

A Description of Sustainability Assessment Tools in Use among Brazilian Businesses

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Abstract

The purpose of this paper is to describe four sustainability assessment tools. By describing these assessment tools, this paper aims to develop a better understanding about of the factors that have been motivating Brazilian companies to achieve a sustainable mode of behavior. Currently, the meaning of sustainability in business is still unclear. The content presented here has the potential to be used in future studies about sustainability in the corporate environment.

The impacts of climate change around the world have raised awareness of the concept of sustainability. Painful choices in the decision-making processes of companies will be made to reach a new sustainable path. In this context, the implementation of sustainable practices in business gained importance and started to be seen as an opportunity to reduce climate change impacts and improve environmental/social quality. While many companies are seeing today's challenges as opportunities and are successfully striving to pass through the difficult transition from "business as usual" to sustainable commerce, many others are not. If companies want to work on sustainable practices, they should put this goal at the core of their businesses, as opposed to it being an additional effort apart from their core concerns.

Keywords: Sustainability in Business; Triple Bottom Line; Sustainable Development; Sustainability Assessment Tools; Dow Jones Sustainability Index World (DJSI World); Corporate Sustainability Index / Índice de Sustentabilidade Empresarial (ISE); ISO 14001; and Brazilian Enterprise Advice for Sustainable Development / Conselho Empresarial Brasileiro de Desenvolvimento Sustentável (CEBDS).

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The concern about climate change has increased the importance and raised awareness of the concept of sustainability. In this context, “sustainability is the principle of ensuring that our actions today do not limit the range of economic, social and environmental options open to future generations” (Elkington, 1999, p.20). The concern about the impact of climate change on the environment has also stimulated the implementation of sustainable practices in the consumption and production processes of many companies. Painful choices in the decision-making processes of companies will be made to reach a new sustainable path. This paper shows the importance of implementing sustainable practices in business as an opportunity to reduce climate change impacts and improve environmental/social quality. While many companies are seeing today’s challenges as opportunities and are successfully striving to pass through the difficult transition from “business as usual” to sustainable commerce, many others are not. As stated by Anderson “sustainability, as a new value, will be the price of entry that society will demand for business success in the 21st century” (cited in Elkington 1999:1). Hence, if companies want to work on sustainable practices, they should put this goal at the core of their businesses, as opposed to it being an additional effort apart from their core concerns.

This paper looks at the concept of sustainability in the Brazilian business community through the description of four sustainability assessment tools. The requirements set by these assessment tools serve as an outline to understand the issues that have been motivating Brazilian companies to achieve a sustainable path. Brazil is the country of choice partly because it has become the eighth largest economy in the world in GDP as of 2008 (World Bank, 2009). Also, it is of interest as it has been increasing of its use of new renewable energy sources. Brazil has a notable propensity for generating this type of energy, primarily because of its biomass, climate and topography, as well as the favorable conditions for

hydropower, solar and wind energy (Cardoso, 2007, p.1). This has created an expectation for Brazil to play a role at the forefront in implementation of sustainability. Furthermore, to completely address the concept of sustainability, Brazilian companies are also investing in social programs, principally in the communities surrounding areas where these companies operate. The social programs are very relevant given the fact that Brazil has considerable social inequality.

The steps toward sustainability transition are still not very clear, but one fact is evident: This transition is likely to destroy some industries, force a radical restructuring of others and create many new businesses. As noted in the research of the Dom Cabral Foundation, the concept of sustainability is not well understood among some Brazilian companies. In some Brazilian companies for example, sustainable practices are merely associated with financial or competitive aspects by advertising their products and aggregating value to their brand name, disregarding environmental or social issues that are involved in their businesses (Marques, et al, 2004, p.6). Similarly, Silva and Quelhas (2006, p.1) reveal that sustainable practices in Brazilian companies are still part of some isolated actions or environmental system management that are only present on paper, without any real action. On the other hand, they stress that some Brazilian companies seem to have future initiatives to boost sustainability; some of them are already committed to outstanding sustainable practices.

Overall, many Brazilian companies from different business sectors, have been following patterns of cleaner production and social projects by incorporating sustainable measures in their goals. Many of those companies are already included in some sustainability assessment tools, such as the Dow Jones Sustainability Index World (Costa, 2007, p.1), and the Corporate Sustainability Index (ISE) - Bovespa (Bovespa, 2007, p.1).

Previous research has shown that companies that are included in these sustainability assessment tools take into consideration, besides financial sustainability, environmental quality and quality of life in their goals and daily practices. These companies believe in the Brazilian potential to counterbalance climate change and they see in the practice of sustainability an opportunity to increase their own credibility in domestic and international markets.

