources, including but not limited to: company reports, media articles, third-party investment research, NGO analysis, research from the sell-side, ESG ratings agencies, engage with the company and/or its key stakeholders, etc.

Figure 8 below illustrates a four-step process to ESG integration to ensure analytical continuity at every level of analysis. A formal review and feedback process should be conducted once a year for each step.

Figure 8 – ESG integration in investment (based on PRI)



Step 1: Identify

What are the relevant ESG issues for the target investment?

Every sector and each company within that sector will be affected differentially by ESG factors. Dissimilar regions will also experience varying degrees of impact. In addition, through their

operations, some companies could be the actual cause ESG issues. Investigating a company's business strategy, its products, and the regions it and its suppliers operate is a good way to start investigating key ESG issues for a company. Examples of material factors include greenhouse gases emissions (climate change) and energy use in the steel industry; and access to finance to finance and human development in the financial sector.

Step 2: Assess

How is the target investment affected by these issues and to what degree?

Once relevant ESG risks and opportunities have been identified, it is important to undertake further work to determine the potential impact of each issue. Is the risk being managed or the opportunity exploited? Has the probability of the risk occurring been assessed by management and what is the potential scale of seriousness? Understanding incremental risk, systemic risk and the culmination of multiple risks is also important.

It is not only important to assess the company's performance with reference to ESG data and ratios, but also compared this to industry averages (peer analysis):

- Collect past and present ESG performance data based on a predetermined set of ESG factors of relevance to the company (based on ESG megatrend, economic, industry and company analysis).
- Review the company's performance against benchmarks (proprietary benchmarks or industry averages). Perform trend analysis to ascertain improvement or deterioration of specific ESG factors.

ESG research will often improve the analyst's understanding of the company's culture, management quality, corporate governance practices, strategic direction and new opportunities. This information becomes extremely important in the qualitative review of investment performance.

Step 3: Model

How are ESG issues accounted for in financial projections and risk assessment models?

The next step is to qualify or quantify the risk or opportunity and to understand their impact. Issues that can be quantified in financial terms can typically be included in financial modelling.

Qualitative issues may be material, but it is not so easy to understand their potential monetary value. In some cases, qualitative issues can be converted to a 'quantitative' form for risk analysis, for example, through scenario testing, importance or probability rating, or quality or time analysis. From there, they can be used to inform assumptions underpinning quantitative financial projections. In other cases, a judgement is needed by the analyst on how material the risk or opportunity is to the company.

Step 4: Engage

Is there an opportunity to mitigate ESG risk through shareholder engagement and voting?

Using the material ESG risks and opportunities identified in the research and analysis, it should be evaluated the engagement with the selected companies in order to encourage them to better manage the risk or opportunity identified:

- communicate key governance risks, opportunities and potential financial impacts
- monitor the company's response to these issues
- vote on shareholder resolutions to improve any inadequate reporting or action on key ESG issues
- raise or collaborating on resolutions, if appropriate
- achieve a higher level of transparency in company reporting and disclosure
- request better disclosure and ask companies to elaborate long-term strategies showing how ESG issues might affect their future value (McKinsey&Company, 2016)
- address the potential need for more comprehensive strategic policies to address material ESG issues
- establish timeframes and actions to implement strategic plans
- elaborate company's ongoing research and analysis to identify new ESG issues or changes to existing conditions and regulations.

6.2 Peers Analysis

Research was conducted about the peers of Brasil Capital on their ESG strategy: Nucleo, Constellation, Absoluta, Bogari, Pollux, and Dynamo are not signatories to PRI and currently do not have any public intention or information regarding ESG integration in their investment process.

6.3 Pilot Project

The pilot project focused on defining Step 1 of the process previously described in item 6.1 and presented in Figure 8 for the following companies (symbols) determined by Brasil Capital: ALUP11, CVCB3, CZLT33, BVMF3, ALSC3, DAGB33, ENGI11, ITSA4, EQTL3, and BRFS3. Main takeaways are described below:

Step 1: Identify

An internal ESG research/questionnaire was developed for each industry/target company based on a combination of diverse ESG materiality assessments already conducted by renowned organizations (and reviewed by industry specialists):

- For environmental & social issues: a combination of SASB and MSCI material factors were considered according to the target company industry/sector. More detailed information about these questionnaires are presented in Appendix 3 and 4.
- For corporate governance issues: factors considered in IFC and PRI were applied to all companies analyzed (not dependent on the sector/industry).

The questionnaires developed are presented in Appendix 12. A critical analysis should be conducted by Brasil Capital to evaluate any additional issues aligned with its business strategy and/or values.

Step 2: Assess

Several sources of data were analyzed through an evidence-based research process: specialized dataset (ESG Bloomberg and MSCI), and company disclosure (GRI, CDP, annual report), as presented in Appendix 11. However, in order to have a more comprehensive and accurate assessment more information is needed. Additional sources of research to properly evaluate all relevant factors identified in Step 1, could include: *Formulario de Referencia* - Brazilian equivalent to “10-K”, annual report, investor presentations, company website, global and local media sources, analysts call, engagement with company stakeholders, etc.

If appropriate, the company evaluated can be assessed to verify the data, or provide additional inputs.

It is important to monitor not only current data, but also historical in order to identify any significant trends, and evaluate management actions in ESG factors.

Step 3: Model

A sustainability score integration model is recommended, in which material issues identified could be scored 0 (worst) to 10 (better) based on the company's and its peer's data. Weights (%) should be attributed for each material issue depending its significance on impacting the target company's value (higher the potential, higher the weight). In the score-based ESG Integration model, all ESG data can be aggregated into a global number per company – its “sustainability score” – by a weighted sum of scores (RobecoSAM, 2015).

It is recommended to adjust information for industry size, because standard ESG scores adopted in equity selection tend to be higher for larger companies (NNI, 2017).

6.4 Recommendations/Next Steps

It is important to consider the misunderstanding regarding ESG factors during its integration in equity investment process. Organizations usually have strong cultures, but influencing new beliefs takes effort and time (McKinsey&Company, 2016). As a first step, senior management buy-in regarding the benefits of integrating ESG issues into the investment processes is essential (PRI, 2016). Brasil Capital should also consider:

- Advocating ESG training and certifications for investment professionals;
- Participating in collaborative ESG discussions and engagement initiatives;
- Addressing ESG issues in investment policy statements; and,
- Elaborating a stakeholder's engagement program.

Mainstreaming ESG into investment process is not a simple task, but given rising stakeholder demand for meaningful action and proven risk management benefits, first mover institutions can benefit from the proven benefits of ESG consideration in investments: lower risks, better returns, and a sustainable future (McKinsey&Company, 2016).

Appendix 1: UN PRI principles of and suggestions for implementation

Principle	Possible Actions
Principle 1. We will incorporate ESG issues into investment analysis and decision-making processes.	<ul style="list-style-type: none"> • Address ESG issues in investment policy statements • Support the development of ESG-related tools, metrics and analysis • Assess the capabilities of internal investment managers to incorporate ESG issues into investment decisions • Assess the capabilities of external investment managers to incorporate ESG issues into decisions • Ask investment service providers such as financial analysts, consultants, brokers, research firms, or rating companies to integrate ESG factors into evolving research and analysis • Encourage academic and other research on ESG issues • Advocate ESG training for investment professionals
Principle 2. We will be active owners and incorporate ESG issues into our ownership policies and practices.	<ul style="list-style-type: none"> • Develop and disclose an active ownership policy consistent with the principles • Exercise voting rights and monitor compliance with voting policy • Develop an engagement capability, either directly or through outsourcing • Participate in the development of policy, regulation, and standard setting such as promoting and protecting shareholder rights • File shareholder resolutions consistent with long-term ESG considerations • Engage with companies on ESG issues • Participate in collaborative engagement initiatives • Ask investment managers to undertake and report on ESG-related engagement
Principle 3. We will seek appropriate disclosure on ESG issues by the entities in which we invest.	<ul style="list-style-type: none"> • Ask for standardized reporting on ESG issues using tools such as the Global Reporting Initiative • Ask for ESG issues to be integrated within annual financial reports • Ask for information from companies regarding adoption of, or adherence to, relevant norms, standards, codes of conduct or international initiatives such as the UN Global Compact • Support shareholder initiatives and resolutions promoting ESG disclosure
Principle 4. We will promote acceptance and implementation of the Principles within the investment industry.	<ul style="list-style-type: none"> • Include Principles-related requirements in requests for proposals (RFPs) • Align investment mandates, monitoring procedures, performance indicators and incentive structures accordingly. For example, ensure investment management processes reflect long-term time horizons when appropriate • Communicate ESG expectations to investment service providers • Revisit relationships with service providers that fail to meet ESG expectations • Support the development of tools for benchmarking ESG integration • Support regulatory or policy developments that enable implementation of the Principles
Principle 5. We will work together to enhance our effectiveness in	<ul style="list-style-type: none"> • Support or participate in networks and information platforms to share tools, pool resources, and make use of investor reporting as a source of learning • Collectively address relevant emerging issues

<p>implementing the Principles.</p> <p>Principle 6. We will each report on our activities and progress toward implementing the Principles.</p>	<ul style="list-style-type: none"> • Develop or support appropriate collaborative initiatives • Disclose how ESG issues are integrated within investment practices • Disclose active ownership activities, for example, voting, engagement and policy dialogue • Disclose what is required from service providers in relation to the Principles • Communicate with beneficiaries about ESG issues and the Principles • Report on progress or achievements relating to the Principles using a 'comply or explain' approach (This requires signatories to report on how they implement the Principles, or provide an explanation where they do not comply with them.) • Seek to determine the impact of the Principles • Make use of reporting to raise awareness among a broader group of stakeholders
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Source: PRI

Appendix 2: ESG issues description

A. Environmental issues

Environmental issue	Description
Air and water pollution	<p>Degradation of air or water quality caused by unwanted chemicals or other materials which may result in adverse impacts on human health and ecosystem functioning.</p> <p>Non-compliance with pollution laws may cause increased costs and loss of revenue. For example, a company that spills an excessive amount of highly toxic industrial effluent into the water or chemical vapour into the air may be subject to fines or shutdowns. Air and water pollution can present a substantial risk to a range of industries – examples include the mining, manufacturing, chemical and pharmaceutical industries. On the other hand, businesses involved in environmental remediation and pollution control may benefit from more stringent regulatory requirements in this area.</p>
Biodiversity loss	<p>Biodiversity loss is the reduction in the number and variety of living organisms, mainly due to the destruction or fragmentation of habitat. Biodiversity loss can occur through both human and natural causes.</p> <p>Loss of biodiversity may seriously impact the supply and quality of natural resources used by society, including food, water, energy, wood, genetic resources and many others. A decline in biodiversity could also significantly impact a variety of industries, including food and agriculture, forestry and paper, pharmaceuticals and tourism.</p>
Climate change	<p>Climate change refers to any significant change in measures of climate lasting for an extended period. Climate change can result from natural factors or human activities that cause the composition of the atmosphere to change. Natural factors may include changes in the sun's intensity, slow changes in the Earth's orbit around the sun or natural processes within the climate system itself. Human actions that contribute to climate change can include activities that increase levels of greenhouse gas emissions in the</p>

atmosphere such as the burning of fossil fuels or changes in the surface of the land such as deforestation.

The Fifth Synthesis Report of the Intergovernmental Panel on Climate Change (IPCC) released in November 2014, states that climate warming is now 'unequivocal' and that human activity is 'extremely likely' to be the dominant cause of the warming since the mid-20th century. The report was prepared by over 700 of the world's leading climate scientists, from more than 70 countries, and assisted by 1,720 expert reviews.

Although the consequences of climate change can influence the entire economy and all primary industries, its immediate impact is felt in extreme weather events such as storms, floods and droughts, along with reduced water supply. These factors could potentially affect the insurance, infrastructure, mining, agriculture, fisheries, forestry and tourism industries, to name just a few.

Conversely, efforts to prevent climate change can foster innovation in clean technologies, such as wind and solar power, biofuels and electric motors. The same efforts could promote greater energy efficiency on the part of industrial equipment manufacturers and appliance makers, and in the construction of new commercial and residential buildings.

Deforestation

Deforestation is the permanent removal of forest. Typically, forest land is cleared and then used for another purpose, such as agriculture or urban development.

Deforestation is occurring globally and is contributing to climate change, water supply/demand imbalances, soil erosion, biodiversity loss and displacement of people. The absence of sustainable forestry management practices can have immediate effects on the paper, forestry and construction industries.

Ecosystem services

Ecosystem services are the benefits people obtain from ecosystems. These include:

- provisioning services such as food and water
- regulating services such as the regulation of floods, drought, land degradation and disease
- supporting services such as soil formation and nutrient cycling
- cultural services providing recreational, spiritual, religious and other non-material benefits.

Ecosystem services are benefits provided to people from the ecosystem in which they live. Today, as these services begin to deteriorate, there are moves to monetise them. One such example is called payment for ecosystem services (PES). This practice provides a payment, or incentive, to those who are in the position to produce environmental benefits from an ecosystem. For example, farmers might be paid for compliance with waste management or irrigation standards, reforestation or the preservation of habitats. Foresters may be paid not to cut down trees in order to reduce GHG emissions in the atmosphere.

Environmental protection

Any activity which maintains or restores the quality of the environment by preventing the emission of pollutants or reducing the presence of polluting substances.

Land degradation	<p>Environmental protection is enshrined in the laws of many countries, leading to fines and even stronger penalties for businesses that do not comply with statutory regulations.</p> <p>Land degradation is the reduction or loss of the biological or economic productivity of rain-fed cropland, irrigated cropland, or range, pasture, forest or woodlands. Such loss of land productivity can result from natural processes, land uses or other human activities including land contamination, soil erosion or the destruction of vegetation cover.</p>
Stranded assets	<p>Land degradation may lead to the deterioration of soil and water quality leading, in turn, to reduced crop yields and greater remediation costs. The food and agriculture industries are most affected by this phenomenon, although other industries may suffer indirectly.</p> <p>The depletion of resources is often attributable to the overuse of non-renewable natural resources in a particular locality, including minerals, fish, animals or fossil fuels.</p> <p>In effect, resource depletion means to consume resources at a level beyond the replenishment rate. For resources described as ‘depletable’ (or at risk of being depleted), resource depletion equals the quantity of resources extracted.</p> <p>The term ‘resource depletion’ also arises from potential global supply/demand imbalances in the energy and natural resource sectors, which can create disruption to economic activity.</p>
Stranded assets	<p>The method of extracting the resource can also be controversial and an ESG issue in itself. For example, fracking is a procedure which creates fractures in rocks and rock formations by injecting fluid into cracks to force them open. It is undertaken to recover gas and oil from shale rock. However, the procedure is highly energy, water and chemical intensive and can also cause small earth tremors. The process is undertaken at significant environmental cost.</p> <p>An asset which loses significant economic value well ahead of its anticipated useful life, as a result of changes in legislation, regulation, market forces, disruptive innovation, societal norms or environmental shocks. Fossil fuels are at risk of becoming stranded assets if there is global agreement and policy measures to limit temperature rises above 2 degrees Celsius, thereby avoiding dangerous climate change</p>
Waste	<p>The systematic management of unwanted materials left over from human activity including collection, storage, transport, separation, processing, treatment, recovery and disposal of waste, as well as the control of waste generation.</p> <p>Processes to manage waste differ greatly depending on whether the waste is hazardous or non-hazardous. Companies that produce hazardous waste are at a higher risk of public and regulatory scrutiny in the event of non-compliance. For example, an industrial plant that does not properly dispose of hazardous waste may cause metal poisoning in its surrounding community. Controversies related to improper chemical and pharmaceutical waste disposal are not uncommon. Other sectors where</p>

waste disposal risks are present include information technology, energy and mining sectors.

Source: PRI

B. Social issues

Social issue	Description
Access to medicines	<p>Medicines account for a major proportion of health costs, especially in the developing world where it is estimated that one third of the population is unable to receive or purchase essential medicines on a regular basis. Most trade in medicines takes place between wealthy countries, with the developing nations accounting for only 17% of imports and 6% of exports. Access to medicines depends on affordable prices and on rational selection and use of drugs. Prices have direct implications, especially for developing countries, where 50% to 95% of drugs are paid for by the patients themselves.</p>
Conflict regions	<p>A conflict region represents one of the highest risk and most unstable environments that a business can operate in. John Ruggie, the United Nations Special Representative of the Secretary-General on the Issue of Human Rights and Transnational Corporations and other Business Enterprises, has argued that conflicts represent ‘unique circumstances’ where some of the most offensive corporate-related human rights abuses take place.</p>
Government and community relations	<p>Companies conducting business in conflict regions face a high level of operating risk and need to take particular precautions in order to manage and control this risk. They may need to address issues such as government corruption, human rights violations, paramilitary movements and warlike conditions.</p> <p>This involves engaging and managing relationships between a company and the community groups and government functions it impacts upon because of its operations.</p> <p>The local community in which a company conducts its business has a genuine interest in that company’s operations. Companies that seek to promote local social goals and present themselves as good corporate citizens are usually well received in the community. An example of a potentially successful community relations initiative is a long-term corporate commitment to specific community spending targets.</p> <p>Likewise, government relations require care. All companies have to uphold the law and comply with the regulations of every market in which they operate. If they do not, they may be prosecuted or fined, and in the extreme, face the closure of some of their operations. They also rely on governments for permits to operate and also pay taxes, fees and royalties to them.</p> <p>Companies employ people to lobby government representatives, in order to try to influence future policy. Some corporations are involved in bribery and corruption which are outlawed in many jurisdictions.</p>

Human capital management	<p>The challenge of recruiting and retaining qualified candidates, and helping new employees fit into an organisation. The goal is to keep employees contributing to an organisation’s intellectual capital by offering competitive salaries, benefits and development opportunities.</p>
Human rights	<p>Good human capital management practices may result in superior financial performance and increases in shareholder value.</p> <p>The basic rights and freedoms to which all humans are entitled, including the right to life and liberty, freedom of thought and expression, and equality before the law.</p>
Labor standards	<p>Companies with a cavalier approach toward human rights may face increased public scrutiny and brand erosion. For example, if a company trades in a country plagued by repression of minorities, and/or government sanctioned torture, it will likely face a challenging operating environment and higher operating risk levels.</p> <p>Standards for working conditions to ensure workers’ rights are respected.</p> <p>Adherence to core labor standards with regard to child labor, forced labor and trade union rights is becoming important both in terms of reputational and operating risk. Companies that have breached labor standards – either internally or in their supply chains – have been subject to protests, boycotts and significant brand erosion. Industries with the highest breaches of core labor standards include apparel, agriculture and consumer electronics.</p>
Product misselling	<p>Occurs when a salesperson misrepresents or misleads a buyer of a product or service.</p> <p>Product mis-selling can occur in many industries, but the most common examples are found in the financial services, insurance, pharmaceutical and retail sectors. Product mis-selling may result in fines and litigation. It can also cause significant losses along with changes in marketing strategy and in the types of products offered to the consumer.</p>
Product safety and liability	<p>The impact on the health, safety and wellbeing of consumers and communities from the production, consumption and disposal of a good or service.</p> <p>Unsafe products can harm a company’s bottom line if they trigger fines, awards for damages, legal settlements and/or expensive product recalls. Industries often affected by product safety concerns include retail, pharmaceuticals, food, consumer electronics and car manufacturers.</p>
Safe development of medicines	<p>This involves the developing, testing, trialing, approval and monitoring of medicines with minimal risk and impact to the health, safety and well-being of individuals and communities.</p> <p>Unsafe development of medicines may include involuntary or controversial clinical trials or controversial animal experimentation. In the past, pharmaceutical and medical companies have settled large legal claims related to research and development practices.</p>

Source: PRI

C. Corporate Governance issues

Corporate Governance issue	Description
Accounting risk	The risk that a company's financial statement recognition and related disclosures are incomplete, misleading, or materially misstated.
Audit committee structure	The audit committee is convened by a company's board of directors to supervise financial disclosure and reporting, specifically the company's accounts and the figures contained within them. In order to minimize potential conflicts of interest, international practice is generally moving towards an audit committee comprised of only independent directors.
Board composition	<p>If independent directors on the audit committee have the requisite financial expertise and spend adequate time on reviews, accounting irregularities are less likely to occur.</p> <p>Board composition refers to the background, skills, experience and personal attributes of the people that make up a company's board of directors.</p> <p>When constructing a quality board, the calibre and perspective of individual directors is as important as the creation of a dynamic chemistry that allow for the effective execution of corporate governance and strategic oversight. The board's primary responsibilities can vary, yet typically include identifying and evaluating significant opportunities and risks, serving as informed counsel for major strategic decisions and assessing the CEO's performance. Executing these changes requires two general conditions:</p> <p>(1) individuals who are experienced, responsible and collaborative and</p> <p>(2) an environment in which challenging issues can be confronted, opposing opinions are sought and trust is implicit. Diversity for its own sake will not mean a board is effective. Breadth of perspective is of vital importance.</p>
Board independence	<p>In order to fulfil its oversight role, the board should have the ability to exercise independent judgment and be free of undue influence. To be more effective in this regard, the majority of the board should be comprised of independent directors.</p> <p>The board of directors should be strong, composed of qualified directors who are both able and disposed to lead, and willing to exercise oversight to ensure management delivers a sustainable business strategy and ask tough questions. The majority of the board should not be employees of the corporation or otherwise closely affiliated with management. The board should not be so large as to dilute personal responsibility or to make discussion difficult. A weak board is always a potential danger to a company.</p>

Bribery and corruption	<p>Bribery is the act of attempting to influence a decision made by a person in a position of power by offering them money or other benefits. Corruption consists of receiving these benefits or allowing one's decision to be swayed by such inducements.</p> <p>Corporate scandals involving bribery are numerous and often involve the bribing of corrupt officials in order to secure lucrative government contracts. Corporations guilty of bribery face fines and tarnished reputations. For example, in 2008, German telecommunications company Siemens was revealed to have engaged in systematic bribery of government officials and purchasing agents around the world to aid the sale of telecom equipment. The bribery was managed through an undisclosed fund and disguised in the books through false accounting.</p>
Combined chairperson and CEO	<p>When the roles of the chairman and the chief executive officer (CEO) are combined into one position of power, questions can be raised as to whether one executive, no matter how skilled, can effectively and objectively handle the demands of both management of the day-to-day running of the business and governance of the board.</p> <p>In addition, combining the two can significantly increase the power and control of such a position – the company’s entire decision-making process lies in the hands of one person as the CEO has absolute authority. If the CEO also chairs the board, it might be difficult for that board to objectively evaluate his decisions and performance, thereby weakening the role of the board.</p> <p>There are also concerns that it allows for little transparency into the CEO’s actions, and as such, these can go unmonitored, paving the way for conflicts of interest and corruption.</p>
Disclosure	<p>The release of information by a company about its business activities, for the purpose of informing stakeholders as to the state of the company and its affairs.</p> <p>In the light of major accounting scandals in recent decades, focus has been placed on the disclosure and reliability of financial statements. Full transparency and proper disclosure of financial information can lessen the risk of questionable accounting practices, while conversely, companies not adequately disclosing can mislead investors. For example, Enron did not adequately report on its complex and unusual financial transactions and off-balance sheet entities in order to conceal its deteriorating financial condition.</p> <p>Many companies are now also disclosing information on how they manage sustainability related issues which is helping responsible investors to gain important ESG insights.</p> <p>The release of information by a company about its business activities, for the purpose of informing stakeholders as to the state of the company and its affairs.</p>

<p>Executive remuneration</p>	<p>In the light of major accounting scandals in recent decades, focus has been placed on the disclosure and reliability of financial statements. Full transparency and proper disclosure of financial information can lessen the risk of questionable accounting practices, while conversely, companies not adequately disclosing can mislead investors. For example, Enron did not adequately report on its complex and unusual financial transactions and off-balance sheet entities in order to conceal its deteriorating financial condition.</p> <p>Many companies are now also disclosing information on how they manage sustainability related issues which is helping responsible investors to gain important ESG insights.</p> <p>The compensation provided to a company's senior management staff. Executive remuneration typically includes a base salary plus additional rewards such as bonuses, share entitlements, commissions and severance packages.</p>
<p>Shareholder rights</p>	<p>It can sometimes be in the short-term interest of corporate executives to maximize their own remuneration at the expense of the corporation's overall welfare, and/or to pay less attention to the bottom line than to factors that increase their own power or prestige. Lack of guidelines, or an inadequate policy on executive remuneration, may allow such a situation to develop, and if executives' interests are not properly aligned with corporate performance, financial risks can arise.</p> <p>The rights conferred to shareholders of a company. These typically include participation in general meetings, the receipt of dividends, the right to information and the right to approve board composition, executive remuneration, the appointment of auditors and the company's annual report and accounts.</p> <p>Although shareholders are the owners of a company and can therefore vote in the company's annual general meeting, it is often difficult for them to make an impact on corporate decision-making. However, shareholders are starting to more actively exercise their rights through ownership practices including engagement, proxy activism and raising shareholder resolutions. Through proper exercise of their rights, shareholders can bring to light unaccounted for or neglected risks.</p>
<p>Corporate tax risk</p>	<p>Managing tax compliance has become increasingly complex with constantly changing assurance, regulatory and tax compliance requirements across multiple jurisdictions.</p> <p>In addition, aggressive tax planning from multinational companies over the past decade has become a growing risk for investors. Such a risk should be incorporated in company valuation. But because transparency about where companies pay their taxes remains low, it is difficult for investors to assess the risks associated with companies' tax practices.</p>
<p>Succession planning</p>	<p>Succession planning can be broadly defined as a process for identifying and developing potential future leaders or senior managers, as well as individuals to fill other business-critical positions, either in the short or long-term.</p>

Conflicts of interest

Succession planning ensures that businesses continue to run smoothly after the business's most important people move on to new opportunities, retire or pass away.