The core of this paper is concentrated in understanding the idea of sustainability from a corporate perspective by describing four sustainability assessment tools through which some Brazilian companies are recognized. By looking at the requirements, features, and sustainability concepts compelled in each index, it will become easier to catch sight of the means companies have been using to move toward sustainable practices and companies' efforts to be listed on these assessment tools. The goal of this work is to increase companies' awareness about the importance of applying sustainability concepts and practices in business, given the impacts of climate change, which are altogether putting the environmental and social quality of the world in danger. Thus, the companies that are concerned about this issue, and are smart enough to implement sustainable practices, are likely to have more credibility and more competitive advantages over the ones that have not taken into account the benefits they might get through these practices.

1. THE CONCEPT OF SUSTAINABILITY IN BUSINESS

The concept of sustainability has not only been brought to the table in the past twenty years, but it has so many meanings that it is difficult to actually put the concept into effect, especially in a short term. According to Doppelt (2003, p.139), in business, sustainability means “managing human and natural capital with the same vigor we apply to the management of financial capital.” In simpler words, it means widening the scope of

companies' awareness so that they can fully comprehend the true cost of every choice they make. Sustainability has been challenging business managers to re-evaluate the means of operating their enterprises and measuring their success.

In addition, Clarke (cited in Dresner 2002:30) emphasizes that sustainability is a process of changing the means of exploiting resources and directing investments, adjusting the technological development and encouraging institutional change. Uhl (2004:38) suggests that sustainability is a new manner of seeing and relating to the world in order to maintain a certain level of social and environmental quality. Alternatively, Henderson (1999:46) points out the importance of going beyond globalization, reflecting on global warming impacts, and looking toward a new reality: the relevance of shaping a new (sustainable) way of thinking. He states that knowledge is the key factor of production and benchmarking and audits are the means to a successful social/environmental performance.

Moreover, Stuart L. Hart (cited in Elkington, 1999, p.71) – former director of the Corporate Environmental Management Program at the University of Michigan – explains that the increasing need for corporate sustainability relies on the fact that the roots of the crises – the impacts of global warming/climate change, intensive exploitation of natural resources, social inequalities, poverty, among others – are political and social issues that surpass the command and competency of any corporation. On the other hand, he invites everyone to see an interesting paradox, that is, the fact that corporations are the only organizations that have resources, technology, global reach (in some cases) and motivation to achieve sustainability (Elkington, 1999, p.71). Additionally, Elkington (1999:69) defends that “business executives wanting to grasp the full scale of the emerging challenge must audit current performance and future targets against the triple bottom line.” As shown above, previous authors have put forth a variety of definitions of sustainability. We have chosen to build on the idea of the triple

bottom line and Elkington's definition because we believe it does the best job of capturing the concept of sustainability in business.

1.1. Sustainability from the Standpoint of the Triple Bottom Line

In 1994, John Elkington invented the concept of the triple bottom line. According to Elkington, companies must have a "triple bottom line," in order to perpetuate their businesses. This means that they should include three aspects as the core of their businesses: social responsibility, environmental responsibility, and financial revenue. This concept has become very useful in explaining the perspective of sustainability in business mostly because of the misinterpretation/vagueness of its meaning. For instance, when not solely associated with profitability, it is also related to environmental sustainability concerns and eco-efficiency. As asserted by Elkington (1999, p. x), the challenge is to find a way to get corporations to embrace and sustain a wider and new set of values. Additionally, he remarks that the ability of an individual company to satisfy the traditional bottom line of profitability and at the same time satisfy the two emergent bottom lines will enhance the market success of that company (Elkington, 1999, p. xi). Figure 1 illustrates the triple bottom line approach. It shows how the interrelationships between the economic, environmental, and social factors combine to produce sustainability.

Economic Bottom Line

In regard to the economic bottom line, companies should do the following to move toward the triple bottom line of sustainability.

- Companies should check if their costs are competitive and expected to stay put, as well as if their profits are sustainable.
- Companies should verify whether the demand for their products and services is sustainable, and also make sure that their rate of innovation can be competitive in the long run.

- Companies should ensure that human capital will support the values of the organization (Elkington, 1999, p.75).

Environmental Bottom Line

The creation of international environmental management standards, such as the ISO 14001 standard, serves as a tool to facilitate the steps to be taken toward the environmental bottom line at the company level. While addressing the environmental bottom line in their values, companies should consider the following aspects.

- Companies should examine the types of natural capital affected by their current/planned activities and also investigate whether these forms of natural capital are sustainable under the practice of their activities.
- Companies should also have a clear understanding about the overall level of stress caused on the environment as well as determine whether these types of environmental stress are sustainable and likely to affect the balance of nature significantly (Elkington, 1999, p.80).