A situation where a professional, or a corporation, has a vested interest which may make them an unreliable source. The interest could be money, status, knowledge or reputation for example. When such a situation arises, the party is usually asked to remove themselves, and it is often legally required of them.

An example of a conflict of interest would be a board member voting on the induction of lower premiums for companies with fleet vehicles when he is the owner of a breakdown truck company outside of the corporation. In relation to law, representation by a party with a vested interest in the outcome of the trial would be considered a conflict of interest, and the representation would not be allowed. One example where a conflict of interest may arise is with auditors. For internal auditors, a conflict of interest can arise as it may be difficult to provide honest feedback about corporate governance disclosures and systems.

For external auditors, a conflict of interest can arise when the firms carrying out the audit are also engaged in providing other professional services to the company (eg consulting).

This other work may be more lucrative than the audit work, thereby creating potential issues if the rigour of the audit is compromised in order to secure or preserve revenue streams from non-audit related services.

Auditor independence rules (eg the Sarbanes Oxley Act 2002), are a direct response to perceived conflicts of interest.

Four examples of conflicts that can arise with auditors are listed on the right:

Service: A situation where an auditing company offers more than one service to a company such as, for example, consulting solutions as well as auditing services.

Knowledge: A situation where there are no financially discerning directors on the audit committee of a company.

Access: A situation where auditors have limited access to key management or other company stakeholders.

Reporting: A situation where audit findings are not necessarily available to all relevant stakeholders and may remain confidential,

Shareholder representation	<p>or where qualifications on audit scope or notes to the accounts are not well communicated or understood.</p>
	<p>The corporation is normally run for the benefit of all its shareholders. No group should be discriminated against by blockholders or insiders, and the rights and interests of all should be represented.</p>
	<p>The right of shareholders to elect directors should be clearly defined and not subject to infringement or interference by the existing board or management.</p>
	<p>Elections should be held at regular intervals and should adequately protect the right of dissent. It should be possible to remove directors by vote of the shareholders, or to completely change the company's board if shareholders no longer have confidence in the existing one.</p>
Transparency	<p>The directors should ensure that the company reports regularly and honestly on all important matters of concern to its shareholders, not merely on those disclosures, reports and accounts required by law.</p>
	<p>The report and accounts should be clearly presented. The responsibilities of the board and key executives should be clear, and these persons should be held accountable.</p>
	<p>Any change involving the governance of a corporation should be publicly and promptly disclosed. Disclosure on financial and operational performance is essential if analysts are to better understand the governance risks and opportunities facing a particular company.</p>
	<p>Most countries set mandatory reporting requirements for public corporations. However, the 2007–2009 global financial crisis highlighted some notable gaps in reporting by companies, catching many investors unaware of the risks they were exposed to.</p>
	<p>A vast array of information is now demanded from companies – from financial information and corporate governance structures to the management and mitigation of the impacts of climate change.</p>
	<p>There is a push towards integrated reporting*, reflecting an acknowledgment of the limitations of traditional financial reporting. Investor support for integrated reporting highlights the desire of investors for more transparent and meaningful information, in order to understand key values drivers for company and shareholder performance.</p>
Risk Management	<p>A rigorous programme of risk management should be in place and its findings and updates should be available to the directors at all times. The board should set clear boundaries on the risk tolerance of the corporation, and these boundaries should be followed.</p>

Sustainability

All decisions that might exceed these boundaries should be brought to the immediate attention of the board. The board should not delegate this responsibility to anyone else.

This does not prevent the possibility of serious – even fatal – mistakes in risk management being made, but it at least guarantees that whatever risk policy is in place will be properly followed

The directors and managers of the corporation should be concerned about its long-term survival and prosperity, as well as the maintenance of its franchise. They should not be willing to gamble with the future of the company in exchange for short-term gains, particularly when those gains would not accrue to the benefit of all shareholders.

Remuneration policy should further the company's mission and not create perverse incentives that might run counter to the interests of shareholders.

Appendix 3: SASB material ESG factors

Disclosure Topics Health Care sector



	Biotechnology & Pharmaceuticals	Drug Retailers	Medical Equipment and Supplies	Health Care Delivery	Health Care Distributors	Managed Care
Environment	<ul style="list-style-type: none"> Energy Management Water and Wastewater Management Waste and Hazardous Materials Management 	<ul style="list-style-type: none"> Energy Management 	<ul style="list-style-type: none"> Energy Management Water and Wastewater Management Waste and Hazardous Materials Management 	<ul style="list-style-type: none"> Energy Management Waste and Hazardous Materials Management Climate Impacts 	<ul style="list-style-type: none"> Energy Management 	<ul style="list-style-type: none"> Climate Impacts
Social Capital	<ul style="list-style-type: none"> Access and affordability Customer Welfare Human Rights Selling Practices and Product Labeling 	<ul style="list-style-type: none"> Customer Welfare 	<ul style="list-style-type: none"> Access and Affordability Selling Practices and Product Labeling 	<ul style="list-style-type: none"> Access and Affordability Customer Welfare Selling Practices and Product Labeling 	<ul style="list-style-type: none"> Customer Welfare 	<ul style="list-style-type: none"> Access and Affordability Customer Welfare Selling Practices and Product Labeling
Human Capital	<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity Employee Health, Safety and Wellbeing 			<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity 		
Business Model	<ul style="list-style-type: none"> Product Quality and Safety Product Design and Lifecycle Management Supply Chain Management 	<ul style="list-style-type: none"> Data Privacy & Security Product Quality & Safety Supply Chain Management 	<ul style="list-style-type: none"> Product Quality and Safety Product Design and Lifecycle Management Supply Chain Management Materials Sourcing 	<ul style="list-style-type: none"> Data Privacy and Security 	<ul style="list-style-type: none"> Product Quality and Safety Product Packaging and Distribution Product Design and Lifecycle Management 	<ul style="list-style-type: none"> Rate Structure and Pricing Data Privacy and Security
Leadership & Governance	<ul style="list-style-type: none"> Business Ethics 		<ul style="list-style-type: none"> Business Ethics 	<ul style="list-style-type: none"> Business Ethics 	<ul style="list-style-type: none"> Business Ethics 	

Disclosure Topics Financials sector



	Commercial Banks	Investment Banking & Brokerage	Asset Management & Custody Activities	Consumer Finance	Mortgage Finance	Security & Commodity Exchanges	Insurance
Environment					<ul style="list-style-type: none"> Climate Impacts 		<ul style="list-style-type: none"> Climate Impacts
Social Capital	<ul style="list-style-type: none"> Access & Affordability 		<ul style="list-style-type: none"> Selling Practices and Product Labeling 	<ul style="list-style-type: none"> Access & Affordability Selling Practices and Product Labeling Customer Welfare 	<ul style="list-style-type: none"> Selling Practices and Product Labeling Customer Welfare 		<ul style="list-style-type: none"> Customer Welfare
Human Capital		<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity 	<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity 				
Business Model	<ul style="list-style-type: none"> Data Privacy & Security Investment, Credit, and Underwriting ESG Risks 	<ul style="list-style-type: none"> Investment, Credit, and Underwriting ESG Risks 	<ul style="list-style-type: none"> Investment, Credit, and Underwriting ESG Risks 	<ul style="list-style-type: none"> Data Privacy & Security 		<ul style="list-style-type: none"> Business Model Resilience 	<ul style="list-style-type: none"> Rate Structure and Pricing Investment, Credit, and Underwriting ESG Risks
Leadership & Governance	<ul style="list-style-type: none"> Systemic Risk Management Business Ethics 	<ul style="list-style-type: none"> Systemic Risk Management Business Ethics 	<ul style="list-style-type: none"> Systemic Risk Management Business Ethics 		<ul style="list-style-type: none"> Business Ethics 	<ul style="list-style-type: none"> Systemic Risk Management Business Ethics 	<ul style="list-style-type: none"> Systemic Risk Management

Disclosure Topics Technology & Communications sector



	Hardware	EMS & ODM	Semiconductors	Software & IT Services	Internet Media & Services	Telecommunications Services
Environment		<ul style="list-style-type: none"> Water & Wastewater Management Waste & Hazardous Materials Management 	<ul style="list-style-type: none"> GHG Emissions Energy Management Water & Wastewater Management Waste & Hazardous Materials Management 	<ul style="list-style-type: none"> Energy Management 	<ul style="list-style-type: none"> Energy Management 	<ul style="list-style-type: none"> Energy Management
Social Capital						
Human Capital	<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity 	<ul style="list-style-type: none"> Employee Health, Safety and Wellbeing Labor Relations Labor Practices & Compensation 	<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity Employee Health, Safety and Wellbeing 	<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity 	<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity 	
Business Model	<ul style="list-style-type: none"> Data Privacy & Security Product Design & Lifecycle Management Materials Sourcing Supply Chain Management 	<ul style="list-style-type: none"> Product Design & Lifecycle Management Materials Sourcing 	<ul style="list-style-type: none"> Product Design & Lifecycle Management Materials Sourcing 	<ul style="list-style-type: none"> Data Privacy & Security 	<ul style="list-style-type: none"> Data Privacy & Security 	<ul style="list-style-type: none"> Data Privacy & Security Product Design & Lifecycle Management
Leadership & Governance			<ul style="list-style-type: none"> Competitive Behavior 	<ul style="list-style-type: none"> Systemic Risk Management Competitive behavior 	<ul style="list-style-type: none"> Systemic Risk Management Competitive behavior 	<ul style="list-style-type: none"> Systemic Risk Management Competitive behavior

Disclosure Topics Extractives & Minerals Processing sector



	Oil & Gas – Exploration & Production	Oil & Gas – Midstream	Oil & Gas – Refining & Marketing	Oil & Gas – Services	Coal Operations	Iron & Steel Producers	Metals & Mining	Construction Materials
Environment	<ul style="list-style-type: none"> GHG emissions Air quality Water management Ecological Impacts 	<ul style="list-style-type: none"> GHG emissions Air Quality Ecological Impacts 	<ul style="list-style-type: none"> GHG emissions Air Quality Water and wastewater management Waste and hazardous materials management 	<ul style="list-style-type: none"> Energy Management Water and wastewater management Waste and hazardous materials management Ecological impacts 	<ul style="list-style-type: none"> Energy Management Water and wastewater management Waste and hazardous materials management Ecological impacts 	<ul style="list-style-type: none"> GHG emissions Air quality Energy management Water and wastewater management Waste and hazardous materials management Ecological impacts 	<ul style="list-style-type: none"> GHG emissions Air quality Energy management Water and wastewater management Waste and hazardous materials management Ecological impacts 	<ul style="list-style-type: none"> GHG emissions Air quality Energy management Water and wastewater management Waste and hazardous materials management Ecological impacts
Social Capital	<ul style="list-style-type: none"> Community Rights Human Rights 				<ul style="list-style-type: none"> Community Rights Human Rights 		<ul style="list-style-type: none"> Community Rights Human Rights 	
Human Capital	<ul style="list-style-type: none"> Employee health, safety, and wellbeing 		<ul style="list-style-type: none"> Employee health, safety, and wellbeing 	<ul style="list-style-type: none"> Employee health, safety, and wellbeing 	<ul style="list-style-type: none"> Employee health, safety, and wellbeing Labor relations 	<ul style="list-style-type: none"> Employee health, safety, and wellbeing 	<ul style="list-style-type: none"> Employee health, safety, and wellbeing Labor relations 	<ul style="list-style-type: none"> Employee health, safety, and wellbeing
Business Model	<ul style="list-style-type: none"> Business Model Resilience 		<ul style="list-style-type: none"> Business Model Resilience 		<ul style="list-style-type: none"> Business Model Resilience 			<ul style="list-style-type: none"> Product Design and Lifecycle Management
Leadership & Governance	<ul style="list-style-type: none"> Critical Incident Risk Management Business ethics Management of legal & regulatory environment 	<ul style="list-style-type: none"> Competitive Behavior Critical Incident Risk Management 	<ul style="list-style-type: none"> Critical Incident Risk Management Competitive Behavior Management of legal & regulatory environment 	<ul style="list-style-type: none"> Critical Incident Risk Management Business ethics Management of legal & regulatory environment 	<ul style="list-style-type: none"> Critical Incident Risk Management 	<ul style="list-style-type: none"> Supply chain management 	<ul style="list-style-type: none"> Business ethics 	<ul style="list-style-type: none"> Competitive Behavior

Disclosure Topics Transportation sector



	Automobiles	Auto Parts	Car Rental & Leasing	Airlines	Air Freight & Logistics	Marine Transportation	Rail Transportation	Road Transportation	Cruise Lines
Environment		<ul style="list-style-type: none"> Energy Management Waste & Hazardous Materials Management 		<ul style="list-style-type: none"> GHG Emissions Energy Management 	<ul style="list-style-type: none"> GHG Emissions Energy Management Air Quality 	<ul style="list-style-type: none"> GHG Emissions Energy Management Air Quality Ecological Impacts 	<ul style="list-style-type: none"> GHG Emissions Energy Management Air Quality 	<ul style="list-style-type: none"> GHG Emissions Energy Management Air Quality 	<ul style="list-style-type: none"> GHG Emissions Energy Management Air Quality Ecological Impacts
Social Capital			<ul style="list-style-type: none"> Customer Welfare 						<ul style="list-style-type: none"> Customer Welfare
Human Capital	<ul style="list-style-type: none"> Labor Relations 			<ul style="list-style-type: none"> Labor Relations 	<ul style="list-style-type: none"> Labor Practices Employee Health, Safety and Wellbeing 	<ul style="list-style-type: none"> Employee Health, Safety and Wellbeing 	<ul style="list-style-type: none"> Employee Health, Safety and Wellbeing 	<ul style="list-style-type: none"> Labor Practices & Compensation Employee Health, Safety and Wellbeing 	<ul style="list-style-type: none"> Labor Practices & Compensation
Business Model	<ul style="list-style-type: none"> Product Quality & Safety Product Design & Lifecycle Management Materials Sourcing 	<ul style="list-style-type: none"> Product Quality & Safety Product Design & Lifecycle Management Materials Sourcing 	<ul style="list-style-type: none"> Product Design & Lifecycle Management 		<ul style="list-style-type: none"> Supply Chain Management 				
Leadership & Governance		<ul style="list-style-type: none"> Competitive Behavior 		<ul style="list-style-type: none"> Competitive Behavior Critical Incident Risk Management 	<ul style="list-style-type: none"> Critical Incident Risk Management 	<ul style="list-style-type: none"> Business Ethics Critical Incident Risk Management 	<ul style="list-style-type: none"> Competitive Behavior Critical Incident Risk Management 	<ul style="list-style-type: none"> Critical Incident Risk Management 	<ul style="list-style-type: none"> Critical Incident Risk Management

Disclosure Topics Services sector



	Education	Professional & Commercial Services	Hotels & Lodging	Casinos & Gaming	Leisure Facilities	Advertising & Marketing	Media & Entertainment
Environment			<ul style="list-style-type: none"> Energy Management Water & Wastewater Management Climate Impacts Ecological Impacts 	<ul style="list-style-type: none"> Energy Management 	<ul style="list-style-type: none"> Energy Management 		
Social Capital	<ul style="list-style-type: none"> Customer Welfare Selling Practices & Product Labeling 			<ul style="list-style-type: none"> Customer Welfare 	<ul style="list-style-type: none"> Customer Welfare 	<ul style="list-style-type: none"> Selling Practices & Product Labeling 	<ul style="list-style-type: none"> Selling Practices & Product Labeling
Human Capital		<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity 	<ul style="list-style-type: none"> Labor Practices & Compensation 	<ul style="list-style-type: none"> Employee Health, Safety, and Wellbeing 	<ul style="list-style-type: none"> Employee Health & Safety Management 	<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity 	<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity
Business Model		<ul style="list-style-type: none"> Data Privacy & Security 				<ul style="list-style-type: none"> Data Privacy & Security 	
Leadership & Governance		<ul style="list-style-type: none"> Business Ethics 		<ul style="list-style-type: none"> Business Ethics Management of Legal & Regulatory Environment 			<ul style="list-style-type: none"> Competitive Behavior

Disclosure Topics Resource Transformation sector



	Chemicals	Aerospace & Defense	Electrical & Electronic Equipment	Industrial Machinery & Goods	Containers & Packaging
Environment	<ul style="list-style-type: none"> Greenhouse Gas Emissions Air Quality Energy Management Water & Wastewater Management Waste & Hazardous Materials Management 	<ul style="list-style-type: none"> Energy Management Waste & Hazardous Materials Management 	<ul style="list-style-type: none"> Energy Management Waste & Hazardous Materials Management 	<ul style="list-style-type: none"> Energy Management 	<ul style="list-style-type: none"> Greenhouse Gas Emissions Air Quality Energy Management Water & Wastewater Management Waste & Hazardous Materials Management
Social Capital	<ul style="list-style-type: none"> Product Quality & Safety 	<ul style="list-style-type: none"> Product Quality and Safety 	<ul style="list-style-type: none"> Product Quality and Safety 		<ul style="list-style-type: none"> Product Quality and Safety
Human Capital				<ul style="list-style-type: none"> Employee health, safety and wellbeing 	
Business Model	<ul style="list-style-type: none"> Product Design and Lifecycle Management Business Model Resilience 	<ul style="list-style-type: none"> Product Design and Lifecycle Management Data Privacy & Security Supply Chain Management Materials Sourcing 	<ul style="list-style-type: none"> Product Design and Lifecycle Management Materials Sourcing 	<ul style="list-style-type: none"> Product Design and Lifecycle Management Materials Sourcing 	<ul style="list-style-type: none"> Product Design and Lifecycle Management Supply Chain Management
Leadership & Governance	<ul style="list-style-type: none"> Management of Legal & Regulatory Environment Critical Incident Risk Management 	<ul style="list-style-type: none"> Business Ethics 	<ul style="list-style-type: none"> Business Ethics Competitive Behavior 		

Disclosure Topics Food & Beverage sector



	Agricultural Products	Meat, Poultry, and Dairy	Processed Foods	Non-Alcoholic Beverages	Alcoholic Beverages	Tobacco	Food Retailers & Distributors	Restaurants
Environment	<ul style="list-style-type: none"> Greenhouse Gas Emissions Energy Management Water & Wastewater Management Ecological Impacts Climate Impacts 	<ul style="list-style-type: none"> Greenhouse Gas Emissions Energy Management Water & Wastewater Management Climate Impacts Ecological Impacts 	<ul style="list-style-type: none"> Energy Management Water & Wastewater Management 	<ul style="list-style-type: none"> Energy Management Water & Wastewater Management 	<ul style="list-style-type: none"> Energy Management Water & Wastewater Management 		<ul style="list-style-type: none"> GHG Emissions Energy Management Waste & Hazardous Materials Management 	<ul style="list-style-type: none"> Energy Management Water & Wastewater Management Waste & Hazardous Materials Management
Social Capital	<ul style="list-style-type: none"> Customer Welfare 	<ul style="list-style-type: none"> Customer Welfare 	<ul style="list-style-type: none"> Customer Welfare Selling Practices and Product Labeling 	<ul style="list-style-type: none"> Customer Welfare Selling Practices and Product Labeling 	<ul style="list-style-type: none"> Selling Practices and Product Labeling 	<ul style="list-style-type: none"> Customer Welfare Selling Practices and Product Labeling 	<ul style="list-style-type: none"> Customer Welfare Selling Practices & Product Labeling 	<ul style="list-style-type: none"> Customer Welfare Product Quality & Safety
Human Capital	<ul style="list-style-type: none"> Labor Practices and Compensation Employee Health, Safety and Wellbeing 	<ul style="list-style-type: none"> Labor Practices and Compensation Employee Health, Safety and Wellbeing 					<ul style="list-style-type: none"> Labor Relations Labor Practices & Compensation 	<ul style="list-style-type: none"> Labor Practices & Compensation
Business Model	<ul style="list-style-type: none"> Product Quality & Safety Supply Chain Management 	<ul style="list-style-type: none"> Product Quality & Safety Business Model Resilience Supply Chain Management 	<ul style="list-style-type: none"> Product Quality & Safety Product Packaging & Distribution Supply Chain Management 	<ul style="list-style-type: none"> Product Packaging & Distribution Supply Chain Management 	<ul style="list-style-type: none"> Product Packaging & Distribution Supply Chain Management 		<ul style="list-style-type: none"> Data Privacy & Security Product Quality & Safety Product Packaging & Distribution Supply Chain Management 	<ul style="list-style-type: none"> Supply Chain Management
Leadership & Governance	<ul style="list-style-type: none"> Management of Legal & Regulatory Environment 							

Disclosure Topics Consumer Goods sector



	Apparel, Accessories & Footwear	E-Commerce	Appliance Manufacturing	Household & Personal Products	Building Products & Furnishings	Toys & Sporting Goods	Multiline & Specialty Retailers & Dist.
Environment		<ul style="list-style-type: none"> Energy Management Water & Wastewater Management Product Packaging & Distribution 		<ul style="list-style-type: none"> Water & Wastewater Management 	<ul style="list-style-type: none"> Energy Management 		<ul style="list-style-type: none"> Energy Management
Social Capital				<ul style="list-style-type: none"> Customer Welfare 			
Human Capital		<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity 					<ul style="list-style-type: none"> Employee Recruitment, Engagement, and Diversity Labor Practices & Compensation
Business Model	<ul style="list-style-type: none"> Product Quality & Safety Materials Sourcing Supply Chain Management 	<ul style="list-style-type: none"> Data Privacy & Security 	<ul style="list-style-type: none"> Product Quality & Safety Product Design & Lifecycle Management 	<ul style="list-style-type: none"> Product Packaging & Distribution Supply Chain Management 	<ul style="list-style-type: none"> Product Quality & Safety Product Design & Lifecycle Management Supply Chain Management 	<ul style="list-style-type: none"> Product Quality & Safety Supply Chain Management 	<ul style="list-style-type: none"> Data Privacy & Security Product Packaging & Distribution Supply Chain Management
Leadership & Governance							

Disclosure Topics Renewables & Alternative Energy sector



	Solar Technology & Project Developers	Wind Technology & Project Developers	Fuel Cells & Industrial Batteries	Biofuels	Pulp & Paper Products	Forestry Management
Environment	<ul style="list-style-type: none"> Energy Management Water & wastewater management Waste & Hazardous Materials Management Ecological Impacts 	<ul style="list-style-type: none"> Ecological Impacts 	<ul style="list-style-type: none"> Energy Management 	<ul style="list-style-type: none"> Air Quality Water & wastewater Management 	<ul style="list-style-type: none"> Greenhouse Gas Emissions Air Quality Energy Management Water Management 	<ul style="list-style-type: none"> Ecosystem Impacts Climate Impacts
Social Capital						<ul style="list-style-type: none"> Community relations
Human Capital		<ul style="list-style-type: none"> Employee health, safety and wellbeing 	<ul style="list-style-type: none"> Employee health, safety and wellbeing 			
Business Model	<ul style="list-style-type: none"> Rate structure and pricing Product Design and Lifecycle Management Supply Chain Management Materials Sourcing 	<ul style="list-style-type: none"> Product Design and Lifecycle Management Materials Sourcing 	<ul style="list-style-type: none"> Product Design and Lifecycle Management Materials Sourcing 	<ul style="list-style-type: none"> Business Model Resilience Supply Chain Management 	<ul style="list-style-type: none"> Supply Chain Management 	
Leadership & Governance				<ul style="list-style-type: none"> Management of the Legal & Regulatory Environment Critical Incident Risk Management 		

2017 KEY ISSUES BY GICS SUB-INDUSTRIES – INDUSTRIALS

Pillar		Theme	Environmental					Social					Governance		
GICS Sub-Industry	Key Issue (2016) Company-specific KI Added in 2017 Removed in 2017		Climate Change	Natural Capital	Pollution & Waste	Environ. Opportun.	Human Capital	Product Liability	Stakeholder Oppos.	Social Opportun.	Corp. Gov.	Corporate Behavior			
		IVA Industry	Carbon Emissions Product Carbon Footprint Financing Environmental Impact Climate Change Vulnerability Water Stress Biodiversity & Land Use Raw Material Sourcing Toxic Emissions & Waste Packaging Material & Waste Electronic Waste Opportunities in Clean Tech Opportunities in Green Building Opportunities in Renewable Energy Labor Management Health & Safety Human Capital Development Supply Chain Labor Standards Product Safety & Quality Chemical Safety Financial Product Safety Privacy & Data Security Responsible Investment Insuring Health & Demographic Risk							Controversial Sourcing Access to Communications Access to Finance Access to Health Care Opportunities in Nutrition & Health	Board Pay Ownership & Control Accounting Business Ethics and Fraud Anticompetitive Practices Corruption & Instability Financial System Instability Tax Transparency				
20101010	Aerospace & Defense	Aerospace & Defense													
20102010	Building Products	Building Products													
20103010	Construction & Engineering	Construction & Engineering													
20104010	Electrical Components & Equipment	Electrical Equipment													
20104020	Heavy Electrical Equipment	Electrical Equipment													
20105010	Industrial Conglomerates	Industrial Conglomerates													
20106010	Construction Machinery & Heavy	Construction & Farm Machinery & Heavy Trucks													
20106015	Agricultural & Farm Machinery	Construction & Farm Machinery & Heavy Trucks													
20106020	Industrial Machinery	Industrial Machinery													
20107010	Trading Companies & Distributors	Trading Companies & Distributors													
20201010	Commercial Printing	Commercial Services & Supplies													
20201050	Environmental & Facilities Services	Commercial Services & Supplies													
20201060	Office Services & Supplies	Commercial Services & Supplies													
20201070	Diversified Support Services	Commercial Services & Supplies													
20201080	Security & Alarm Services	Commercial Services & Supplies													
20202010	Human Resource & Employment	Professional Services													
20202020	Research & Consulting Services	Professional Services													
20301010	Air Freight & Logistics	Air Freight & Logistics													
20302010	Airlines	Airlines													
20303010	Marine	Marine Transport													
20304010	Railroads	Road & Rail Transport													
20304020	Trucking	Road & Rail Transport													
20305010	Airport Services	Transportation Infrastructure													
20305020	Highways & Railroads	Transportation Infrastructure													
20305030	Marine Ports & Services	Transportation Infrastructure													
25101010	Auto Parts & Equipment	Auto Components													
25101020	Tires & Rubber	Auto Components													
25102010	Automobile Manufacturers	Automobiles													
25102020	Motorcycle Manufacturers	Automobiles													

2017 KEY ISSUES BY GICS SUB-INDUSTRIES – CONSUMER DISCRETIONARY

Pillar		Theme	Environmental					Social					Governance		
GICS Sector Description	GICS Sub-Industry		Key Issue (2016) Company-specific KI Added in 2017 Removed in 2017	Climate Change	Natural Capital	Pollution & Waste	Environ. Opportun.	Human Capital	Product Liability	Stakeholder Oppos.	Social Opportun.	Corp. Gov.	Corporate Behavior		
		IVA Industry	Carbon Emissions Product Carbon Footprint Financing Environmental Impact Climate Change Vulnerability Water Stress Biodiversity & Land Use Raw Material Sourcing Toxic Emissions & Waste Packaging Material & Waste Electronic Waste Opportunities in Clean Tech Opportunities in Green Building Opportunities in Renewable Energy Labor Management Health & Safety Human Capital Development Supply Chain Labor Standards Product Safety & Quality Chemical Safety Financial Product Safety Privacy & Data Security Responsible Investment Insuring Health & Demographic Risk							Controversial Sourcing Access to Communications Access to Finance Access to Health Care Opportunities in Nutrition & Health	Board Pay Ownership & Control Accounting Business Ethics and Fraud Anticompetitive Practices Corruption & Instability Financial System Instability Tax Transparency				
Consumer	25201010	Consumer Electronics	Household Durables												
Consumer	25201020	Home Furnishings	Household Durables												
Consumer	25201030	Homebuilding	Real Estate Development & Diversified Activities												
Consumer	25201040	Household Appliances	Household Durables												
Consumer	25201050	Housewares & Specialties	Household Durables												
Consumer	25202010	Leisure Products	Leisure Products												
Consumer	25203010	Apparel, Accessories & Luxury	Textiles, Apparel & Luxury Goods												
Consumer	25203020	Footwear	Textiles, Apparel & Luxury Goods												
Consumer	25203030	Textiles	Textiles, Apparel & Luxury Goods												
Consumer	25301010	Casinos & Gaming	Casinos & Gaming												
Consumer	25301020	Hotels, Resorts & Cruise Lines	Hotels & Travel												
Consumer	25301030	Leisure Facilities	Hotels & Travel												
Consumer	25301040	Restaurants	Restaurants												
Consumer	25302010	Education Services	Diversified Consumer Services												
Consumer	25302020	Specialized Consumer Services	Diversified Consumer Services												
Consumer	25401010	Advertising	Media												
Consumer	25401020	Broadcasting	Broadcasting, Cable & Satellite												
Consumer	25401025	Cable & Satellite	Broadcasting, Cable & Satellite												
Consumer	25401030	Movies & Entertainment	Media												
Consumer	25401040	Publishing	Media												
Consumer	25501010	Distributors	Retail - Consumer Discretionary												
Consumer	25502020	Internet Retail	Retail - Consumer Discretionary												
Consumer	25503010	Department Stores	Retail - Consumer Discretionary												
Consumer	25503020	General Merchandise Stores	Retail - Consumer Discretionary												
Consumer	25504010	Apparel Retail	Retail - Consumer Discretionary												
Consumer	25504020	Computer & Electronics Retail	Retail - Consumer Discretionary												
Consumer	25504030	Home Improvement Retail	Retail - Consumer Discretionary												
Consumer	25504040	Specialty Stores	Retail - Consumer Discretionary												
Consumer	25504050	Automotive Retail	Retail - Consumer Discretionary												
Consumer	25504060	Homefurnishing Retail	Retail - Consumer Discretionary												

2017 KEY ISSUES BY GICS SUB-INDUSTRIES – CONSUMER STAPLES AND HEALTH CARE

		Pillar	Environmental					Social				Governance	
		Theme	Climate Change	Natural Capital	Pollution & Waste	Environ. Opportun.	Human Capital	Product Liability	Stakeholder Oppos.	Social Opportun.	Corp. Gov.	Corporate Behavior	
GICS Sector Description	GICS Sub-Industry	IVA Industry	Carbon Emissions Product Carbon Footprint Financing Environmental Impact Climate Change Vulnerability	Water Stress Biodiversity & Land Use Raw Material Sourcing	Toxic Emissions & Waste Packaging Material & Waste Electronic Waste	Opportunities in Clean Tech Opportunities in Green Building Opportunities in Renewable Energy	Health & Safety Human Capital Development Supply Chain Labor Standards Product Safety & Quality	Chemical Safety Financial Product Safety Privacy & Data Security Responsible Investment Incurring Health & Demographic Risk	Controversial Sourcing Access to Communications Access to Finance Access to Health Care Opportunities in Nutrition & Health	Board Pay Ownership & Control Accounting	Business Ethics and Fraud Anticompetitive Practices Corruption & Instability Financial System Instability Tax Transparency		
Consumer	30101010 Drug Retail	Retail - Food & Staples											
Consumer	30101020 Food Distributors	Retail - Food & Staples											
Consumer	30101030 Food Retail	Retail - Food & Staples											
Consumer	30101040 Hypermarkets & Super Centers	Retail - Food & Staples											
Consumer	30201010 Brewers	Beverages											
Consumer	30201020 Distillers & Vintners	Beverages											
Consumer	30201030 Soft Drinks	Beverages											
Consumer	30202010 Agricultural Products	Food Products											
Consumer	30202030 Packaged Foods & Meats	Food Products											
Consumer	30203010 Tobacco	Tobacco											
Consumer	30301010 Household Products	Household & Personal Products											
Consumer	30302010 Personal Products	Household & Personal Products											
Health Care	35101010 Health Care Equipment	Health Care Equipment & Supplies											
Health Care	35101020 Health Care Supplies	Health Care Equipment & Supplies											
Health Care	35102010 Health Care Distributors	Health Care Providers & Services											
Health Care	35102015 Health Care Services	Health Care Providers & Services											
Health Care	35102020 Health Care Facilities	Health Care Providers & Services											
Health Care	35102030 Managed Health Care	Health Care Providers & Services											
Health Care	35103010 Health Care Technology	Health Care Equipment & Supplies											
Health Care	35201010 Biotechnology	Biotechnology											
Health Care	35202010 Pharmaceuticals	Pharmaceuticals											
Health Care	35203010 Life Sciences Tools & Services	Health Care Equipment & Supplies											

2017 KEY ISSUES BY GICS SUB-INDUSTRIES – FINANCIALS AND INFORMATION TECHNOLOGY

		Pillar	Environmental					Social				Governance	
		Theme	Climate Change	Natural Capital	Pollution & Waste	Environ. Opportun.	Human Capital	Product Liability	Stakeholder Oppos.	Social Opportun.	Corp. Gov.	Corporate Behavior	
GICS Sub-Industry	IVA Industry	IVA Industry	Carbon Emissions Product Carbon Footprint Financing Environmental Impact Climate Change Vulnerability	Water Stress Biodiversity & Land Use Raw Material Sourcing	Toxic Emissions & Waste Packaging Material & Waste Electronic Waste	Opportunities in Clean Tech Opportunities in Green Building Opportunities in Renewable Energy	Health & Safety Human Capital Development Supply Chain Labor Standards Product Safety & Quality	Chemical Safety Financial Product Safety Privacy & Data Security Responsible Investment Incurring Health & Demographic Risk	Controversial Sourcing Access to Communications Access to Finance Access to Health Care Opportunities in Nutrition & Health	Board Pay Ownership & Control Accounting	Business Ethics and Fraud Anticompetitive Practices Corruption & Instability Financial System Instability Tax Transparency		
40101010	Diversified Banks	Banks											
40101015	Regional Banks	Banks											
40102010	Trusts & Mortgage Finance	Banks											
40201020	Other Diversified Financial Services	Diversified Financials											
40201030	Multi-Sector Holdings	Diversified Financials											
40201040	Specialized Finance	Diversified Financials											
40202010	Consumer Finance	Consumer Finance											
40203010	Asset Management & Custody	Asset Management & Custody Banks											
40203020	Investment Banking & Brokerage	Investment Banking & Brokerage											
40203030	Diversified Capital Markets	Investment Banking & Brokerage											
40203040	Financial Exchanges & Data	Diversified Financials											
40204010	Mortgage REITs	Asset Management & Custody Banks											
40301010	Insurance Brokers	Multi-Line Insurance & Brokerage											
40301020	Life & Health Insurance	Life & Health Insurance											
40301030	Multi-line Insurance	Multi-Line Insurance & Brokerage											
40301040	Property & Casualty Insurance	Property & Casualty Insurance											
40301050	Reinsurance	Multi-Line Insurance & Brokerage											
45101010	Internet Software & Services	Software & Services											
45102010	IT Consulting & Other Services	Software & Services											
45102020	Data Processing & Outsourced	Software & Services											
45103010	Application Software	Software & Services											
45103020	Systems Software	Software & Services											
45103030	Home Entertainment Software	Software & Services											
45201020	Communications Equipment	Technology Hardware, Storage & Peripherals											
45202030	Technology Hardware, Storage &	Technology Hardware, Storage & Peripherals											
45203010	Electronic Equipment & Instruments	Electronic Equipment, Instruments & Components											
45203015	Electronic Components	Electronic Equipment, Instruments & Components											
45203020	Electronic Manufacturing Services	Electronic Equipment, Instruments & Components											
45203030	Technology Distributors	Electronic Equipment, Instruments & Components											
45301010	Semiconductor Equipment	Semiconductors & Semiconductor Equipment											
45301020	Semiconductors	Semiconductors & Semiconductor Equipment											

One of the most important documents highlighting the importance of integrating ESG issues into investment decisions is the 'Freshfields Report', published in 2005. The Asset Management Working Group (AMWG) of the United Nations Environmental Programme Finance Initiative (UNEP FI) commissioned international law firm Freshfields Bruckhaus Deringer to investigate the following question:

'Is the integration of environmental, social and governance issues into investment policy (including asset allocation, portfolio construction and stock-picking or bond-picking) voluntarily permitted, legally required or hampered by law and regulation; primarily as regards public and private pension funds, secondarily as regards insurance company reserves and mutual funds?'

Freshfields covered nine jurisdictions including Australia, Canada, France, Germany, Italy, Japan, Spain, the UK and the US. It concluded that:

'...integrating ESG considerations into investment analysis so as to more reliably predict financial performance is clearly permissible and is arguably required in all jurisdictions.'

A follow up to the AMWG's 'Freshfields Report' was published in 2009. This report is titled 'Fiduciary Responsibility – Legal and Practical Aspects of Integrating Environmental, Social and Governance Issues into Investment'. Pages 58-66 of the report are available in your reading guide and provide concluding views on fiduciary responsibilities and legal developments regarding ESG issues.

Corporate governance risk

The incidence of major corporate governance and management failures has grown significantly in recent times.

As a result of this, there is now a greater need for a better understanding of corporate governance risks and controls.

ESG analysis provides a framework for corporate governance risk assessment that goes beyond conventional analysis.

Some recent examples of prominent company failures linked to corporate governance issues include:

- News Corp
- Barclays
- Petrobras

Availability of data

Disclosure by companies of their ESG risks and opportunities is increasing and becoming more quantitative and comprehensive, enabling much needed insights for investors and other stakeholders.

In addition, mainstream and specialized research and data providers now produce a comprehensive range of country, industry and company-specific reports and projections.

Availability of analytics	<p>This increasing availability of data, benchmarks and case studies makes it easier for investors to assess ESG risks and opportunities as part of securities analysis and portfolio construction.</p> <p>Increasing availability of data leads to new ways of analyzing performance and trends – ways that can augment traditional investment processes.</p>
Universal Owner Principles	<p>Where traditional fundamental analysis might look at purely financial metrics such as return on equity, asset turnover, gross margin or EV/EBITDA, ESG analysis adds another layer of information that gives greater insight into operating performance and a company’s strategic positioning.</p> <p>An example of a resource efficiency metric used in ESG analysis is water intensity per litre of product, which can be relevant for beverage companies. Another is water intensity as a ratio to sales revenue, which may be relevant, for example, to mining companies operating in water- scarce regions.</p> <p>With increasing amounts of money in private and public pension funds, there is a growing impetus for the consideration of the portfolio-wide impacts of externalities.</p> <p>Such considerations are particularly important for the 'Universal Owner'. The Universal Owner is typically a pension fund, superannuation fund or sovereign fund with diverse holdings which are representative of the entire economy.</p> <p>Because such funds are exposed to all sectors and across many jurisdictions, there is an argument that they should act in the interests of their entire portfolio. Put simply, what is an unpriced input for one industry may be a cost to another industry. Consequently, it is in the interests of an asset owner, with a diverse portfolio, to ensure that their overall risk and exposure is limited.</p>
Increasing demand for RI	<p>By way of example, a fund may be invested in a gold mine and a major aquaculture farm located on the same river. The gold mine may be saving money by releasing excessive pollution into a river. This pollution may flow downstream, having an adverse impact upon the fishery. In other words, one investment's gain is the other’s loss.</p> <p>There is increasing market demand for investment professionals and funds that incorporate analysis of ESG issues into their investment process.</p> <p>Signatories to the United Nations Principles for Responsible Investment are approaching 1,300 and represent almost one quarter of all assets under management in the world. Investment in responsible investment products designed for specialised audiences is also rising every year, particularly in Europe, Asia, Australasia, Canada and the United States.</p>

Intangible Factors	<p>This demand is leading to a growing need for ESG metrics and analysis, more jobs and career opportunities and an increasingly sophisticated industry.</p> <p>Tangible factors are those which can be easily measured and are included in financial accounts and other sources of data that support fundamental analysis. Examples may include items seen on a typical profit and loss or balance sheet. On the other hand, intangible factors are not as readily quantifiable, but may contribute greatly to corporate performance and shareholder value. Examples may include quality of management, capacity for innovation, societal impacts, safety, human capital management, reputation, brand equity, supplier and consumer relationships, governance and culture.</p> <p>ESG analysis can shed light on the contribution of intangible factors to the value of a corporation.</p> <p>Many large investment and research houses have concluded that intangible factors now far outweigh the contribution of tangible factors to corporate value.</p> <p>This trend is a direct result of the shift in corporate focus toward investment in people and processes, in line with the demands of a globalised and increasingly services-oriented economy.</p> <p>This changing landscape has serious implications for the way in which companies are valued and the type of information which is used to inform those valuations.</p>
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Source: PRI

Appendix 6: International relevant ESG regulations

Year	ESG Regulations
1989	Montreal Protocol on Substances that Deplete the Ozone Layer (Worldwide) Environmental Issue
1990	Amendments to Clean Air Act lead to world's first emissions trading scheme (USA) Environmental Issue
2000	Grain to Green programme (China) Environmental Issue
2002	Sarbanes–Oxley Act (USA) Governance Issue
2005	European Union Emission Trading Scheme (EU) Environmental Issue
2006	RoHS (Restriction of Hazardous Substances) – (EU) Environmental Issue
2008	Amendment to the Danish Financial Statements Act Mandatory ESG disclosure for companies and investors. Information must include: <ul style="list-style-type: none"> • Policies on corporate social responsibility • Implementation methods • An evaluation of what has been achieved through corporate social responsibility, in the last financial year, and what is expected for the future.
2009	Action Plan for Rescue and Rehabilitation of Child Labour (India)

2011	<p>Societal Issue</p> <p>South Africa: Reg 28 of the Pension Funds Act</p> <p>Integration of ESG considerations to fiduciary duty</p> <p>Broad responsible investment issue</p> <p>Australia: ‘Two-strikes rule’</p> <p>Since 2005, shareowners have had a non-binding vote on executive compensation at Australian-listed companies. However, in 2011, Australian shareowners received a rather potent weapon in their say-on-pay votes: the ‘two-strikes’ rule. Under the rule, if 25% of shareholders vote against a company’s remuneration report at two consecutive annual general meetings, the entire board may have to stand for re-election within three months. Key management personnel, and parties related to them, are not permitted to vote in the original vote on executive pay but may vote concerning board elections. Therefore, it is possible that shareowners may ‘spill’ a board with a second-strike vote only to have that board reappointed by insiders.</p> <p>Governance issue</p>
2012	<p>Government and stock exchanges of over 30 countries now require corporate sustainability reporting (mandatory or voluntary)</p> <p>Governance Issue</p>
2014	<p>Non-Financial Reporting in Europe</p> <p>Companies concerned will need to disclose information on policies, risks and outcomes as regards environmental matters, social and employee-related aspects, respect for human rights, anti-corruption and bribery issues, and diversity in their board of directors.</p> <p>Environmental, Social and Governance Issue</p> <p>Switzerland: Decree of board remuneration</p> <p>Voting on annual shareholder meetings on remuneration of members of the board of administration, advisory board, and management board.</p> <p>Governance issue</p>

Source: PRI

Appendix 7: Responsible investment-related legislation and soft law initiatives in Brazil

Year	Institution	Title	Classification	Observation
2016	AMEC	AMEC Stewardship Code	Stewardship Code, Voluntary ESG	The AMEC Stewardship Code aims to develop a stewardship culture in Brazil and create responsible engagement standards. It consists of 7 recommendations including implementing and disclosing a stewardship program, taking ESG factors into consideration for the investment process, exercising voting rights, establishing collective engagement initiatives and reporting on engagement efforts.
2012	BM&FBOVESPA	Listing Rule A	Non-Government Imposed Corporate Disclosure, ESG Comply or Explain	As of 2012, BM&FBOVESPA requires listed companies to disclose whether they publish a regular sustainability or integrated report, and if not, explain why.