Environmental justice is a crucial aspect that has become the biggest challenge for business-as-usual practices. It is important but, at the same time, difficult to measure; it stands between the environmental and social bottom lines. Elkington (1999, p.83) suggests that many companies have been intimidated by environmental justice issues referring to the way society is somewhat disadvantaged by environmental problems. Therefore, companies should take into account the externalities, such as pollution and emission of toxic gases, generated by their activities in order to avoid complications – complaints or even lawsuits – that can diminish performance and lessen the value of their business. Thus, the environmental bottom line brings a new form of evaluating the influence of companies on environmental problems by relating their performance to the amount of emissions/waste produced per unit of a volume/value of production (Elkington, 1999, p.82). For instance, an oil company

associates its environmental performance with each barrel of oil produced. By using this approach, said company can demonstrate to consumers and stakeholders the environmental impacts of its activities.

Social Bottom Line

The social bottom line involves the relationships between companies and their employees/stakeholders as well as companies and society. When companies start considering the social bottom line in their values, they should think about the following.

- Companies should be able to find the critical forms of social capital in terms of their capability to become sustainable corporations.
- Companies should also develop the role of their businesses in terms of sustaining human and social capital (Elkington, 1999, p.86).

Accounting for the Triple Bottom Line

Given the aspects of the three components of the triple bottom line, Hart (cited in Elkington, 1999, p.72) declares that “the more we learn about the challenges of sustainability, the clearer it is that we are poised at the threshold of an historic moment in which many of the world’s industries may be transformed.” Many companies have been restructuring their industries to reestablish natural balances, such as the production of heat and light without any carbon emissions. However, as the triple bottom line has shown, sustainable corporations need to go beyond environmentally friendly technologies and radically address new views of business values, social equity, and environmental justice. Therefore, companies must be convinced that society, economy, and environment are the triad of factors that will decisively affect the performance of businesses in the future. For that reason, companies moving toward sustainable practices should overtly include these three factors in their business practices.

1.2. Putting Sustainability into Effect: An Introduction to the Sustainability Assessment

Tools

In the beginning of the 21st century, many companies increased their concern with the social and environmental impacts of their businesses. The foremost contributor to these changes in companies' behavior across the world is the Dow Jones Sustainability Index World (DJSI). Since it was launched in 1999, this index has been shaping a new wave of social and environmental investments in Brazil and in the rest of the world (Mundo Sustentável, 2007, p.1). The creation of a simple sustainability index, based on the New York Stock Exchange (NYSE), has influenced and improved the institutional images of companies, increased the demand for well-structured social-environmental projects, and promoted societies' quality of life. The positive outcomes from the Dow Jones Sustainability Index motivated the creation of three more sustainability indices: one in London, one in Johannesburg, and another one in São Paulo (ISE). Similarly important are the creation of other sustainability assessment tools, such as the CEBDS and the ISO 14001. They were created before the DJSI World, and they are not limited to the evaluation of those companies listed in stock markets. For this reason, they can provide opportunities for more companies to be recognized by their sustainable practices. Together, these assessment tools exemplify the growing tendency to implement sustainability within corporations.

Companies concerned with their reputation, credibility, and recognition in national and international markets find that profits are not enough. They are increasingly investing in social-environmental projects. According to John Prestbo (Mundo Sustentável, 2007, p.1), editor and executive director of Dow Jones Indices, the DJSI World's criteria basically evolve around practicing sustainability as an integral part of a company's businesses strategy. Interestingly, Prestbo declares that companies that enter the DJSI World are not expected to have their stocks values raised immediately, instead, he emphasizes that the DJSI World is more related to a reputational gain and a reputational advantage over competitors. "I think that the companies that do practice sustainability are good for the communities that they

operate in and good for the countries they operate in, because they help raise a general standard of excellence” he asserts.

Bringing Prestbo’s statements to a broader view, it can be said that sustainability issues, whether related to environmental or social issues or corporate governance, have to be built into the companies’ basic businesses strategies. Companies which do that the best are the ones that are recognized and valued by stakeholders/shareholders. Such companies are the ones likely to get listed in the sustainability assessment tools. Prestbo (Mundo Sustentável, 2007, p.1) also argues that Brazilian companies have shown a lot of leadership in practicing sustainability and a couple of them (Itaú and Cemig) have been in the DJSI World since 1999. But he highlights that given the size of the Brazilian economy, more Brazilian companies should take part in the annual survey.

2. AN EXAMINATION OF THE SUSTAINABILITY ASSESSMENT TOOLS

This portion of the paper provides an individual description of each sustainability assessment tool. The four sustainability assessment tools that are analyzed are the following:

- The Dow Jones Sustainability Index World (DJSI World);
- The Corporate Sustainability Index - Bovespa/ Índice de Sustentabilidade Empresarial da Bovespa (ISE);
- The Brazilian Enterprise Advice for the Sustainable Development/ Conselho Empresarial Brasileiro para o Desenvolvimento Sustentável (CEBDS); and
- The International Organization for Standardization (ISO) 14001 Management.