1995, updated 2004, 2009 and 2016	Brazilian Institute of Corporate Governance (IBGC)	Code of Best Practice of Corporate Governance (5th edition)	Novo Valor Corporate Sustainability	Non-Government Imposed Corporate ESG Disclosure, Voluntary	The BM&FBOVESPA corporate sustainability guidance for issuers.
2009, updated 2014	Brazilian Securities Commission (CVM)	Instrução Normativa 480/2009		Government Imposed Corporate Environmental Disclosure, Mandatory	Under item 2: Decision-Making, the code notes that any ethical decision should include consideration of the impacts to society and the environment, with the aim to promote societal good. Its Basic Principles of Corporate Governance, include Corporate Responsibility noting the aim to reduce negative externalities with respect to social, human and environmental capital in the short, medium and long-term. Items 7 and 10 of Annex 24 require listed corporation to include the following environmental sustainability information in their annual reports: environmental policies, costs for compliance with environmental regulations and international standards, and whether the information is reviewed by a third party.
2012	CETESB	Decisão de Diretoria 254/2012/V /I		Government Imposed Corporate Environmental Disclosure, Mandatory for certain companies	CETESB, the main environmental regulator in São Paulo requires companies in highly polluting industries (particularly manufacturing and energy) to report scope 1 and 2 GHG emissions.
2009	Issued by: National Monetary Council (Conselho Monetário Nacional – CMN) Supervised by: Superintendency of Private Pension Funds (Superintendência Nacional de Previdência Complementar – PREVIC)	Resolution Nr. 3,792/2009		Pension Fund ESG Regulation, Mandatory	Article 16, § 3rd., VIII requires pension funds to disclose in their investment policies if Social and Environmental Responsibility is factored into investment policies.

2014	National Monetary Council (Conselho Monetário Nacional – CMN)/Central Bank of Brazil	Resolution Nr. 4,327/2014	Other	This resolution set forth guidelines for the adoption of Social and Environmental Responsibility Policies by financial institutions and other entities authorized to operate by the Central Bank of Brazil. It requires financial institutions to maintain an adequate governance structure for the management of social and environmental risks.
2012	Orientation Committee for Information Disclosure to the Market (CODIM)	Pronouncement no. 13 and 14, 2012	Non-Government Imposed Corporate ESG, Voluntary	This resolution set forth guidelines for the adoption of Social and Environmental Responsibility Policies by financial institutions and other entities authorized to operate by the Central Bank of Brazil. It requires financial institutions to maintain an adequate governance structure for the management of social and environmental risks.
2016	The Brazilian National Association of Pension Funds (ABRAPP)	Self-Regulation Code of Investment Governance	Pension Fund ESG Regulation, Voluntary	The Self-Regulation Code was developed over two years by ABRAPP, Sindapp and ICSS with input from PREVIC and aims to address recent developments in pension funds' investment management, support existing legislation, and promote the sustainable development of the pension system. One of the obligations of the code is to consider environmental & social issues in manager selection & monitoring.

Source: PRI. Available at <https://www.unpri.org/page/responsible-investment-regulation>

Appendix 8: International ESG commitments and initiatives

International commitments and initiatives	Description
UN Global Compact	<p>The UN Global Compact is a policy initiative that encourages businesses to align their operations and strategies with ten principles in the areas of human rights, labour, the environment and corruption. Environmental commitments include stipulations that businesses should:</p> <p>Principle 7: Support a precautionary approach to environmental challenges;</p> <p>Principle 8: Undertake initiatives to promote greater environmental responsibility; and</p> <p>Principle 9: Encourage the development and diffusion of environmentally friendly technologies.</p>

International Corporation	Finance	<p>The International Finance Corporation encourages sustainable economic growth in developing countries through finance, capital and advisory initiatives. The IFC's Performance Standards on Social and Environmental Sustainability include the following environmental commitments:</p> <p>Performance Standard 1: Social and environmental assessment and management systems;</p> <p>Performance Standard 3: Pollution prevention and abatement; and</p> <p>Performance Standard 6: Biodiversity conservation and sustainable natural resource management.</p>
Equator Principles		<p>The Equator Principles are a set of voluntary standards for determining, assessing and managing the social and environmental risk in project financing. Environmental commitments include:</p> <p>Principle 1: Environmental review and due diligence;</p> <p>Principle 2: Social and environmental assessment; and</p> <p>Principle 3: Applicable social and environmental standards.</p>
Sustainable Goals	Development	<p>The sustainable development goals (SDGs) are a universal set of goals, targets and indicators that UN member states are expected to use to frame their agendas and political policies over the 15 years beyond 2015. They consist of 17 goals that aim to transform the world by 2030. The goals fall under the following headings: Dignity, People, Planet, Partnership, Justice and Prosperity. The goals that specifically relate to protecting the planet are:</p> <ul style="list-style-type: none"> • Ensure availability and sustainable management of water and sanitation for all; • Ensure access to affordable, reliable, sustainable and modern energy for all; • Ensure sustainable consumption and production patterns • Take urgent action to combat climate change and its impacts; • Conserve and sustainably use the oceans, seas and marine resources for sustainable development; • Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, • combat desertification, and halt and reverse land degradation and halt biodiversity loss
UN Environment Programme		<p>The SDGs follow, and expand on the millennium development goals (MDGs), which were agreed by governments in 2000, and which expire in 2015.</p> <p>UNEP was established in 1972 and is the voice for the environment within the United Nations system.</p> <p>UNEP hosts several environmental convention secretariats including the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the Convention on Biological Diversity, the Basel Convention on the Transboundary Movement of Hazardous Wastes and the Stockholm Convention on Persistent Organic Pollutants (POPs).</p>
UNFCCC		<p>The United Nations Framework Convention on Climate Change is an international environmental treaty that emerged from the 'Earth Summit' held in Rio de Janeiro in 1992. The objective of the treaty is to</p>

stabilise greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The treaty entered into force in 1994 and currently has 196 supporting parties.

The parties to the convention meet annually and have been doing so since 1995. The annual event is Named the Conferences of the Parties (COP). The main objective is to assess progress in dealing with climate change. In 1997, at COP3, the Kyoto Protocol was formalised, establishing legally binding obligations for developed countries to reduce their greenhouse gas emissions. As well as the Kyoto Protocol, parties to the Convention have agreed to further commitments, including the Bali Action Plan (2007), the Copenhagen Accord (2009), the Cancún agreements (2010), the Durban Platform for Enhanced Action (2012) and the Lima Accord (2014).

Source: PRI

Appendix 9: Advantages and Disadvantages of different ESG data sources

Sources	Advantages	Disadvantges
Sell-side research	<ul style="list-style-type: none"> • Paid for through the broker commission process. • Familiar to analysts/fund managers. • Increasing coverage of ESG issues. • Relevant to investors' interests. • Breadth of coverage. 	<ul style="list-style-type: none"> • Can be overly focused on short-term drivers of investment value. • Many still do not explicitly considering ESG issues.
Internal research (from the responsible investment team)	<ul style="list-style-type: none"> • Proprietary. • Can be tailored to the specific needs of analysts and investment managers. • Can be more robust because of dedicated resource and frequently good access to companies. • Timeliness. 	<ul style="list-style-type: none"> • May not have required breadth of coverage (i.e. may need to be supplemented by other research sources). • (in particular in early stages) May not be credible with analysts and fund managers.
ESG Rating Agencies	<ul style="list-style-type: none"> • Breadth of coverage. • Frequently modest cost (relative to the universe of companies covered). 	<ul style="list-style-type: none"> • May not be relevant to ESG integration (as frequently developed for use in screened funds) • Data quality tends to be mixed. • May not be seen as credible by investment professionals (who may be more comfortable with sell-side research). • May be difficult to tailor to specific investment needs.

Source: PRI

Appendix 10: Advantages and disadvantages of different responsible for ESG integration

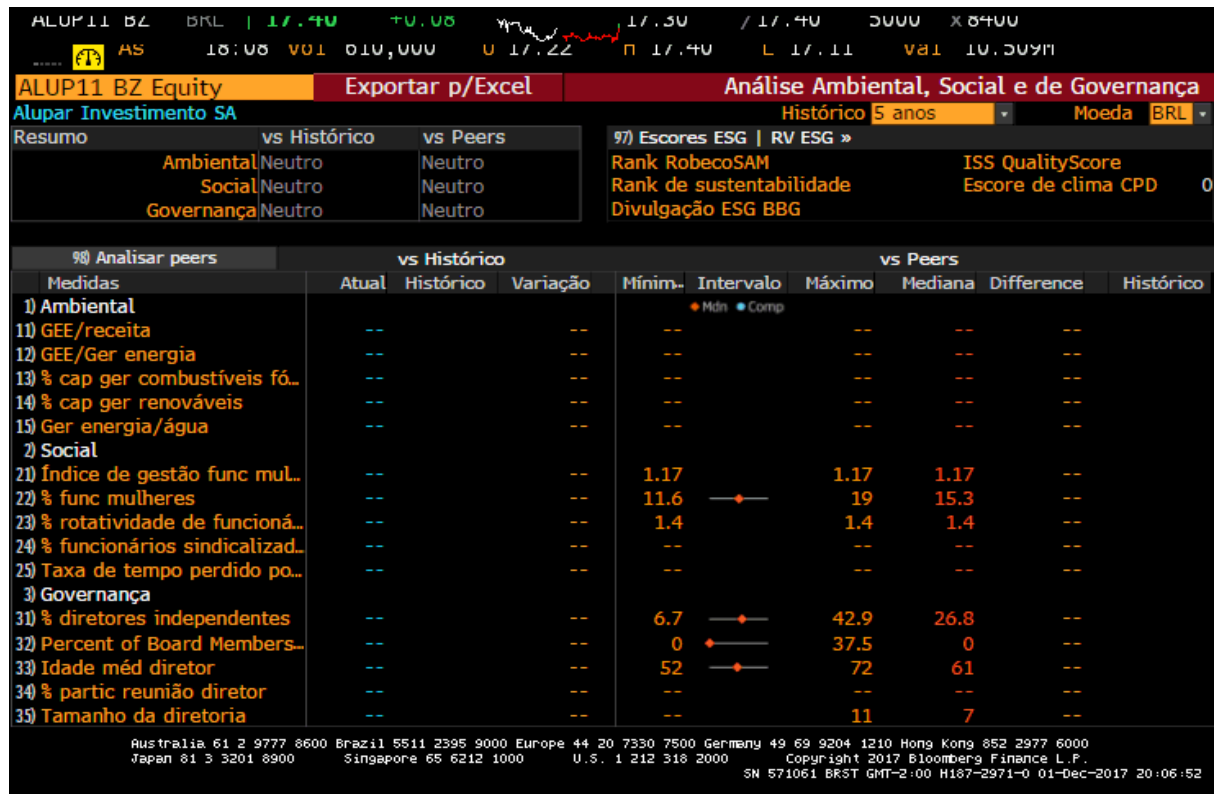
Responsible	Advantages	Disadvantges
Integrated investment teams	<ul style="list-style-type: none"> • ESG factors are included within the portfolio manager's research, alongside other material investment risks and opportunities. 	<ul style="list-style-type: none"> • Portfolio managers may not have time to conduct comprehensive ESG research.

Dedicated ESG team and investment teams	<ul style="list-style-type: none"> ESG issues are included in discussions, alongside other material investment risks and opportunities. Engagement activities on ESG issues will include portfolio managers. 	<ul style="list-style-type: none"> Portfolio managers may not be sufficiently familiar with ESG issues and trends to identify material ones. Portfolio managers may not have time to engage with companies on ESG factors.
	<ul style="list-style-type: none"> Investment manager will have employees who advocate ESG integration. Comprehensive ESG research conducted on all investments in the investible universe and portfolio. ESG team can liaise with equity analysts for a more holistic approach to ESG analysis. Engagement activities on ESG issues will be performed. 	<ul style="list-style-type: none"> ESG team may not have buy-in from the portfolio managers. Portfolio managers may not read the ESG analysis performed by the ESG team. The ESG research may not be in a form that the portfolio manager can integrate into valuation models. Portfolio managers may not be aware of the engagement activities being carried out by the ESG team.

Source: PRI

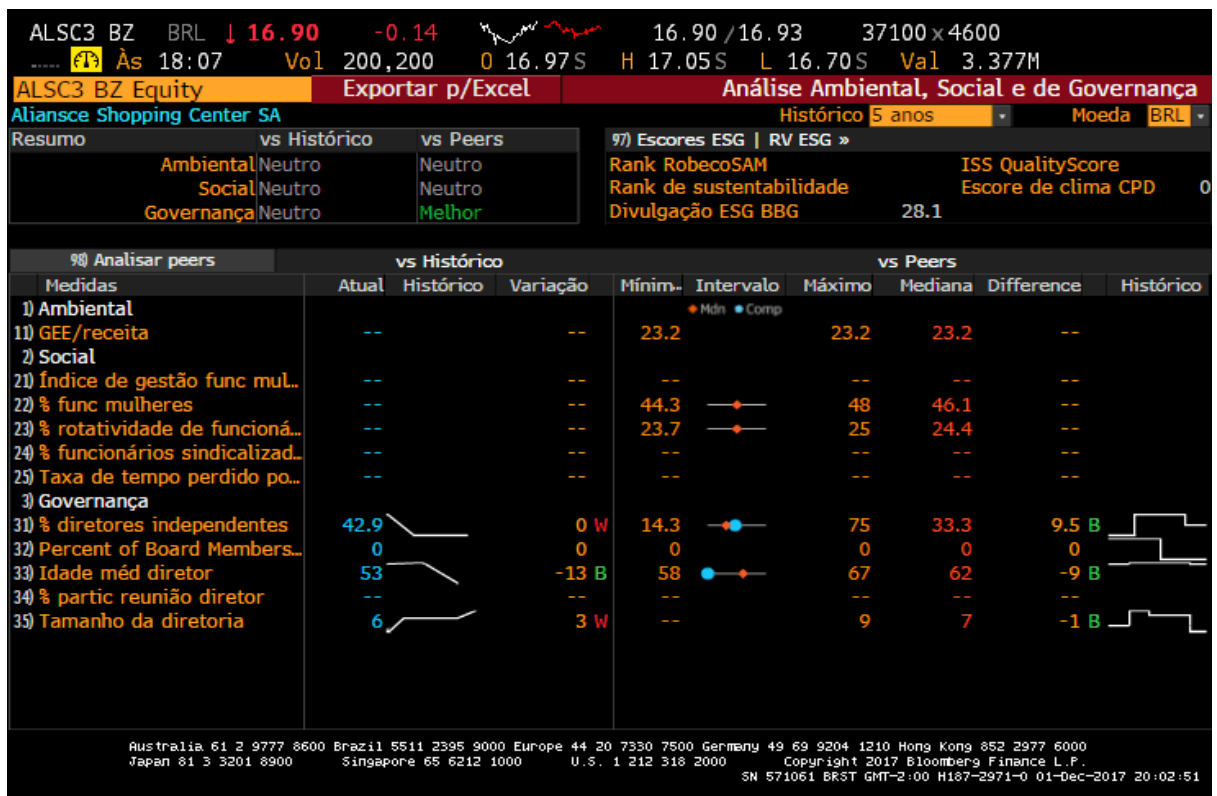
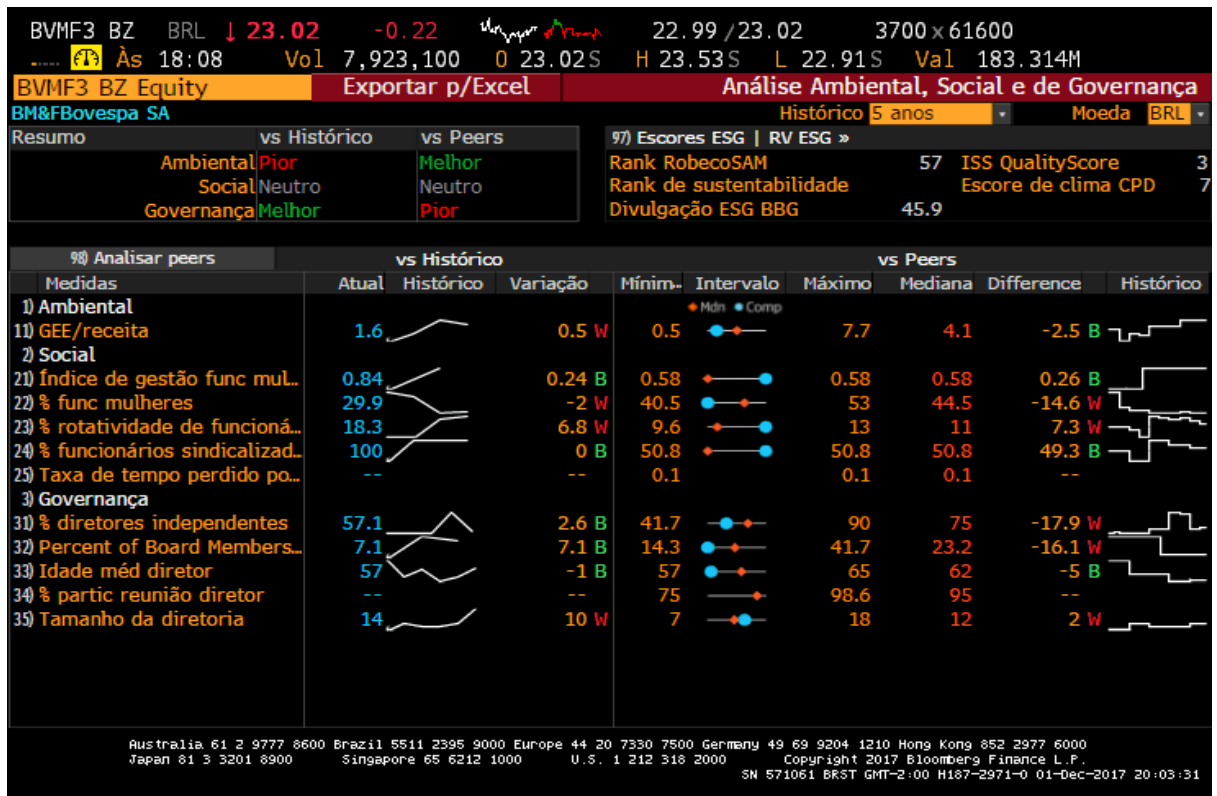
Appendix 11: ESG Data for target companies

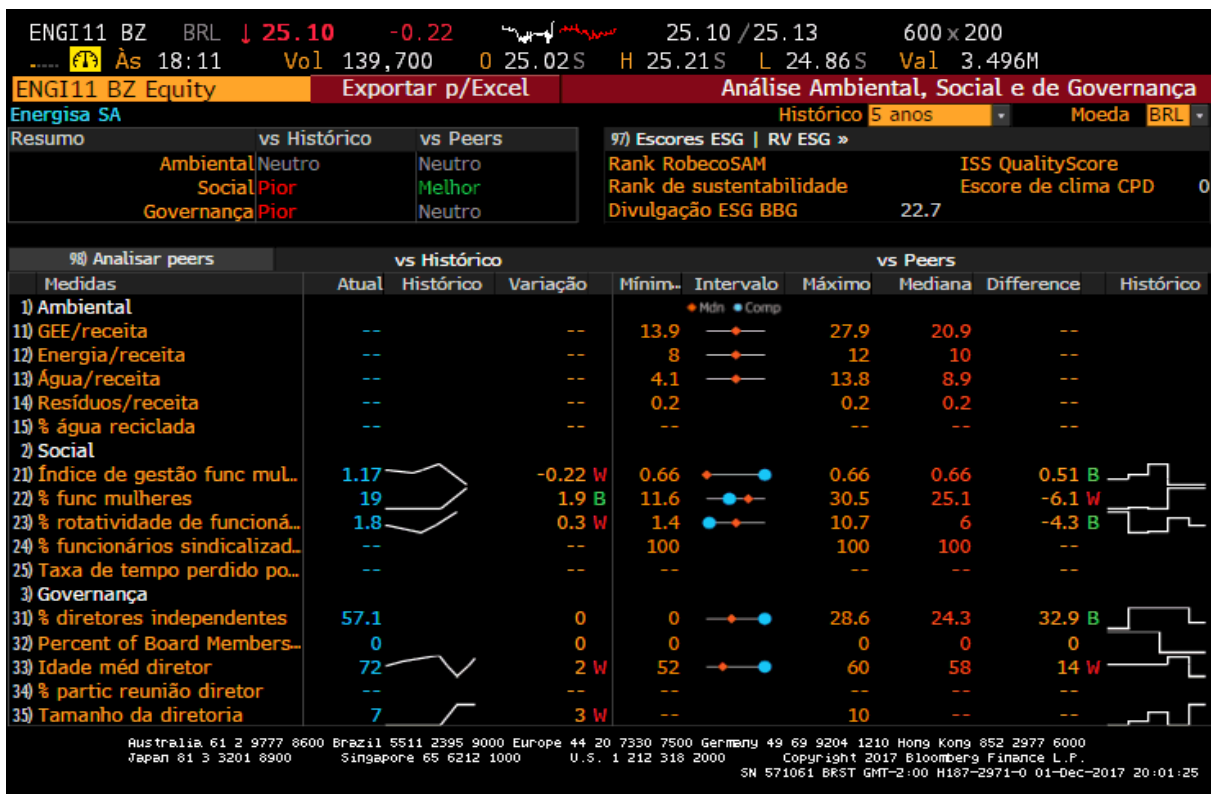
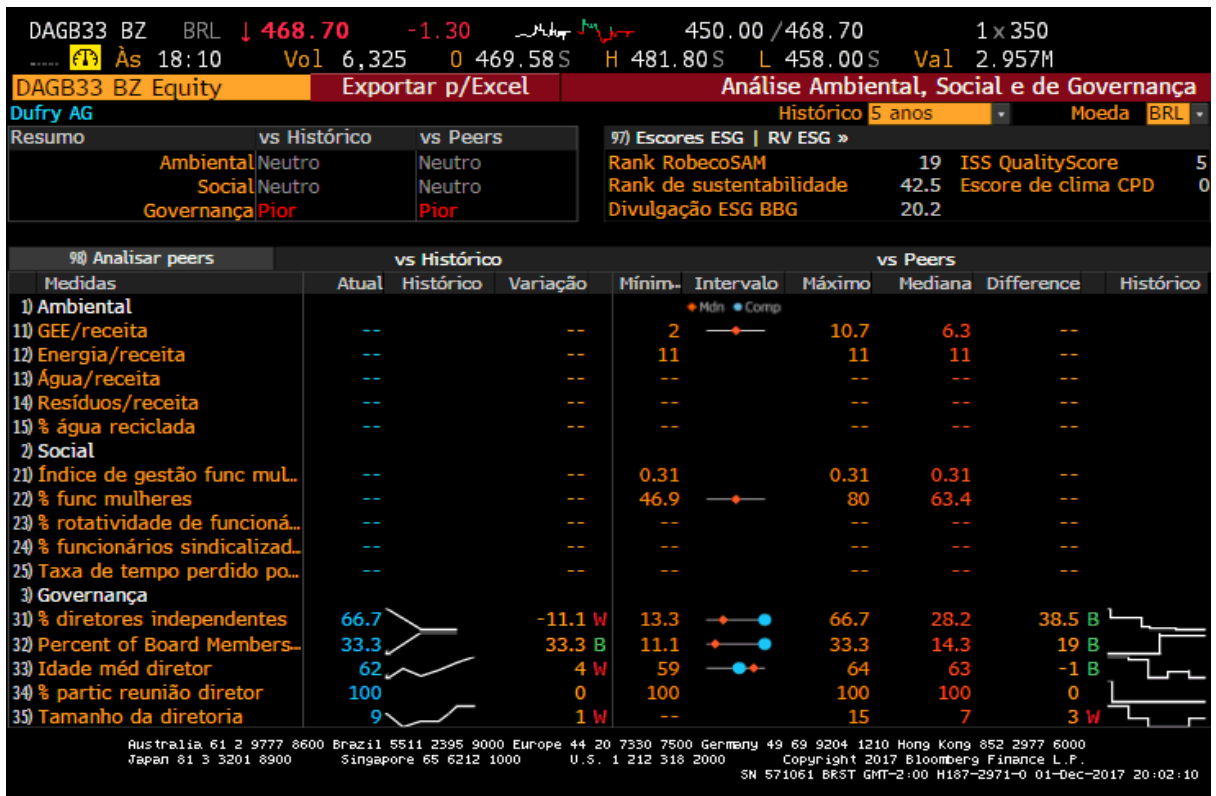
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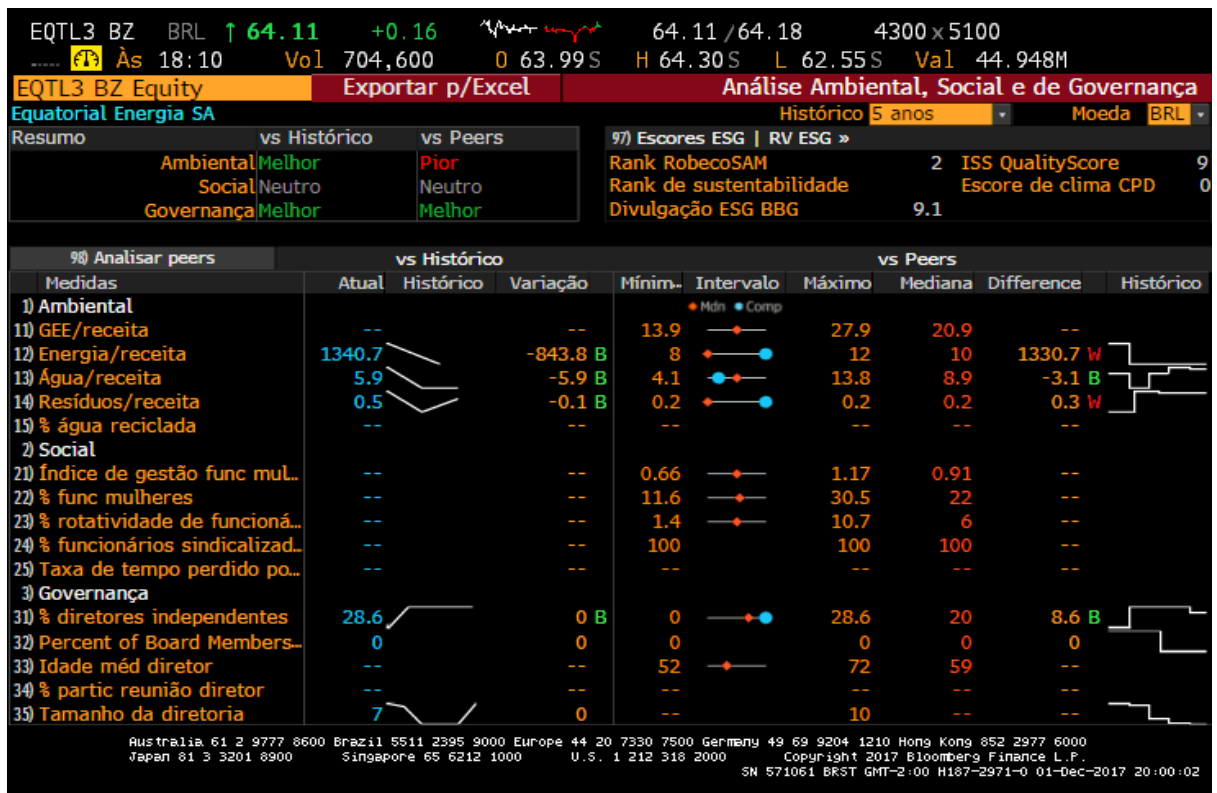
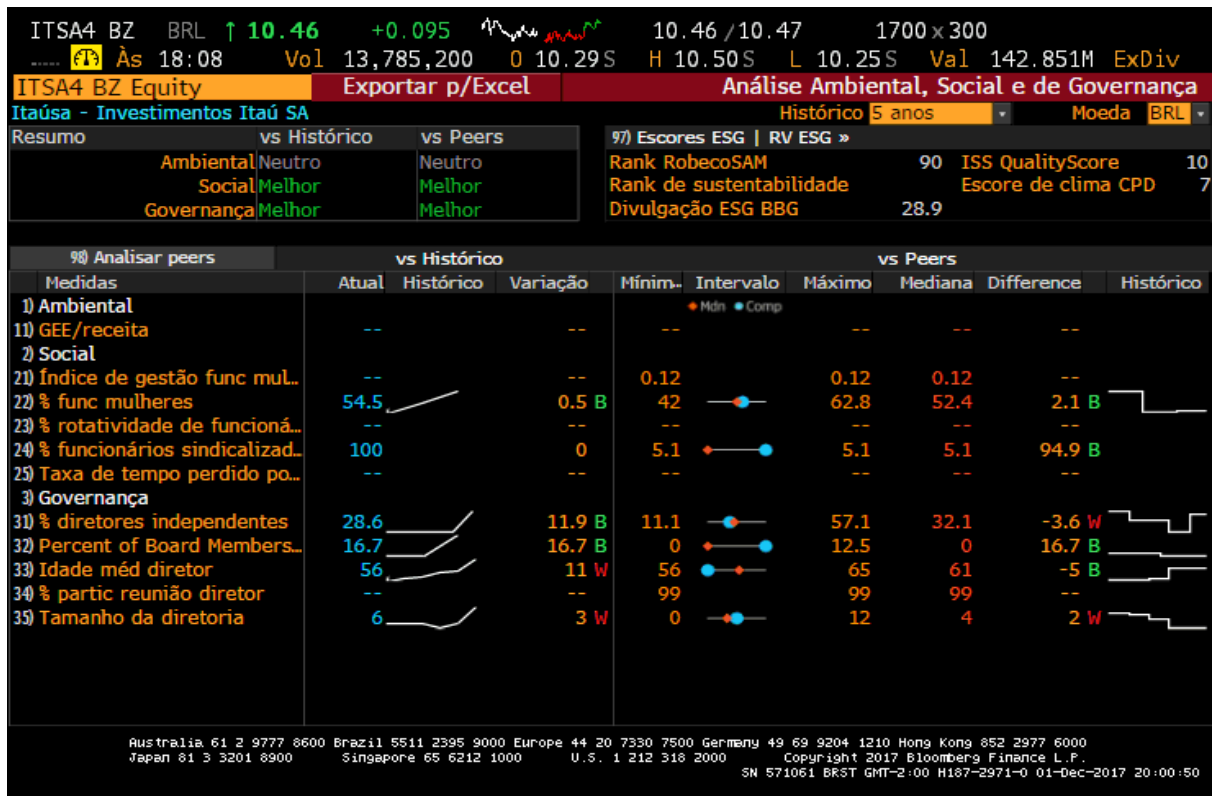


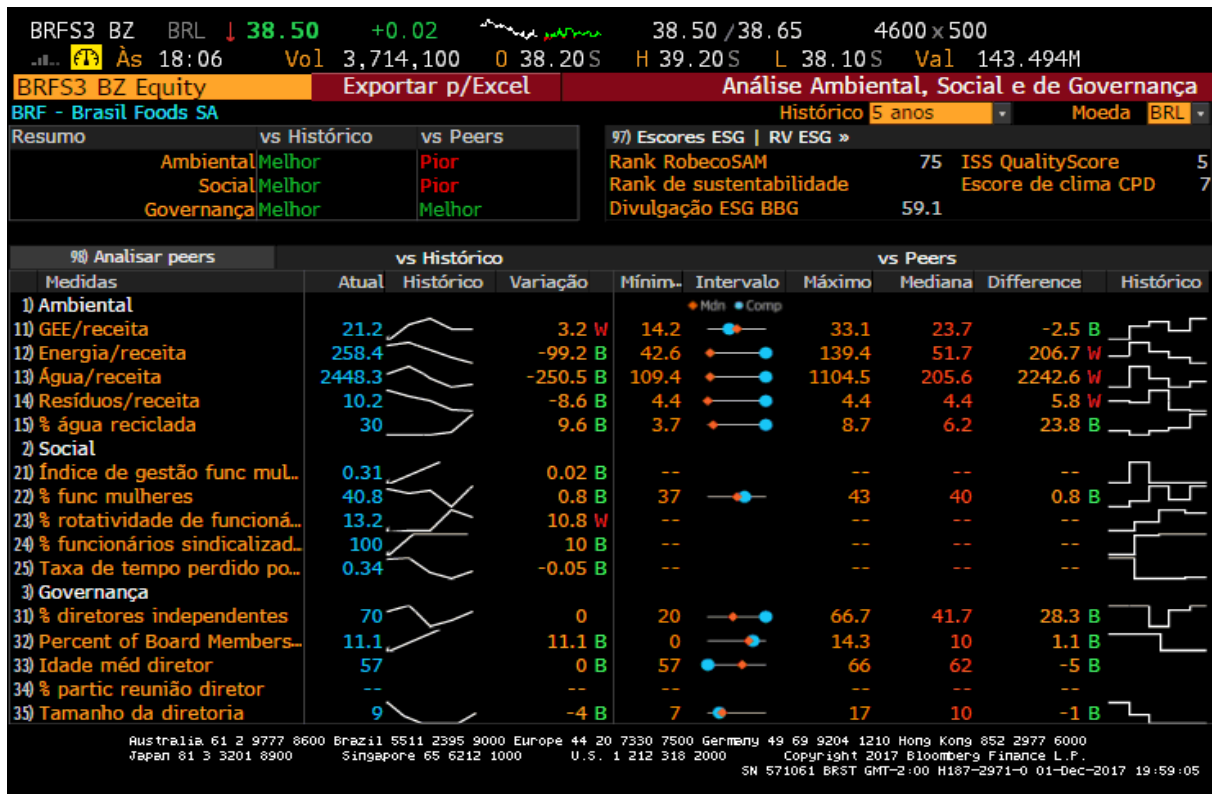
CVCB3 BZ	BRL	↓ 44.72	-0.25		44.72 / 44.80	2500 x 23700			
...	Às 18:07	Vol 534,900	0 44.97S	H 45.08S	L 44.31S	Val 23.897M			
CVCB3 BZ Equity		Exportar p/Excel		Análise Ambiental, Social e de Governança					
CVC Brasil Operadora e Agencia de Vi...				Histórico 5 anos		Moeda BRL			
Resumo		vs Histórico	vs Peers	97) Escores ESG RV ESG »					
Ambiental		Neutro	Neutro	Rank RobecoSAM		ISS QualityScore			
Social		Neutro	Neutro	Rank de sustentabilidade		Escore de clima CPD			
Governança		Neutro	Neutro	Divulgação ESG BBG					
98) Analisar peers		vs Histórico			vs Peers				
Medidas	Atual	Histórico	Varição	Mínim.	Intervalo	Máximo	Mediana	Difference	Histórico
1) Ambiental									
11) GEE/receita	--	--	--	--	--	--	--	--	--
12) Energia/receita	--	--	--	--	--	--	--	--	--
13) Água/receita	--	--	--	--	--	--	--	--	--
14) Resíduos/receita	--	--	--	--	--	--	--	--	--
15) % água reciclada	--	--	--	--	--	--	--	--	--
2) Social									
21) Índice de gestão func mul...	--	--	--	0.67	0.67	0.67	0.67	--	--
22) % func mulheres	--	--	--	75	75	75	75	--	--
23) % rotatividade de funcioná...	--	--	--	--	--	--	--	--	--
24) % funcionários sindicalizad...	--	--	--	--	--	--	--	--	--
25) Taxa de tempo perdido po...	--	--	--	--	--	--	--	--	--
3) Governança									
31) % diretores independentes	--	--	--	75	75	75	75	--	--
32) Percent of Board Members...	--	--	--	0	25	12.5	12.5	--	--
33) Idade méd diretor	--	--	--	58	66	62	62	--	--
34) % partic reunião diretor	--	--	--	98.3	98.3	98.3	98.3	--	--
35) Tamanho da diretoria	--	--	--	--	4	4	4	--	--
Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2017 Bloomberg Finance L.P. SN 571061 BRST GMT-2:00 H187-2971-0 01-Dec-2017 20:06:01									

CZLT33 BZ	BRL	↑ 30.20	-0.05		30.01 / 30.20	2100 x 13300			
...	Às 18:08	Vol 462,900	0 29.90S	H 30.28S	L 29.75S	Val 13.881M			
CZLT33 BZ Equity		Exportar p/Excel		Análise Ambiental, Social e de Governança					
Cosan Ltda.				Histórico 5 anos		Moeda BRL			
Resumo		vs Histórico	vs Peers	97) Escores ESG RV ESG »					
Ambiental		Neutro	Neutro	Rank RobecoSAM		0 ISS QualityScore			
Social		Neutro	Neutro	Rank de sustentabilidade		Escore de clima CPD			
Governança		Pior	Pior	Divulgação ESG BBG 7.9					
98) Analisar peers		vs Histórico			vs Peers				
Medidas	Atual	Histórico	Varição	Mínim.	Intervalo	Máximo	Mediana	Difference	Histórico
1) Ambiental									
11) GEE/receita	--	--	--	--	--	--	--	--	--
12) Energia/receita	--	--	--	6.5	6.5	6.5	6.5	--	--
13) Água/receita	--	--	--	68.4	68.4	68.4	68.4	--	--
14) Resíduos/receita	--	--	--	0.1	0.1	0.1	0.1	--	--
15) % água reciclada	--	--	--	--	--	--	--	--	--
2) Social									
21) Índice de gestão func mul...	--	--	--	--	--	--	--	--	--
22) % func mulheres	--	--	--	29	44.5	36.7	36.7	--	--
23) % rotatividade de funcioná...	--	--	--	10.8	10.8	10.8	10.8	--	--
24) % funcionários sindicalizad...	--	--	--	45	45	45	45	--	--
25) Taxa de tempo perdido po...	--	--	--	--	--	--	--	--	--
3) Governança									
31) % diretores independentes	36.4	--	-9.1 W	28.6	93.3	66.7	66.7	-30.3 W	--
32) Percent of Board Members...	0	--	0	0	5.9	0	0	0	--
33) Idade méd diretor	57	--	5 W	68	68	68	68	-10 B	--
34) % partic reunião diretor	--	--	--	--	--	--	--	--	--
35) Tamanho da diretoria	12	--	6 W	7	17	9	9	3 W	--
Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000 Japan 81 3 3201 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2017 Bloomberg Finance L.P. SN 571061 BRST GMT-2:00 H187-2971-0 01-Dec-2017 20:04:26									









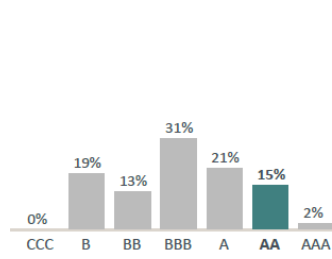
B) MSCI data

Strong ethics practices with effective employee programs

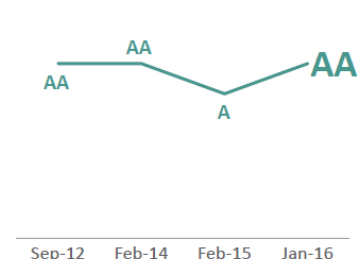
GOVERNANCE SNAPSHOT

Board Independence %	64.3%
Significant Votes Against Management	NO
Entrenched Board	NO
Pay Performance Gap	NO
Executive Pay Non-Disclosure	YES
Multiple Share Classes with Different Voting Rights	NO

INDUSTRY RATING DISTRIBUTION



ESG RATING HISTORY



ESG SCORE CARD*

	WEIGHT	SCORE	QUARTILE
Environment	5.0%	7.0	
Carbon Emissions	5.0%	7.0	••
Social	31.0%	3.3	
Human Capital Development	31.0%	3.3	•••
Governance	64.0%	6.4	
Corporate Governance	33.0%	6.1	•••
Corruption & Instability	31.0%	6.7	•••
Tax Transparency	0.0%	8.0	••
Overall Score			
Weighted-Average Key Issue Score		5.5	
Industry Relative Score		7.2	

RATING COMMENT

RATING DATE: February 27, 2017

BM&F Bovespa's rating is unchanged at 'AA'.

BM&F Bovespa has strong policies and programs in place to ensure adherence to code of conduct and company values across its business operations, including subsidiaries. BM&F Bovespa continues to exhibit strong human capital management programs, such as competitive remuneration system, mechanism to gauge morale of its employees and strong engagement with employees through comprehensive training programs. However, its major acquisition of Cetip in 2016 - Latin America's largest securities clearing house; for close to USD 3.3 billion, might aggravate company's talent management challenges.

Analysts: Kedar Deshpande, Abinash Mishra

KEY RISKS



Human Capital Development - Score 3.3

February 27, 2017

The company's concentration in lines of business that typically rely on highly skilled employees and recent M&A activity suggest high exposure to recruitment, retention and employee productivity challenges. Our analysis finds moderately strong mitigation capacity, leading to above average score for this key issue.

ISSUER COMMUNICATION

Company response last 12 months? **NO**

STRENGTHS



Corruption & Instability - Score 6.7

February 27, 2017

The company's business activities and the geographic distribution of its assets suggest high exposure to potential regulatory action or operational disruptions. Our analysis finds moderately strong mitigation capacity.





Corporate Governance - Score 6.1

February 27, 2017

BM&F Bovespa SA (BM&F Bovespa) does not disclose detailed information regarding its executives' remuneration practices. Although common to the Brazilian market, this practice does not provide shareholders with the opportunity to confirm if executives' remuneration is in line with companies' performance. For the appointment of its directors, BM&F Bovespa uses a slate system where directors can be nominated by both the Board and shareholders.

MOST RECENT CONTROVERSIES

There are no recent new controversies or updates to ongoing controversies for this company.

CEO	BOARD OF DIRECTORS			SHAREHOLDERS
Name Edimir Pinto Tenure 4 Years Total Realized Pay N/A Total Summary Pay N/A	13 Men on Board		1 Women on Board	
	0 Inside Directors	5 Outside related Directors	9 Outside Directors	Majority Shareholder Control (%) N/A Insider Holdings (%) N/A 5% Holdings 20.6% % Held by Largest Shareholder N/A

LARGEST 10 INDUSTRY PEERS (DIVERSIFIED FINANCIALS)

	CARBON EMISSIONS	HUMAN CAPITAL DEVELOPMENT	CORPORATE GOVERNANCE	CORRUPTION & INSTABILITY	RATING AND TREND
B3 S.A. - Brasil, Bolsa, Balcao	●●	●●●	●●●	●●●	AA ↔
FIRSTRAND LIMITED	●●●●	●●●●	●●●	N/A	AA ↑
Hong Kong Exchanges and Clearing Limited	●●●	●	●●●●	●●●●	A ↔
ORIX CORPORATION	●●●●	●●	●●	N/A	BBB ↔
S&P GLOBAL INC.	●●●●	●	●●●	●●●	BBB ↑
CME GROUP INC.	●●●	●●●	●●	●●●●	BBB ↔
Investor Aktiebolag	●	●●●	●●	N/A	BBB ↔
MOODY'S CORPORATION	●●●	●	●●●●	●●	BBB ↑
THOMSON REUTERS CORPORATION	●●●●	●	●●	●	BB ↔
BERKSHIRE HATHAWAY INC.	●●	●	●	N/A	BB ↑
INTERCONTINENTAL EXCHANGE, INC.	●●	●	●	●●●●	B ↔

QUARTILE KEY: ● Bottom Quartile ●●●● Top Quartile
RATING TREND KEY: ↔ maintain ↑ upgrade ↑↑ two or more notch upgrade ↓ downgrade ↓↓ two or more notch downgrade

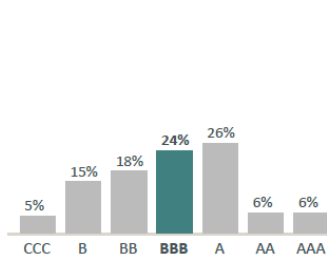
*The Weighted-Average Key Issue score is dynamic, reflecting changes in any underlying scores as of the Last Update date, while the Industry Relative Score is more static and corresponds to the Rating Date. Issues that we determine do not present material risks or opportunities to companies in a given industry receive 0% weight and do not impact the overall ESG rating.

Insufficient anti-corruption practices

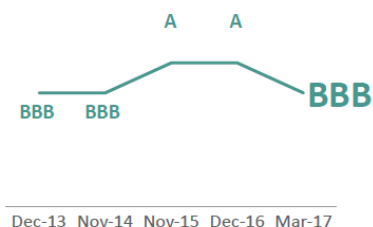
GOVERNANCE SNAPSHOT

Board Independence %	80.0%
Significant Votes Against Management	NO
Entrenched Board	NO
Pay Performance Gap	NO
Executive Pay Non-Disclosure	YES
Multiple Share Classes with Different Voting Rights	NO

INDUSTRY RATING DISTRIBUTION



ESG RATING HISTORY



ESG SCORE CARD*

	WEIGHT	SCORE	QUARTILE
Environment	35.0%	3.8	
Water Stress	13.0%	3.5	●●●
Product Carbon Footprint	11.0%	0.4	●
Raw Material Sourcing	11.0%	7.5	●●●●
Social	39.0%	4.3	
Product Safety & Quality	15.0%	1.5	●
Opportunities in Nutrition & Health	13.0%	5.7	●●●
Health & Safety	11.0%	6.4	●●●●
Governance	26.0%	4.3	
Corporate Governance	15.0%	4.9	●●●
Corruption & Instability	11.0%	3.5	●●●●
Tax Transparency	0.0%	2.0	●
Overall Score			
Weighted-Average Key Issue Score		4.1	
Industry Relative Score		4.7	

RATING COMMENT

RATING DATE: March 27, 2017

BRF has been downgraded to 'BBB' from 'A'. While BRF's has robust quality assurance processes in place, its anti-corruption measures are still ineffective to mitigate the risk from operating in a country where unethical business practices are pervasive.

BRF is under investigation by Brazilian Federal authorities due to alleged food safety and corruption issues. Despite the uncertainty around the corruption case implications, its exports have come to a virtual halt. BRF enhanced in 2015 its measures to assure business ethics with the creation of a compliance department. However, this initiative continues to evolve and lacks actual enforcement measures, which suggests that the possibility of BRF involvement in future high-profile scandals cannot be ruled out. The company, however, continues registering a robust performance on its H&S programs, on the traceability of palm oil and bovine products, and on the nutritional profile of its products.

KEY RISKS



Product Carbon Footprint - Score 0.4

March 27, 2017

BRF faces high risks of experiencing increased input or distribution costs resulting from rising energy prices because its product portfolio consists mostly of meat products, which has a high carbon footprint. While the company recognizes these risks, it still provides evidence of limited initiatives to reduce the carbon footprint of its products throughout the value chain.



Product Safety & Quality - Score 1.5 (Change ▼ -0.2)

May 31, 2017

The current scandal from the "Weak Meat" investigation from Brazilian federal Authorities is unlikely attributed to a lapse of BRF's quality assurance systems, but rather, a deliberate intent to disguise and sell inedible meat, which points to unethical business practices and potential corruption concerns at a higher level. We note, however, that the materialization of this high risk is tied to uncertainty around the corruption case implications.



Corruption & Instability - Score 3.5 (Change ▼ -1.0)

October 24, 2017

Despite the uncertainty around the corruption case implications, the 'weak meat' investigation has already resulted in its executives being investigated and its exports coming to a virtual halt. While the company created its Compliance Department in 2015 to avoid this type of incidents, without sufficient internal enforcement systems, as the current status quo seems to be, it is unlikely that similar incidents do not occur in the future.

ISSUER COMMUNICATION

Company response last 12 months? **NO**

STRENGTHS

No areas of substantial strengths in managing material risks or capitalizing on growth opportunities are identified for this company.

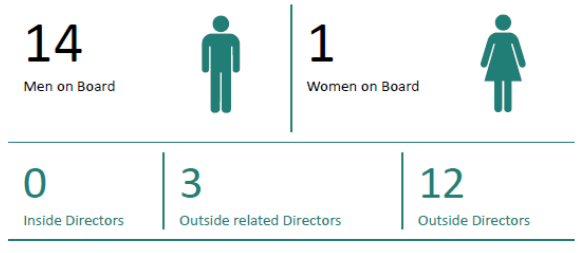
MOST RECENT CONTROVERSIES

HEADLINE	ASSESSMENT	TYPE	DATE
China: Government Investigation over Anti-Dumping Allegations Concerning Broiler Chicken Products	Moderate	Anticompetitive Practices	August 2017
Brazil: Raid of Meat Facilities Due to Unsanitary Practices and Related Bribery	Severe	Product Safety & Quality	March 2017
Brazil: Bribery of Health Inspectors to Allow Tainted Meat in the Market	Moderate	Bribery & Fraud	March 2017

CEO

Name	Pedro de Andrade Faria
Tenure	2 Years
Total Realized Pay	N/A
Total Summary Pay	N/A

BOARD OF DIRECTORS



SHAREHOLDERS

Majority Shareholder Control (%)	N/A
Insider Holdings (%)	4.6%
5% Holdings	33.9%
% Held by Largest Shareholder	N/A

LARGEST 10 INDUSTRY PEERS (FOOD PRODUCTS)

	WATER STRESS	PRODUCT CARBON FOOTPRINT	RAW MATERIAL SOURCING	PRODUCT SAFETY & QUALITY	OPPORTUNITIES IN NUTRITION & HEALTH	HEALTH & SAFETY	CORPORATE GOVERNANCE	CORRUPTION & INSTABILITY	RATING AND TREND
DANONE S.A.	●●●●	●●●●	●●●●	●●●	●●●●	●●●●	●●●●	N/A	AAA ↔
KELLOGG COMPANY	●●●●	●●●●	●●●●	●●	●●●●	●●●●	●●●	N/A	AAA ↔
GENERAL MILLS, INC.	●●●●	●●●●	●●●●	●	●●●●	●●●●	●●●●	N/A	AA ↔
Nestle S.A.	●●●●	●●●●	●●●	●	●●●●	●●●	●●●●	N/A	A ↔
ASSOCIATED BRITISH FOODS PLC	●●	●●●●	●●●	●	●●	●●●●	●●●●	N/A	A ↔
Mondelez International, Inc.	●●●●	●●●●	●	●	●●●	●●●	●	N/A	A ↔
ARCHER-DANIELS-MIDLAND COMPANY	●●	N/A	N/A	N/A	N/A	●●	●●	N/A	A ↓
THE HERSHEY COMPANY	●●●●	●●	●●	●●●	●●	●●●	●	N/A	BBB ↔
BRF S.A.	●●●	●	●●●●	●	●●●	●●●●	●●●	●●●●	BBB ↓
THE KRAFT HEINZ COMPANY	●	●●●●	●●●●	●	●●●●	●●	●	N/A	BBB ↔
TYSON FOODS, INC.	●●●	●●	●	●	●●	●●	●●	N/A	B ↔

QUARTILE KEY: ● Bottom Quartile ●●●● Top Quartile

RATING TREND KEY: ↔ maintain ↑ upgrade ↑↑ two or more notch upgrade ↓ downgrade ↓↓ two or more notch downgrade

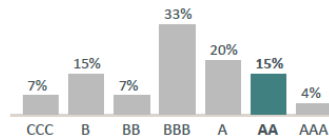
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Biofuels involvement and focus on sustainable supply support the rating

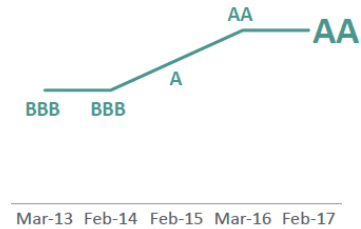
GOVERNANCE SNAPSHOT

Board Independence %	28.6%
Significant Votes Against Management	NO
Entrenched Board	NO
Pay Performance Gap	NO
Executive Pay Non-Disclosure	YES
Multiple Share Classes with Different Voting Rights	NO

INDUSTRY RATING DISTRIBUTION



ESG RATING HISTORY



ESG SCORE CARD*

	WEIGHT	SCORE	QUARTILE
Environment	61.0%	6.2	
Toxic Emissions & Waste	26.0%	4.9	●●●
Carbon Emissions	22.0%	8.5	●●●●
Opportunities in Clean Tech	13.0%	5.0	●●●
Social	22.0%	7.0	
Health & Safety	22.0%	7.0	●●●
Governance	17.0%	3.6	
Corporate Governance	17.0%	3.6	●
Tax Transparency	0.0%	3.0	●
Overall Score			
Weighted-Average Key Issue Score		5.9	
Industry Relative Score		7.2	

RATING COMMENT

RATING DATE: February 24, 2017

Cosan's rating is unchanged at 'AA'.

Cosan has become one of the biggest ethanol producers in the world through the production of sugarcane after it began producing second-generation ethanol from sugarcane by-products in 2014-2015. This strengthens the company's position in the niche biofuels market and lends it a first mover's advantage for cleaner transport fuels. Additionally, the company pursues diversification through its subsidiaries' involvement in biogas for electricity generation. Moreover, the number of fatalities at Raizen (the company's ethanol producing arm) has declined in 2015 in comparison to the high levels witnessed in previous years.

Analyst: Antonios Panagiotopoulos

KEY RISKS

No issues with substantially unmanaged material risks or untapped opportunities are identified for this company.

STRENGTHS



Health & Safety - Score 7.0

February 24, 2017

The company faces a moderate exposure to risks of workplace accidents that can lead to production disruptions, litigation, and liabilities in its sugar and ethanol production and fuel distribution operations. With modest employee health and safety management programs, but poor performance and past controversial practices, Cosan ranks averagely on safety compared to its peers.

ISSUER COMMUNICATION

Company response last 12 months? NO

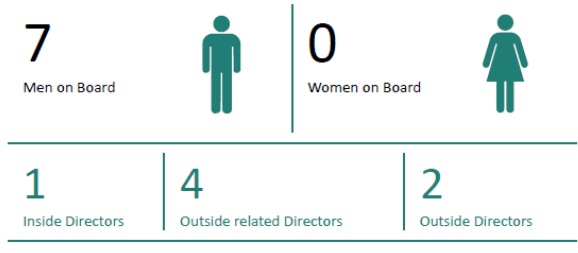
MOST RECENT CONTROVERSIES

There are no recent new controversies or updates to ongoing controversies for this company.

CEO

Name	Mario Augusto da Silva
Tenure	1 year
Total Realized Pay	N/A
Total Summary Pay	N/A

BOARD OF DIRECTORS



SHAREHOLDERS

Majority Shareholder Control (%)	61.9%
Insider Holdings (%)	N/A
5% Holdings	61.9%
% Held by Largest Shareholder	61.9%

LARGEST 10 INDUSTRY PEERS (OIL & GAS REFINING, MARKETING, TRANSPORTATION & STORAGE)

	TOXIC EMISSIONS & WASTE	CARBON EMISSIONS	OPPORTUNITIES IN CLEAN TECH	HEALTH & SAFETY	CORPORATE GOVERNANCE	RATING AND TREND
Cosan S.A. Industria e Comercio	●●●	●●●●	●●●	●●●	●	AA ↔
Enbridge Inc.	●●	●●●●	N/A	●●●	●●	A ↔
TransCanada Corporation	●●●●	●●●●	N/A	●●●	●●●	BBB ↓
PHILLIPS 66	●●	●●	●	●●●	●●●	BBB ↓
MARATHON PETROLEUM CORPORATION	●●	●●	●●	●●	●	BBB ↔
INDIAN OIL CORPN. LIMITED	●	●●●●	●●●	●	●●	BBB ↓
VALERO ENERGY CORPORATION	●	●	●●●●	●●●●	●●●●	BBB ↔
FORMOSA PETROCHEMICAL CORPORATION	●●●	●	●●	●●	●	B ↔
KINDER MORGAN, INC.	●●●	●●	N/A	●●	●●	B ↔
THE WILLIAMS COMPANIES, INC.	●	●	N/A	●	●●●●	B ↔
RELIANCE INDUSTRIES LIMITED	●	●●	●●●●	●	●	B ↔

QUARTILE KEY: ● Bottom Quartile ●●●● Top Quartile
RATING TREND KEY: ↔ maintain ↑ upgrade ↑↑ two or more notch upgrade ↓ downgrade ↓↓ two or more notch downgrade

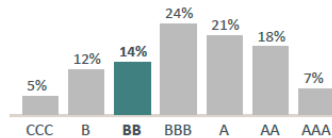
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Lacks noteworthy measures to manage operational impact on biodiversity

GOVERNANCE SNAPSHOT

Board Independence %	66.7%
Significant Votes Against Management	YES
Entrenched Board	NO
Pay Performance Gap	NO
Executive Pay Non-Disclosure	YES
Multiple Share Classes with Different Voting Rights	NO

INDUSTRY RATING DISTRIBUTION



ESG RATING HISTORY



ESG SCORE CARD*

	WEIGHT	SCORE	QUARTILE
Environment	69.0%	5.0	
Biodiversity & Land Use	16.0%	1.3	●
Carbon Emissions	16.0%	9.3	●●●
Toxic Emissions & Waste	16.0%	5.3	●●
Water Stress	13.0%	6.3	●●●
Opportunities in Renewable Energy	8.0%	1.1	●
Social	13.0%	3.2	
Human Capital Development	13.0%	3.2	●●
Governance	18.0%	5.2	
Corporate Governance	18.0%	5.2	●●
Tax Transparency	0.0%	5.0	●
Overall Score			
Weighted-Average Key Issue Score		4.8	
Industry Relative Score		3.9	

RATING COMMENT

RATING DATE: October 25, 2017

Equatorial Energia's rating is unchanged at 'BB'.

The company operates the CEMAR and CELPA electricity distribution entities in Maranhão (Brazil) and Pará (Brazil). The distribution operations have a relatively low environmental impact on carbon emissions and water, thereby enabling the company to achieve moderate performance in mitigating the risks. The company also has a stake (25%) in generation through Geramar, which has a joint installed capacity of 332 MW. Equatorial Energia however does not capitalize on renewable energy opportunities since its generation operations are coal driven. Further, the company shows a drop in board performance and executive pay practices.

Analyst: Pranav Patel

KEY RISKS



Biodiversity & Land Use - Score 1.3

October 25, 2017

Overall, Equatorial Energia has minimal policies and programs in place to manage these risks. We note that the company fails to articulate a policy that includes such key components as respect for human and indigenous rights, as well as minimizing disturbances from operations.



Human Capital Development - Score 3.2

October 25, 2017

Companies that have comprehensive compensation and benefits packages and provide formal employee engagement channels as well as broad-based professional development and training opportunities are best positioned to mitigate operational risks in this area. Equatorial Energia offers employee stock plans, which strongly link employees' interests to the success of the firm, to a limited number of employees. Equatorial Energia discloses little information regarding its human capital management practices. While lack of disclosure does not necessarily indicate lack of policies or programs, we are concerned about the company's lack of transparency regarding its management of this key resource.

ISSUER COMMUNICATION

Company response last 12 months? **NO**

STRENGTHS



Corporate Governance - Score 5.2 (Change ▲ 0.6)

November 24, 2017

EQUATORIAL ENERGIA falls into the average scoring range for all the companies we assess relative to global peers and reflects a relatively low level of governance risk in most areas.

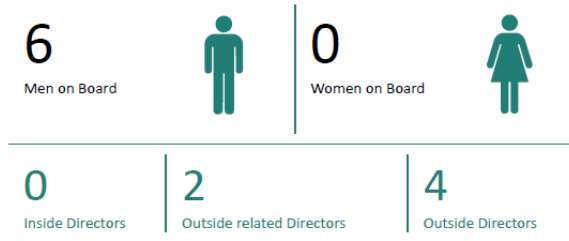
MOST RECENT CONTROVERSIES

There are no recent new controversies or updates to ongoing controversies for this company.

CEO

Name	Augusto Miranda da Paz
Tenure	2 Years
Total Realized Pay	N/A
Total Summary Pay	N/A

BOARD OF DIRECTORS



SHAREHOLDERS

Majority Shareholder Control (%)	N/A
Insider Holdings (%)	N/A
5% Holdings	30.6%
% Held by Largest Shareholder	N/A

LARGEST 10 INDUSTRY PEERS (UTILITIES)

	BIODIVERSITY & LAND USE	CARBON EMISSIONS	TOXIC EMISSIONS & WASTE	WATER STRESS	OPPORTUNITIES IN RENEWABLE ENERGY	HUMAN CAPITAL DEVELOPMENT	CORPORATE GOVERNANCE	RATING AND TREND
NEXTERA ENERGY, INC.	N/A	●●●	●●●	●●●●	●●●●	●●	●●	AAA ↔
NATIONAL GRID PLC	●●●●	●●●	●●●●	●●●●	●●●●	●●●	●●●●	AAA ↑
Iberdrola, S.A.	N/A	●●●	●●●●	●●●●	●●●●	●●●●	●●●●	AAA ↔
ENEL - SPA	●●●	●●●	●●	●●●●	●●●●	●	●●●	AA ↔
EXELON CORPORATION	●●●	●●●	●●●●	●●●	●●●●	●●●	●●	AA ↔
AMERICAN ELECTRIC POWER COMPANY, INC.	●●●	●●●	●	●●●●	●●	●●●	●●●●	A ↔
ENGIE S.A.	●●	●●	●	●●●	●●●●	●●●●	●●●●	A ↔
THE SOUTHERN COMPANY	N/A	●	●	●●●	●●●	●●●●	●●●	BBB ↔
DUKE ENERGY CORPORATION	N/A	●●●	●	●●	●●●	●●	●●	BBB ↑
DOMINION ENERGY, INC	●●●	●●	●	●●	●●●	●●	●●	BBB ↔
EQUATORIAL ENERGIA S.A.	●	●●●	●●	●●●	●	●●	●●	BB ↔

QUARTILE KEY: ● Bottom Quartile ●●●● Top Quartile

RATING TREND KEY: ↔ maintain ↑ upgrade ↑↑ two or more notch upgrade ↓ downgrade ↓↓ two or more notch downgrade

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Itaúsa - Investimentos Itaú S.A. (ITSA3)

BANKS | BR

ESG RATING

A

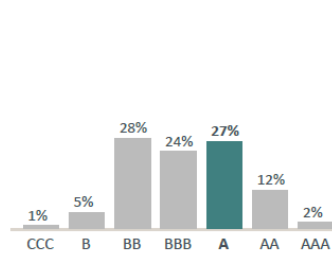
LAST UPDATE: November 22, 2017

Strong on environment & talent risks management, but concerns over ethics

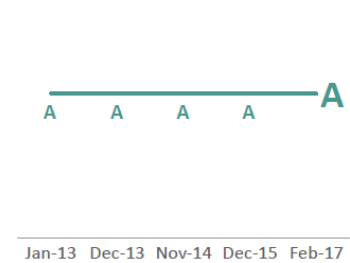
GOVERNANCE SNAPSHOT

Board Independence %	33.3%
Significant Votes Against Management	YES
Entrenched Board	NO
Pay Performance Gap	NO
Executive Pay Non-Disclosure	YES
Multiple Share Classes with Different Voting Rights	YES

INDUSTRY RATING DISTRIBUTION



ESG RATING HISTORY



ESG SCORE CARD*

	WEIGHT	SCORE	QUARTILE
Environment	8.0%	7.9	
Financing Environmental Impact	8.0%	7.9	●●●●
Social	58.0%	5.5	
Financial Product Safety	16.0%	5.8	●●
Human Capital Development	16.0%	5.3	●●●
Access to Finance	13.0%	5.3	●●●●
Privacy & Data Security	13.0%	5.5	●●●●
Governance	34.0%	4.2	
Corporate Governance	18.0%	4.5	●
Financial System Instability	16.0%	3.9	●
Tax Transparency	0.0%	3.0	●
Overall Score			
Weighted-Average Key Issue Score		5.2	
Industry Relative Score		7.1	

RATING COMMENT

RATING DATE: February 27, 2017

Itaúsa - Investimentos Itaú's rating is unchanged at 'A'.

Itaúsa's performance on environmental and social risks is driven by Itaú Unibanco Holdings in which it holds a controlling stake. Itaú's strengths in environmental risk due diligence, human capital management, data protection policy and access to finance buoy the bank's rating. On governance, Itaúsa upholds one share one vote capital structure, which helps align economic and voting power across different classes of shareholders. However, concerns remain over the Itaú's increased exposure to high social risk loans (payroll) and the high profile investigations in which Itaú continues to be involved. These investigations relate to corruption, bribery and money laundering.

Analysts: Kedar Deshpande, Achin Bhati

KEY RISKS



Financial System Instability - Score 3.9

February 27, 2017

Itaú protects shareholder interests through business ethics programs. Specific provisions include guidance to avoid corruption with mandatory training. However, it is of concern that these programs did not exclude it from high profile investigations, including those related to Operation Zealot (bribing tax authorities), Grupo Schahin (money laundering) and Petrobras (corruption).

STRENGTHS

No areas of substantial strengths in managing material risks or capitalizing on growth opportunities are identified for this company.

ISSUER COMMUNICATION

Company response last 12 months? **NO**

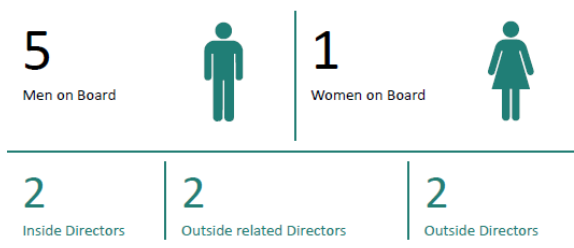
MOST RECENT CONTROVERSIES

HEADLINE	ASSESSMENT	TYPE	DATE
Brazil: Operation Zealot Investigation over Alleged Corruption Scheme	Moderate	Bribery & Fraud	April 2017

CEO

Name	Alfredo Egydio Setubal
Tenure	2 Years
Total Realized Pay	N/A
Total Summary Pay	N/A

BOARD OF DIRECTORS



SHAREHOLDERS

Majority Shareholder Control (%)	62.0%
Insider Holdings (%)	N/A
5% Holdings	62.0%
% Held by Largest Shareholder	62.0%


LARGEST 10 INDUSTRY PEERS (BANKS)

	FINANCING ENVIRONMENTAL IMPACT	FINANCIAL PRODUCT SAFETY	HUMAN CAPITAL DEVELOPMENT	ACCESS TO FINANCE	PRIVACY & DATA SECURITY	CORPORATE GOVERNANCE	FINANCIAL SYSTEM INSTABILITY	RATING AND TREND
Itausa - Investimentos Itau S.A.	●●●●	●●	●●●	●●●●	●●●●	●	●	A ↔
BANQUE ROYALE DU CANADA	●●●●	●●●	●●●●	●●	●●●●	●●●	●	A ↔
CITIGROUP INC.	●●●●	●	●	●●●	●●●●	●●●	●	BBB ↑
HSBC HOLDINGS PLC	●●●●	●	●●●	●●●	●●●●	●●●	●	BB ↑
China Construction Bank Corp (Wuxi Branch)	●●●●	●	●●●●	●●●●	●	●●●	●	BB ↔
JPMORGAN CHASE & CO.	●●●●	●	●●●●	●●●	●●	●●	●	BB ↔
BANK OF AMERICA CORPORATION	●●●●	●	●●●	●●●	●●●	●	●	BB ↑
INDUSTRIAL AND COMMERCIAL BANK OF CHINA LIMITED	●●●	●	●●●	●●●●	●●●	●●	●	BB ↑
Bank of China Limited	●●●●	●●	●●●●	●●●	●	●●	●	BB ↑
Agricultural Bank of China Limited	●●●●	●	●●●●	●●●●	●●●	●	●	BB ↔
WELLS FARGO & COMPANY	●●●●	●	●●●●	●●●	●	●	●	CCC ↓

QUARTILE KEY: ● Bottom Quartile ●●●● Top Quartile
RATING TREND KEY: ↔ maintain ↑ upgrade ↑↑ two or more notch upgrade ↓ downgrade ↓↓ two or more notch downgrade

*The Weighted-Average Key Issue score is dynamic, reflecting changes in any underlying scores as of the Last Update date, while the Industry Relative Score is more static and corresponds to the Rating Date. Issues that we determine do not present material risks or opportunities to companies in a given industry receive 0% weight and do not impact the overall ESG rating.

C) CDP data

<u>Name</u>	<u>Response</u>	<u>Year</u> ▾	<u>Status</u>	Score
<u>Aliansce Shopping Centers SA</u>	Climate Change 2017	2017	Declined to participate	
<u>Aliansce Shopping Centers SA</u>	Climate Change 2016	2016	No Response	Not Available

Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

<u>Name</u>	<u>Response</u>	<u>Year</u> ▾	<u>Status</u>	Score
<u>Alupar Investimento SA</u>	Climate Change 2017	2017	No Response	
<u>Alupar Investimento SA</u>	Climate Change 2016	2016	Other	Not Available

Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

<u>Name</u>	<u>Response</u>	<u>Year</u> ▾	<u>Status</u>	Score
<u>BM&FBOVESPA</u>	<u>Climate Change 2017</u>	2017	Submitted	
<u>BM&FBOVESPA</u>	<u>Climate Change 2016</u>	2016	Submitted	
<u>BM&FBOVESPA</u>	<u>Climate Change 2015</u>	2015	Submitted	 
<u>BM&FBOVESPA</u>	<u>Climate Change 2014</u>	2014	Submitted	 
<u>BM&FBOVESPA</u>	<u>Climate Change 2013</u>	2013	Submitted	 

Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

<u>Name</u>	<u>Response</u>	<u>Year</u> ▾	<u>Status</u>	Score
<u>BRF S.A</u>	Forests 2017	2017	Submitted	
<u>BRF S.A</u>	<u>Climate Change 2017</u>	2017	Submitted	
<u>BRF S.A</u>	Water 2017	2017	Submitted	
<u>BRF S.A</u>	Forests 2016	2016	Not Submitted	Not Scored
<u>BRF S.A</u>	<u>Climate Change 2016</u>	2016	Submitted	


Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

<u>Name</u>	<u>Response</u>	<u>Year</u> ▾	<u>Status</u>	Score
<u>Cosan Logistica SA</u>	Climate Change 2017	2017	No Response	
<u>Cosan Ltd</u>	Climate Change 2017	2017	Declined to participate	
<u>Cosan Ltd</u>	<u>Supply Chain 2017</u>	2017	Submitted	Not available Not available
<u>COSAN S.A. Indústria e Comércio</u>	Climate Change 2017	2017	No Response	
<u>COSAN S.A. Indústria e Comércio</u>	Water 2017	2017	No Response	

Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

CVC Brasil Operadora e Agencia de Viagens SA

Country: Brazil

<u>Year</u> ∨	<u>Program</u>	<u>Status</u>	Score
2017	Climate Change 2017	No Response	
2016	Climate Change 2016	Not Submitted	Not available

Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

<u>Name</u>	<u>Response</u>	<u>Year</u> ∨	<u>Status</u>	Score
<u>Dufry</u>	Climate Change 2017	2017	Declined to participate	
<u>Dufry</u>	Water 2017	2017	Declined to participate	
<u>Dufry</u>	Climate Change 2016	2016	Declined to participate	
<u>Dufry</u>	Water 2016	2016	No Response	
<u>Dufry</u>	Climate Change 2015	2015	No Response	Not available

Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

6 results / Energisa

<u>Name</u>	<u>Response</u>	<u>Year</u> ▾	<u>Status</u>	Score
Energisa SA	Climate Change 2017	2017	No Response	
Energisa SA	Climate Change 2016	2016	Declined to participate	Not Available
Energisa SA	Climate Change 2015	2015	No Response	Not available
Energisa SA	Climate Change 2014	2014	No Response	Not available
Energisa SA	Climate Change 2013	2013	No Response	Not applicable

Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

<u>Name</u>	<u>Response</u>	<u>Year</u> ▾	<u>Status</u>	Score
Equatorial Energia SA	Climate Change 2017	2017	No Response	
Equatorial Energia SA	Water 2017	2017	No Response	
Equatorial Energia SA	Climate Change 2016	2016	Other	Not Available
Equatorial Energia SA	Climate Change 2015	2015	No Response	Not available
Equatorial Energia SA	Climate Change 2014	2014	No Response	Not available

Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

<u>Name</u>	<u>Response</u>	<u>Year</u> ▾	<u>Status</u>	<u>Score</u>
<u>Itausa Investimentos Itau S.A.</u>	<u>Climate Change 2017</u>	2017	Submitted	
<u>Itausa Investimentos Itau S.A.</u>	<u>Climate Change 2016</u>	2016	Submitted	
<u>Itausa Investimentos Itau S.A.</u>	<u>Climate Change 2015</u>	2015	Submitted	 
<u>Itausa Investimentos Itau S.A.</u>	<u>Climate Change 2014</u>	2014	Submitted	 
<u>Itausa Investimentos Itau S.A.</u>	<u>Climate Change 2013</u>	2013	Submitted	 

Note: Not all companies requested to respond to CDP do so. Companies who are requested to disclose their data and fail to do so, or fail to provide sufficient information to CDP to be evaluated will receive an F. An F does not indicate a failure in environmental stewardship.

Appendix 12: Pilot Project

A) Corporate Governance: Core issues (for all companies)

CG Topic/Risk	Questions to Ask	Answer Source	LEVEL 1 Basic CG Practices	LEVEL 2 Improvements towards good CG	LEVEL 3 Advanced CG practices	LEVEL 4 Best CG practices
<p>A. Commitment to Corporate Governance</p> <p>Key Risk: The company and its shareholders have not demonstrated a commitment to implementing high quality CG policies and practices</p>	<ul style="list-style-type: none"> Does the company have a charter or articles of incorporation according to local legislation, with provisions on: (i) the protection of shareholder rights and the equitable treatment of shareholders; (ii) distribution of authority between the Annual General Meeting of Shareholders, the Board of Directors and executive bodies, and (iii) information disclosure and transparency of the company's activities? Are the Board of Directors and the senior management familiar with the voluntary code of corporate governance for the country (if such a code exists)? To what extent does the company comply with the provisions of this code? How is this compliance disclosed? Does the company have a corporate governance code and/or policies? What are the procedures for monitoring compliance with these? Who does the monitoring? Does the company disclose the extent to which it is complying with its corporate governance policies and procedures? Does the company have a code of ethics? Does the company have a designated officer responsible for ensuring compliance with the company's corporate governance policies and code of ethics? Does the management/Board of Directors approve the annual calendar of corporate events (Board meetings, General Shareholder Meeting, etc.)? 	<ul style="list-style-type: none"> <i>Documents:</i> Articles of incorporation, CG code, CG section of the annual report <i>Interviews:</i> Board chair, CEO, compliance or CG officer 	<ul style="list-style-type: none"> The company has a charter or articles of incorporation, with provisions on: <ul style="list-style-type: none"> the protection of shareholder rights and the equitable treatment of shareholders, the distribution of authority between the Annual General Meeting of Shareholders, the Board of Directors and executive bodies; and information disclosure and transparency of the company's activities. 	<ul style="list-style-type: none"> The company has a written code of ethics approved by the Board of Directors. The company has a designated officer responsible for ensuring compliance with the company's corporate governance policies and also has a compliance officer responsible for ensuring compliance with its code of ethics. Management/Board of Directors approves annual calendar of corporate events (Board meetings, General Shareholders' Meeting, etc.). 	<ul style="list-style-type: none"> The company has a written corporate governance code. The company periodically discloses to shareholders its corporate governance code and practices and the extent to which such practices conform to the country's voluntary code of best practices, if applicable. 	<ul style="list-style-type: none"> Applicable corporate governance, accounting, external and internal auditing, internal controls, and shareholder information practices are equivalent to those in place at best practice public companies (i.e., little would need to be done to qualify to make a public offering). The company fully complies or explains any deviations from all applicable provisions of the voluntary code of best practices of the country (some elements of which may be applicable only to public companies).
<p>B. Structure and Functioning of the Board of Directors</p> <p>Key Risk: The Board of directors is not up to the</p>	<ul style="list-style-type: none"> How is the composition of the Board of Directors determined? Are there any shareholder agreements, provisions of the company's charter, or informal understandings that specify which shareholders appoint directors? Are there any independent directors? 	<ul style="list-style-type: none"> <i>Documents:</i> Articles of incorporation, Board charter, directors' profiles, calendar of Board meetings, Board 	<ul style="list-style-type: none"> The Board of Directors is constituted, meets periodically and deliberates independently of executive management. Board members are given sufficient information and time to 	<ul style="list-style-type: none"> The Board includes members who are neither executives of the company and its affiliates, nor controlling shareholders. Board meetings are held according to a regular schedule (at least 4 	<ul style="list-style-type: none"> The Board of Directors has an Audit Committee <ul style="list-style-type: none"> chaired by an independent Director; composed of a majority of independent Directors; includes at least one 	<ul style="list-style-type: none"> The Board of Directors is composed of a majority of independent Directors. The audit committee is composed <i>entirely</i> of independent Directors.

CGTopic/Risk	Questions to Ask	Answer Source	LEVEL 1 Basic CG Practices	LEVEL 2 Improvements towards good CG	LEVEL 3 Advanced CG practices	LEVEL 4 Best CG practices
task of overseeing the strategy, management and performance of the company	<p>How were they selected? How, if at all, does the company define “independent” director?</p> <ul style="list-style-type: none"> · Does the company have Board Committees? If so, how are they established, who sits on them, and how do they function? · How often does the Board of Directors meet? · Is an agenda prepared and distributed in advance of Board meetings? Are minutes prepared and approved after Board meetings? · Does the company have a corporate secretary? If not, who organizes Board meetings? · What is understood as the role of the Board of Directors vis-à-vis management, particularly with respect to the following? (1) Setting strategy and vision of the company; (2) Selection and compensation of the CEO and senior management; (3) Risk Management, oversight of internal controls, external audit and preparation of financial statements; and (4) Major capital expenditures and large-value transactions. · How does the current mix of skills/experience on the Board of Directors serve the company’s interests? · Are directors appointed on the basis of a clear job description which identifies the required directors’ background and expertise? · Does the Board of Directors review material transactions that involve conflicts of interest and related parties? · Does the company offer induction and/or regular training to members of the Board? · Does the Board of Directors conduct self-evaluations or other reviews of its effectiveness? How and when are such 	<p>minutes, related party transactions table</p> <ul style="list-style-type: none"> · <i>Interviews:</i> Board chair, corporate secretary, Committee chairmen, CEO, CFO 	<p>prepare for Board meetings. Board members exercise their duties of management oversight and developing the company’s direction and strategy.</p>	<p>times a year), the agenda is prepared in advance, and minutes are recorded and approved.</p> <ul style="list-style-type: none"> · Board composition (competencies / skill mix) is adequate for its strategy and oversight duties. 	<p>financial expert; and - all members should be at least financially literate.</p> <ul style="list-style-type: none"> · The Board of Directors and executive management receive induction and regular training. · The Board of Directors is elected on a regular basis. 	<ul style="list-style-type: none"> · The Board has a Nominating Committee. · The Board has a Compensation Committee. · The Board of Directors is elected annually. · The performance of the Board as well as each individual director is reviewed annually. · The company has an established succession plan for the CEO.

CGTopic/Risk	Questions to Ask	Answer Source	LEVEL 1 Basic CG Practices	LEVEL 2 Improvements towards good CG	LEVEL 3 Advanced CG practices	LEVEL 4 Best CG practices
	<p>reviews conducted and with whom are the results shared?</p> <ul style="list-style-type: none"> · Have any of the Board Directors ever been sanctioned for violating any of his/her duties? · How often is the Board of Directors elected? Is there a maximum number of terms that a Director can serve? <p>Does the company have a formal or informal succession plan for its current CEO? How much longer does the current CEO intend to remain in this position?</p>					
<p>C. Control Environment and Processes</p> <p>Key Risk: The company's risk management and controls are insufficient to ensure sound stewardship of the company's assets and compliance with relevant regulations</p>	<ul style="list-style-type: none"> · Does the company have adequate internal controls in place? Are they properly documented and periodically reviewed? · Does the company have an Audit Committee? What is the role of the Audit Committee and the Board of Directors in ensuring that proper internal controls are maintained, risks are managed and that the company is in compliance with all relevant laws and regulations? · Does the Board of Directors set the company's risk appetite and periodically review the risk management system? · Does the company have an internal audit (IA) function? Does the IA function have a charter that is approved by the Audit Committee or Board of Directors? Does the IA function have full access to records, property and personnel relevant to their audit? · To whom does the IA function report? Is the IA chief independently hired and dismissed with the consent of the Board of Directors? · Does the Board of Directors monitor management's response to deficiencies and weaknesses identified by the IA function and/or external auditors? · Does the company have a risk management system? Who is responsible for developing it? How are the risks 	<ul style="list-style-type: none"> · <i>Documents:</i> audit committee charter, internal control and risk management policies, management letters, compliance program · <i>Interviews:</i> Board chair, Audit Committee chair, CFO, internal audit chief, risk officer, compliance officer, external auditor 	<ul style="list-style-type: none"> · An adequate internal control system is in place, documented and periodically reviewed by an independent internal audit function. 	<ul style="list-style-type: none"> · The internal control system is in accordance with the highest national standards. · The internal audit function is established and is in accordance with the highest national standards. · The Board of Directors approves and regularly monitors the company's risk management and compliance policies and procedures. 	<ul style="list-style-type: none"> · The company has a comprehensive compliance program that is annually reviewed. · The internal audit function is independent and oversees and reports directly to the Audit Committee. 	<ul style="list-style-type: none"> · The internal controls system and the internal audit function are risk-based and in accordance with <i>highest international standards</i>.

CG Topic/Risk	Questions to Ask	Answer Source	LEVEL 1 Basic CG Practices	LEVEL 2 Improvements towards good CG	LEVEL 3 Advanced CG practices	LEVEL 4 Best CG practices
	<p>identified and compared with industry standards?</p> <ul style="list-style-type: none"> Does the company have a compliance program or procedures that include the training of employees, auditing and monitoring systems, and a company “hotline” for reporting violations? Were there any significant problems reported in internal controls, risk management and compliance in the past 5 years? Is the company’s external audit in line with International Standards on Auditing (ISA)? Who, formally and in practice, selects the external auditors and to whom are they accountable? Is there a policy to rotate the external auditors or the engagement audit partners? Has the external auditor ever issued a Qualified, Adverse, or Disclaimer of Opinion on the financial statements? Why? 					
<p>D. Transparency and Disclosure</p> <p>Key Risk: The company’s financial disclosures are not a relevant, faithful, and timely representation of its economic transactions and resources</p>	<ul style="list-style-type: none"> Are the financial statements prepared in keeping with internationally recognized accounting standards (e.g., IFRS or U.S. GAAP)? Were there any material re-statements of the company’s financial statements in the past 5 years? Please specify. Does the company disclose major transactions, related party transactions, off-balance sheet activities, and other material events? How (e.g., Annual Report, website)? Does the Board of Directors/Audit Committee review key elements of the company’s financial statements? How often? Does the company have a written information disclosure policy that seeks to make all material information (financial and non- financial) fully, timely and equally available to all stakeholders? 	<ul style="list-style-type: none"> <i>Documents:</i> financial statements, information disclosure policy <i>Interviews:</i> audit committee chair, CFO, external auditor, chief of investor relations 	<ul style="list-style-type: none"> Financial statements are prepared in accordance with the highest national accounting standards, and audited by a recognized independent external auditing firm. The company complies with all disclosure requirements under applicable law, regulations and listing rules (fair disclosure). Shareholders are provided with information and documentation upon their request and as specified by applicable law. 	<ul style="list-style-type: none"> The company prepares and presents all financial statements and reporting in accordance with a widely accepted, internationally recognized system of accounting (IFRS or U.S. GAAP). The company’s financial statements are audited in accordance with <i>International Standards on Auditing</i>. The company discloses information on: <ul style="list-style-type: none"> affiliated parties and the affiliation of members of the Board of Directors; and In meetings of 	<ul style="list-style-type: none"> The company discloses information on the remuneration of the members of the Board of Directors and senior management. The company publishes a comprehensive annual report that includes a corporate governance section. The company rotates its external auditors or at least rotates its audit engagement partner. The company discloses its beneficial owners. 	<ul style="list-style-type: none"> Financial and non-financial disclosure practices are in accordance with <i>highest international standards</i>.

CG Topic/Risk	Questions to Ask	Answer Source	LEVEL 1 Basic CG Practices	LEVEL 2 Improvements towards good CG	LEVEL 3 Advanced CG practices	LEVEL 4 Best CG practices
	<ul style="list-style-type: none"> · <i>If the company is publicly listed:</i> - <i>Are periodic meetings with securities analysts held? Who participates in such meetings?</i> - <i>Has the regulator or the exchange ever required the company to provide additional information or clarification in the annual report, financial statements or other disclosure? On what elements?</i> - <i>Has the company ever been sanctioned or censured by the regulator or the exchange for any failure or delay in disclosing required information to the public?</i> 			<p>the Board of Directors and Annual General Meeting of Shareholders.</p> <ul style="list-style-type: none"> · All disclosure to and communications with shareholders (e.g., materials for the shareholders' meetings, minutes of the most recent meetings etc.) are made available on the internet in a timely fashion. 		
<p>E. Rights of Minority Shareholders</p> <p>Key Risk: The company's minority shareholders' rights are inadequate or abused</p>	<ul style="list-style-type: none"> · Are there differences between the voting rights and cash flow rights of the company's various classes of equity and quasi-equity securities (as different from the "one share, one vote" principle)? · Do minority shareholders have any mechanisms to nominate members of the Board of Directors (e.g., cumulative voting, block voting, etc.)? Have such rights been exercised? · Is ultimate beneficial ownership of shares disclosed by controlling shareholders and management? · Are there any minority shareholders protection mechanisms in place? · How will minority shareholders be treated in the event of a change of control of the company (e.g., tag-along rights)? · Does the preparation and calling of annual and extraordinary shareholders meetings enable the participation of all shareholders (sufficient notice; agenda and supporting materials; proposing agenda items; participation personally or through proxy; the right to ask questions; dissemination of the results of the meeting)? · Has the company ever been subject to investigation into its treatment of 	<ul style="list-style-type: none"> · <i>Documents:</i> articles of association, annual report, by-laws on shareholders' meeting · <i>Interviews:</i> controlling shareholders, minority shareholders, Board chair, corporate secretary 	<ul style="list-style-type: none"> · Minority shareholders are provided with adequate notice and an agenda of the shareholders' meetings; and are permitted to participate and vote at such shareholders' meetings. All shareholders' meetings are convened at an easily accessible location. · All shareholders of the same class are treated equally with respect to voting rights, subscription rights and transfer rights. · Shareholders are provided with accurate and timely information regarding the number of shares of all classes held by controlling shareholders and their affiliates (ownership concentration). 	<ul style="list-style-type: none"> · Shareholders have the opportunity to propose items to the agenda and to ask questions at the shareholders' meetings. · Effective representation of minority shareholders is provided by cumulative voting or similar mechanisms. · The company has a well understood policy and practice of full and timely disclosure to shareholders of all material transactions with affiliates of the controlling shareholders, directors or management (conflicts of interest). · The company has a dividend policy which is disclosed to shareholders. 	<ul style="list-style-type: none"> · The company has effective shareholder voting mechanisms in place to protect minority shareholders against unfairly prejudiced actions of controlling shareholders where ownership is especially concentrated or controlling shareholders have strong conflicts of interest (e.g., super-majority or "majority of minority" provisions). · The company has clearly articulated and enforceable policies with respect to the treatment of minority shareholders in changes of control situations (tag-along rights). · The annual report clearly discloses the principal risks to minority shareholders associated with the identity of 	<ul style="list-style-type: none"> · Shareholders have the opportunity to use electronic means of communication (including the internet) for voting. · The company has a system of registering shareholders complaints and effectively regulating corporate disputes. · The company's history of equitable treatment of shareholders demonstrates consistent conformance with international market expectations. · The company has a well understood policy and practice of full and timely disclosure to shareholders of all material shareholder agreements.

CGTopic/Risk	Questions to Ask	Answer Source	LEVEL 1 Basic CG Practices	LEVEL 2 Improvements towards good CG	LEVEL 3 Advanced CG practices	LEVEL 4 Best CG practices
	shareholders? How have shareholder disputes been resolved?				the company's controlling shareholders; the degree of ownership concentration; cross-holdings among company affiliates; and any imbalances between the controlling shareholders' voting power and overall equity position in the company. · The company pays dividends shortly after a decision to declare dividends is made.	

B) Environmental and Social issues by company

Industry Classification of Companies and Funds Listed at BM&FBOVESPA					SASB Sustainable Industry Classification System™ (SICS™)	
Listing code	Name	Sector	Subsector	Segment	Industry classification systems group	Sub-group
ALUP11	ALUPAR	Utilities	Electric Utilities	Electric Utilities	Infrastructure	Electric Utilities
CVCB3	CVC BRASIL	Consumer Cyclical	Travel, Entertainment and Leisure	Travel and Tourism	Services Consumption	Professional Services E-Commerce
CZLT33	COSAN LTD	Oil, Gas and Biofuels	Oil, Gas and Biofuels	Exploration, Refining and Distribution	Renewable Resources & Alternative Energy Non-Renewable Resources	Biofuels Oil & Gas – Exploration & Production
BVMF3	BMFBOVESPA	Financial	Diversified Financial Services	Diversified Financial Services	Financials	Security & Commodity Exchanges
ALSC3	ALANSCE	Financial	Real Estate	Real Estate	Infrastructure	Real Estate Owners, Developers & Investment Trusts
DAGB33	DUFY AG	Consumer Cyclical	Retail	Diversified Retailers	Consumption	Multiline and Specialty Retailers & Distributors
ENGI1	ENERGISA	Utilities	Electric Utilities	Electric Utilities	Infrastructure	Electric Utilities
ITSA4	ITAUSA	Financial	Financial Intermediaries	Banks	Financials	Commercial Banks
EQTL3	EQUATORIAL	Utilities	Electric Utilities	Electric Utilities	Infrastructure	Electric Utilities
BRFS3	BRF SA	Consumer Non Cyclical	Food Processors	Meat, Poultry and Others	Consumption	Meat, Poultry & Dairy

Source: BM&F Bovespa

(http://www.bmfbovespa.com.br/main.jsp?lumPageId=8A6883565186B02601518BBB7DAC76B5&lumA=1&lumII=8A6883565186B02601518BBB7DF176C2&locale=en_US&doui_processActionId=setLocaleProcessAction) and SASB (<https://www.sasb.org/approach/sics/>)

ISSUES	ALUP11	CVCB3	CZLT33	BVMF3	ALSC3	DAGB33	ENGL11	ITSA4	EQTL3	BRFS3
	Infrastructure	Consumption/ Services	Non-Renewable Resources/ Renewable Resources & Alternative Energy	Financials	Infrastructure	Consumption	Infrastructure	Financials	Infrastructure	Consumption
	Electric Utilities	E-Commerce/ Professional Services	Oil & Gas – Exploration & Production/ Biofuels	Security & Commodity Exchanges	Real Estate Owners, Developers & Investment Trusts	Multiline and Specialty Retailers & Distributors	Electric Utilities	Commercial Banks	Electric Utilities	Meat, Poultry & Dairy
Environment										
GHG emissions										
Air quality										
Energy management										
Fuel management										
Water and wastewater management										
Waste and hazardous materials management										
Biodiversity impacts										
Social Capital										
Human rights and community relations										
Access and affordability										
Customer welfare										
Data security and customer privacy										
Fair disclosure and labeling										
Fair marketing and advertising										
Human Capital										
Labor relations										
Fair labor practices										
Employee health, safety and wellbeing										
Diversity and inclusion										
Compensation and benefits										
Recruitment, development and retention										
Business Model and Innovation										
Lifecycle impacts of products and services										
Environmental, social impacts on assets & operations										
Product packaging										
Product quality and safety										
Leadership and Governance										
Systemic risk management										
Accident and safety management										
Business ethics and transparency of payments										
Competitive behavior										
Regulatory capture and political influence										
Materials sourcing										
Supply chain management										

Source: SASB Materiality Map (<https://www.sasb.org/materiality/sasb-materiality-map/>)

Materiality Matrix: Environmental and Social Metrics per company:

Company (symbol): BVMF3

Topic	Description	Category	Unit of measure
Promoting Transparent & Efficient Capital Markets	Discussion of alert policy regarding timing and nature of public release of information	Discussion and Analysis	n/a
	Number and average duration of (1) halts related to public release of information and (2) pauses related to volatility	Quantitative	Number (#), time (hours)
	Percentage of trades generated from automated trading systems ¹	Quantitative	Percentage (%)
	Description of policy to encourage or require listed companies to publicly disclose governance, social, and/or environmental information	Discussion and Analysis	n/a
Managing Conflicts of Interest	Description of process to identify and assess conflicts of interest between the exchange's regulatory obligations and the interests of its members, its market operations, its listed issuers, and, in the case of a demutualized self-regulatory organization (SRO), its shareholders	Discussion and Analysis	n/a
	Amount of legal and regulatory fines and settlements associated with fraud, anti-trust, anti-competitive, market manipulation, malpractice or other business ethics violations ²	Quantitative	U.S. dollars (\$)
Managing Business Continuity & Technology Risks	Description of efforts to prevent technology errors, security breaches, and market disruptions	Discussion and Analysis	n/a
	Number of significant market disruptions and duration of downtime ³	Quantitative	Number (#), time (hours/days)
	Number of data security breaches and percentage involving customers' personally identifiable information ⁴	Quantitative	Number (#), percentage (%)

¹ Disclosure shall include a discussion of risks and opportunities (short and long-term) associated with automated trading systems including algorithmic or high frequency trading.

² Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

³ Disclosure shall include, for each disruption: the type and extent of the disruption, a discussion of the root cause, and a description of any corrective actions implemented in response.

⁴ Disclosure shall include a description of corrective actions implemented in response.

Company (symbol): CVCB3

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
Energy & Water Footprint of Hardware Infrastructure	Total energy consumed, percentage grid electricity, percentage renewable energy	Quantitative	Gigajoules (GJ), Percentage (%)
	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)
	Description of the integration of environmental considerations into strategic planning for data center needs	Discussion and Analysis	n/a
Logistics & Packaging Efficiency	Total greenhouse gas (GHG) footprint of product shipments	Quantitative	Metric tons CO2-e
	Description of strategies to reduce the environmental impact of product delivery	Discussion and Analysis	n/a
Data Security & Fraud Protection	Discussion of management approach to identifying and addressing data security risks	Discussion and Analysis	n/a
	Number of data security breaches, percentage involving customers' personally identifiable information (PII), number of customers affected ¹	Quantitative	Number, Percentage (%)
Data Privacy	Percentage of users whose customer information is collected for secondary purposes, percentage who have opted in	Quantitative	Percentage (%)
	Discussion of policies and practices relating to behavioral advertising and customer privacy	Discussion and Analysis	n/a
Employee Recruitment, Inclusion, and Performance	Employee engagement as a percentage ²	Quantitative	Percentage (%)
	(1) Voluntary and (2) involuntary employee turnover rate	Quantitative	Rate
	Percentage of gender and racial/ethnic group representation for (1) executives, (2) technical staff, and (3) all others	Quantitative	Percentage (%)
	Percentage of technical employees who are H-1B visa holders	Quantitative	Percentage (%)
	Percentage of successful H-1B visa applications	Quantitative	Percentage (%)
Professional Integrity	Description of management approach to assuring professional integrity and duty of care	Discussion and analysis	n/a
	Amount of legal and regulatory fines and settlements associated with professional integrity or duty of care[1]	Quantitative	BRL(R\$)
Data Security	Discussion of management approach to identifying and addressing data security risks	Discussion and analysis	n/a

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
	Discussion of policies and practices relating to collection, usage, and retention of customer information	Discussion and analysis	n/a
	Number of data security breaches and percentage involving customers' confidential business information or personally identifiable information	Quantitative	Number, Percentage (%)
Workforce Diversity & Engagement	Percentage of gender and racial/ethnic group representation for: (1) executives, (2) all other non-contingent staff, and (3) contingent staff	Quantitative	Percentage (%)
	(1) Voluntary and (2) involuntary turnover rate	Quantitative	Percentage (%)
	Employee engagement as a percentage	Quantitative	Percentage (%)

¹ Disclosure shall include a description of corrective actions implemented in response to data security breaches or threats.

² Disclosure shall include a description of the methodology employed.

Company (symbol): CZLT33

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
Greenhouse Gas Emissions	Gross global Scope 1 emissions, percentage covered under a regulatory program, percentage by hydrocarbon resource	Quantitative	Metric tons CO ₂ -e, Percentage (%)
	Amount of gross global Scope 1 emissions from: (1) combustion, (2) flared hydrocarbons, (3) process emissions, (4) directly vented releases, and (5) fugitive emissions/leaks	Quantitative	Metric tons CO ₂ -e
	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a
Air Quality	Air emissions for the following pollutants: NOx (excluding N ₂ O), SOx, volatile organic compounds (VOCs), particulate matter (PM), and hazardous air pollutants (HAPs)	Quantitative	Metric tons (t)
	Number of incidents of non-compliance with air quality permits, standards, and regulations	Quantitative	Number
Water Management	Total fresh water withdrawn, percentage recycled, percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)
	Volume of produced water and flowback generated; percentage (1) discharged, (2) injected, (3) recycled; hydrocarbon content in discharged water	Quantitative	Cubic meters (m ³), Percentage (%), Metric tons (t)

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
	Percentage of hydraulically fractured wells for which there is public disclosure of all fracturing fluid chemicals used	Quantitative	Percentage (%)
	Percentage of hydraulic fracturing sites where ground or surface water quality deteriorated compared to a baseline	Quantitative	Percentage (%)
	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)
	Discussion of water management risks and description of strategies and practices to mitigate those risks	Discussion and Analysis	n/a
	Number of incidents of non-compliance with water quality permits, standards, and regulations	Quantitative	Number
Biodiversity Impacts	Description of environmental management policies and practices for active sites	Discussion and Analysis	n/a
	Number and aggregate volume of hydrocarbon spills, volume in Arctic, volume near shorelines with ESI rankings 8-10, and volume recovered	Quantitative	Number, Barrels (bbls)
	(1) Proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Quantitative	Million barrels (MMbbls), Million standard cubic feet (MMscf)
Security, Human Rights, and Rights of Indigenous Peoples	(1) Proved and (2) probable reserves in or near areas of conflict	Quantitative	Million barrels (MMbbls), Million standard cubic feet (MMscf)
	(1) Proved and (2) probable reserves in or near indigenous land	Quantitative	Million barrels (MMbbls), Million standard cubic feet (MMscf)
	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights, and operation in areas of conflict	Discussion and Analysis	n/a
Community Relations	Discussion of process to manage risks and opportunities associated with community rights and interests	Discussion and Analysis	n/a
	Number and duration of non-technical delays	Quantitative	Number, Days
Health, Safety, and Emergency Management	(1) Total Recordable Injury Rate (TRIR), (2) Fatality Rate, and (3) Near Miss Frequency Rate for (a) full-time employees, (b) contract employees, and (c) short-service employees	Quantitative	Rate
	Process Safety Event (PSE) rates for Loss of Primary Containment (LOPC) of greater consequence (Tier 1)	Quantitative	Rate

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
	Discussion of management systems used to integrate a culture of safety and emergency preparedness throughout the value chain and throughout the exploration and production lifecycle	Discussion and Analysis	n/a
Operational Safety, Emergency Preparedness, and Response	Process Safety Incidents Count (PSIC), Process Safety Total Incident Rate (PSTIR), and Process Safety Incident Severity Rate (PSISR) ¹	Quantitative	Number, Rate
Product Formulation & Impacts on Food Markets	Top five feedstocks used for biofuels production, by weight ²	Quantitative	Metric tons (t)
	Percentage of feedstock grown in food-insecure countries	Quantitative	Percentage (%) by weight
Lifecycle Emissions Balance	Lifecycle greenhouse gas (GHG) emissions, by biofuel type	Quantitative	Grams of CO ₂ -e per megajoule (MJ)
Business Ethics & Payments Transparency	(1) Proved and (2) probable reserves in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Quantitative	Million barrels (MMbbls), Million standard cubic feet (MMscf)
	Description of the management system for prevention of corruption and bribery throughout the value chain	Discussion and Analysis	n/a
Reserves Valuation & Capital Expenditures	Sensitivity of hydrocarbon reserve levels to future price projection scenarios that account for a price on carbon emissions	Quantitative	Million barrels (MMbbls), Million standard cubic feet (MMscf)
	Estimated carbon dioxide emissions embedded in proved hydrocarbon reserves	Quantitative	Metric tons CO ₂
	Discussion of how price and demand for hydrocarbons and/or climate regulation influence the capital expenditure strategy for exploration, acquisition, and development of assets	Discussion and Analysis	n/a
Management of the Legal & Regulatory Environment	Amount of political campaign spending, lobbying expenditures, and contributions to tax-exempt groups including trade associations	Quantitative	BRL(R\$)
	Five largest political, lobbying, or tax-exempt group expenditures	Quantitative	BRL(R\$), by recipient
	Amount of subsidies received through government programs	Quantitative	BRL(R\$)
	Discussion of positions on the regulatory and political environment related to environmental and social factors and description of efforts to manage risks and opportunities presented	Discussion and Analysis	n/a
	Description of strategy to manage risks associated with environmental impacts of feedstock production	Discussion and Analysis	n/a

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
Sourcing & Environmental Impacts of Feedstock Production	Percentage of biofuel production third-party certified to an environmental sustainability standard	Quantitative	Percentage (%) of gallons

¹ Disclosure shall describe incidents with a severity rating of 1 or 2, including their root cause, outcomes, and corrective actions implemented in response (e.g., technology improvements, operator training, etc.).

² Disclosure shall discuss risks associated with the use of food crop feedstocks and feedstocks grown on arable lands.

Company (symbol): ALSC3

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
Energy Management	Energy consumption data coverage as a percentage of floor area, by property subsector	Quantitative	Percentage (%) by floor area (m ²)
	Total energy consumed by portfolio area with data coverage, percentage grid electricity, and percentage renewable, each by property subsector	Quantitative	Gigajoules (GJ), Percentage (%)
	Like-for-like change in energy consumption of portfolio area with data coverage, by property subsector	Quantitative	Percentage (%) by gigajoules (GJ)
	Percentage of eligible portfolio that (1) has obtained an energy rating and (2) is certified to ENERGY STAR [®] , by property subsector	Quantitative	Percentage (%) by floor area (m ²)
	Description of how building energy management considerations are integrated into property investment analysis and operational strategy	Discussion and Analysis	n/a
Water Management	Water withdrawal data coverage as a percentage of total floor area and percentage in regions with High or Extremely High Baseline Water Stress, each by property subsector	Quantitative	Percentage (%) by floor area (ft ²)
	Total water withdrawn by portfolio area with data coverage and percentage in regions with High or Extremely High Baseline Water Stress, each by property subsector	Quantitative	Cubic meters (m ³), Percentage (%)
	Like-for-like change in water withdrawn for portfolio area with data coverage, by property subsector	Quantitative	Percentage (%) by cubic meters (m ³)
	Discussion of water management risks and description of strategies and practices to mitigate those risks	Discussion and Analysis	n/a
Management of Tenant Sustainability Impacts	Percentage of new leases that contain a cost recovery clause for resource efficiency-related capital improvements and associated leased floor area, by property subsector	Quantitative	Percentage (%) by floor area (m ²), Square meter (m ²)

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
	Percentage of tenants that are separately metered or submetered for (1) grid electricity consumption and (2) water withdrawals, by property subsector	Quantitative	Percentage (%) by floor area (m ²)
	Description of approach to measuring, incentivizing, and improving sustainability impacts of tenants	Discussion and Analysis	n/a
Climate Change Adaptation	Area of properties located in FEMA Special Flood Hazard Areas or foreign equivalent, by property subsector	Quantitative	Square meters (m ²)
	Description of climate change risk exposure analysis, degree of systematic portfolio exposure, and strategies for mitigating risks	Discussion and Analysis	n/a

Company (symbol): DAGB33

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
Energy Management in Retail & Distribution	Total energy consumed, percentage grid electricity, percentage renewable energy	Quantitative	Gigajoules (GJ), Percentage (%)
Data Security	Discussion of management approach to identifying and addressing data security risks	Discussion and Analysis	n/a
	Number of data security breaches, percentage involving customers' personally identifiable information (PII), number of customers affected ¹	Quantitative	Number, Percentage (%)
Workforce Diversity & Inclusion	Percentage of gender and racial/ethnic group representation for (1) management and (2) all other employees	Quantitative	Percentage (%)
	Amount of legal and regulatory fines and settlements associated with employment discrimination ²	Quantitative	BRL(R\$)
Fair Labor Practices	Average hourly wage and percentage of in-store employees earning minimum wage, by region	Quantitative	BRL(R\$), Percentage (%)
	(1) Voluntary and (2) involuntary employee turnover rate for in-store employees	Quantitative	Rate
	Amount of legal and regulatory fines and settlements associated with labor law violations ³	Quantitative	BRL(R\$)
Product Sourcing, Packaging, and Marketing	Revenue from products third-party certified to environmental and/or social sustainability standards	Quantitative	BRL(R\$)
	Description of processes to assess and manage risks and/or hazards associated with chemicals in products	Discussion and Analysis	n/a

	Description of strategies to reduce the environmental impact of packaging	Discussion and Analysis	n/a
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¹ Disclosure shall include a description of corrective actions implemented in response to data security breaches.

² Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

³ Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

Company (symbol): BRFS3

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
Greenhouse Gas Emissions	Gross global Scope 1 emissions	Quantitative	Metric tons (t) ^{CO2-e}
	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets	Discussion & Analysis	n/a
Energy Management	Total energy consumed, percentage grid electricity, percentage renewable	Quantitative	Gigajoules (GJ), Percentage (%)
Water Withdrawal	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)
	Discussion of risks associated with water withdrawal and description of strategies and practices to mitigate those risks	Discussion and Analysis	n/a
Land Use & Ecological Impacts	Number of incidents of non-compliance with water-quality permits, standards, and regulations	Quantitative	Number
	Discussion of risks associated with water discharges and description of strategies and practices to mitigate those risks	Discussion & Analysis	n/a
	Amount of animal litter and manure generated, percentage managed according to a nutrient management plan	Quantitative	Metric tons (t), Percentage (%)
	Percentage of pasture and grazing land managed to NRCS Conservation Plan criteria	Quantitative	Percentage by hectares (%)
	Animal protein production from concentrated animal feeding operations (CAFO)	Quantitative	Metric tons (t)
Food Safety	Number of recalls issued, total weight of products recalled ¹	Quantitative	Number, Metric tons (t)
	Global Food Safety Initiative (GFSI) audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate	Quantitative	Rate
	Percentage of supplier facilities that meet the Global Food Safety Initiative (GFSI) requirements	Quantitative	Percentage (%)

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
	Discussion of markets that ban imports of the registrant's products	Discussion & Analysis	n/a
Workforce Health & Safety	(1) Total recordable injury rate (TRIR) and (2) fatality rate	Quantitative	Rate
	Description of practices to monitor for and mitigate chronic and acute health conditions	Discussion & Analysis	n/a
Antibiotic Use in Animal Production	Percentage of animal production that receives (1) medically important antibiotics and (2) nontherapeutic antibiotics	Quantitative	Percentage by weight (%)
Animal Care & Welfare	Percentage of pork produced without the use of gestation crates	Quantitative	Percentage by weight (%)
	Percentage of cage-free shell egg sales	Quantitative	Percentage (%)
	Percentage of production certified to a third-party animal welfare standard	Quantitative	Percentage by weight (%)
Environmental & Social Impacts of Animal Supply Chains	Percentage of livestock from suppliers implementing NRCS Conservation Plans or the equivalent	Quantitative	Percentage by weight (%)
	Percentage of contract producers in regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage by contract value (%)
	Percentage of supplier and contract production facilities verified to meet animal welfare standards	Quantitative	Percentage (%)
	Discussion of strategy to manage opportunities and risks to livestock supply presented by climate change	Discussion & Analysis	n/a
Environmental Risks in Animal Feed Supply Chains	Percentage of feed sourced from regions with High or Extremely High Baseline Water Stress	Quantitative	Percentage by weight (%)
	Discussion of strategy to manage opportunities and risks to feed sourcing presented by climate change	Discussion & Analysis	n/a

¹ Disclosure shall include a description of notable recalls, such as those that affected a significant amount of product or those related to serious illness or fatality.

Company (symbol): ALUP11-ENGI11-EQTL3

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
Greenhouse Gas Emissions & Energy Resource Planning	(1) Gross global Scope 1 emissions, (2) percentage covered under emissions-limiting regulations, and (3) percentage covered under emissions-reporting regulations	Quantitative	Metric tons (t) CO ₂ -e, Percentage (%)
	Description of long-term and short-term strategy or plan to manage Scope 1 emissions, emission-reduction targets, and an analysis of performance against those targets	Discussion and Analysis	n/a

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
	(1) Number of customers served in markets subject to renewable portfolio standards (RPS) and (2) percentage fulfillment of RPS target by market ¹	Quantitative	Number, Percentage (%)
Air Quality	Air emissions of the following pollutants: NOx (excluding N2O), SOx, particulate matter (PM10), Pb, and Hg; percentage of each in or near areas of dense population	Quantitative	Metric tons (t), Percentage (%)
Water Management	(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic Meters (m ³), Percentage (%)
	Number of incidents of non-compliance with water quality and/or quantity permits, standards, and regulations	Quantitative	Number
	Discussion of water management risks and description of strategies and practices to mitigate those risks	Discussion and Analysis	n/a
Coal Ash Management	Amount of coal combustion residuals (CCR) generated, percentage recycled	Quantitative	Metric tons (t), Percentage (%)
	Total number of coal combustion residual (CCR) impoundments and number by EPA Hazard Potential Classification, broken down by EPA structural integrity assessment	Quantitative	Number
Community Impacts of Project Siting	Number of projects requiring environmental or social modification, percentage of modifications resulting from formal public interventions or protests ²	Quantitative	Number, Percentage (%)
	Discussion of community engagement processes to identify and mitigate concerns regarding project environmental and community impacts	Discussion and Analysis	n/a
Workforce Health & Safety	(1) Total recordable injury rate (TRIR), (2) fatality rate, and (3) near miss frequency rate (NMFR)	Quantitative	Rate
End-Use Efficiency & Demand	Percentage of electric load served by smart grid technology ³	Quantitative	Percentage (%) by Megawatt-Hours (MWh)
	Customer electricity savings from efficiency measures by market ⁴	Quantitative	Megawatt- Hours (MWh)
Nuclear Safety & Emergency Management	Total number of nuclear power units, broken down by Nuclear Regulatory Commission (NRC) Action Matrix Column	Quantitative	Number
	Discussion of efforts to manage nuclear safety and emergency preparedness	Discussion and Analysis	n/a
Grid Resiliency	Number of incidents of non-compliance with North American Electric Reliability Corporation (NERC) Critical Infrastructure Protection standards	Quantitative	Number

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
	(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days ⁵	Quantitative	Minutes, Number
Management of the Legal & Regulatory Environment	Discussion of policies and processes to identify and manage potential ethical violations resulting from interactions with utility commissions	Discussion and Analysis	n/a
	Amount of legal and regulatory fines and settlements associated with allegations of violations resulting from interactions with utility commissions ⁶	Quantitative	BRL(R\$)
	Discussion of positions on the regulatory and political environment related to environmental and social factors and description of efforts to manage risks and opportunities presented	Discussion and Analysis	n/a

¹ Disclosure shall discuss its operations in markets with RPS regulations or where regulations are emerging, including whether it is meeting its regulatory obligations, whether regulations require future increases to the registrant's renewable energy portfolio, and strategies to maintain compliance with emerging regulations.

² Disclosure shall discuss modifications that relate to significant projects such as those with large transmission or generation capacity.

³ Disclosure shall discuss the opportunities and challenges associated with the development and operations of a smart grid.

⁴ Disclosure shall discuss customer efficiency regulations relevant to each market in which it operates.

⁵ Disclosure shall discuss notable service disruptions such as those that affected a significant number of customers or disruptions of extended duration.

⁶ Disclosure shall briefly describe the nature, context, and corrective action taken as a result of the fine and/or settlement.

Company (symbol): ITSA4

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
Financial Inclusion & Capacity Building	Percentage of new accounts held by first-time account holders	Quantitative	Percentage (%)
	Percentage of total domestic loans for underserved and underbanked business segments	Quantitative	Percentage (%) in BRL(R\$)
	Number of participants in financial literacy initiatives for unbanked, underbanked, or underserved customers ¹	Quantitative	Number (#)
	Loan-to-deposit ratio for: (1) Overall domestic lending (2) Underserved and underbanked business segments	Quantitative	Ratio in BRL(R\$)

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
	Loan default rates for: (1) Overall domestic lending (2) Underserved and underbanked business segments	Quantitative	Rate in BRL(R\$)
Customer Privacy & Data Security	Number of data security breaches and percentage involving customers' personally identifiable information ²	Quantitative	Number (#), percentage (%)
	Discussion of management approach to identifying and addressing vulnerabilities and threats to data security	Discussion and Analysis	n/a
Management of the Legal & Regulatory Environment	Amount of legal and regulatory fines and settlements associated with financial industry regulation and percentage that resulted from whistleblowing actions ³	Quantitative	BRL(R\$), percentage (%)
	Number of inquiries, complaints, or issues received by the legal and compliance office through an internal monitoring or reporting system, and percentage that were substantiated ⁴	Quantitative	Number (#), percentage (%)
Systemic Risk Management	Results of stress tests under adverse economic scenarios, ⁵ including the following measures (actual and projection): (1) Loan losses (2) Losses, revenue, and net income before taxes (3) Tier 1 common capital ratio (4) Tier 1 capital ratio (5) Total risk-based capital ratio (6) Tier 1 leverage ratio	Quantitative	BRL(R\$), ratio in BRL(R\$)
	Basel III Liquidity Coverage Ratio (LCR)	Quantitative	Ratio in BRL(R\$)
	Net exposure to written credit derivatives	Quantitative	BRL(R\$)
	Level 3 assets: (1) total value and (2) percentage of total assets	Quantitative	BRL(R\$), percentage (%)
	Skewness and kurtosis of trading revenue	Quantitative	n/a
Integration of Environmental, Social, and Governance Risk Factors in Credit Risk Analysis	Discussion of how environmental, social, and governance (ESG) factors are integrated into the lending process	Discussion and Analysis	n/a
	Discussion of credit risk to the loan portfolio presented by climate change, natural resource constraints, human rights concerns, or other broad sustainability trends	Discussion and Analysis	n/a
	Amount and percentage of lending and project finance that employs: (1) Integration of ESG factors (2) Sustainability themed lending or finance (3) Screening (exclusionary, inclusionary, or benchmarked) (4) Impact or community lending or finance	Quantitative	BRL(R\$), percentage (%)

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE
	Total loans to companies in the following sectors/ industries: Energy/Oil&Gas, Materials/Basic Materials, Industrials, and Utilities	Quantitative	BRL(R\$)

¹ Disclosure shall include a description of financial literacy initiatives.

² Disclosure shall include a description of corrective actions.

³ Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.

⁴ Disclosure shall include a description of the nature of the inquiries, complaints, or issues and of any corrective actions taken by registrant in response to information received by its legal and compliance office through an internal monitoring and/or reporting system.

⁵ Disclosure shall include a description of the most significant drivers of changes in regulatory capital ratios.

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