Although the sustainability approaches of the assessment tools differ from each other, the four sustainability assessment tools were created with the purpose of promoting sustainability among businesses. Each, in its own way, has encouraged companies to put their efforts

toward a more sustainable path through the requirements that each has to get companies listed.

2.1. Dow Jones Sustainability Index World (DJSI World): The Stock Market

Sustainability Indicator of the World

What is DJSI World?: It is the world's first financial benchmark tracking financial performance of leading companies in regards to corporate sustainability (SAM Group, 2008, p.4b). Companies that are selected to participate in the DJSI have the best performance in regard to economic, environmental, and social practices and they are also the largest ones in terms of free-floating market capitalization in their sectors. At present, the DJSI World has 320 listed companies from 27 countries.

Need to launch the index: Sustainability was a known ingredient in European politics for many years and a number of companies had expressed an interest in having a benchmark for sustainability. Consequently, the Dow Jones Indices – a leading global index provider – found a sufficient demand for a sustainability index back in the 1990s and launched the DJSI World in 1999 (DJSI, 2008, p.5).

Definition of sustainability: Basically, the DJSI World acknowledges companies that are industry leaders in the aspects of the triple bottom line. These companies should be able to create long-term shareholder values by managing sustainability related opportunities and risks through an outstanding strategy. (SAM Group, 2008, p.16b).

Foundation of the index: SAM's internationally recognized leading corporate assessment methodology is the foundation for the DJSI World. The "Best-In-Class" approach is used as a tool to help identify best practices across the economic, environmental, and social aspects of corporate sustainability (SAM Group, 2007, p.1).

Institutions responsible for managing the DJSI World: There are two institutions, Dow Jones & Companies and SAM Group (DJSI, 2008, p.43).

Costs: There is no charge for the companies that are invited to take part in the SAM assessment (SAM Group, 2008, p.3a).

Maximum number of participants: The participation of companies in the DJSI World is limited to the target selection for each of the eligible DJSI World sector – 10% by number (DJSI, 2008, p.28) ¹.

Identification of companies: The invitation to eligible companies for participation in SAM's corporate assessment depends on two criteria: (a) companies must be a component of the Dow Jones Wilshire Global Index (DJWGI) and, (b) components must have their investable stock universe consisting of the largest 2,500 companies in terms of market capitalization (DJSI, 2008, p.18) ².

Participation of companies: Companies participating in the annual review have to fill in SAM's questionnaire and submit it, along with required documentation. SAM assigns points to each question and to the answers that each company gives to those questions. At the end of the process, the points are added up and the companies with the highest scores in every sector are selected for the index.

Exclusion of companies: During the time a company is listed in the index it can be removed from the DJSI World if it no longer fulfills the requirements of the index.

Advantages to companies listed on DJSI World: By being listed in the index, companies are likely to gain advantages related to: (a) sustainability investing, (b) value creation, (c) reputation and brand, (d) benchmark feedback, (e) DJSI membership logo, and (f) sustainability trends (SAM Group, 2008, p.2a and DJSI, 2006, p.1).

¹ E.g. if a sector has 100 companies, 10 companies – the ones that represent 10% in terms of the best performance in economic, environmental, and social criteria – of that sector are chosen for the index.

² The investable stock universe of a company is its market capitalization.

Participation of Brazilian companies: The annual review of DJSI World for 2008 was released on September 4, 2008. Eight Brazilian companies are listed: Aracruz, Bradesco, Itau Holding Financeira, Cemig, Itaúsa Investimentos, Petrobrás, Usiminas, and Votorotim Celulose e Papel (VCP). This number is relatively small given the universe of Brazilian companies that could be considered. According to Sybille Borner (Amanhã 2008:1), the percentage of Brazilian participation is a little bit smaller than other countries. She asserts that in developed markets, such as Europe and Japan, at least one fifth of companies are participants in the DJSI World. In Brazil, however, the average is one-sixth. There are two factors that work against the participation of Brazilian companies in the DJSI World. The first one is the small number of Brazilian companies listed on the NYSE and the second is the language barrier (Amanhã, 2008, p.1). Often some companies are not able to express their reports and practices in a clear way due to the language barrier, making it difficult to participate in the index. In Brazil, the DJSI World influenced the creation of the Bovespa's Corporate Sustainability Index (ISE) in 2004, which has served as venue for recognizing Brazilian companies (Mundo Sustentável, 2007, p.1).

2.2. The Corporate Sustainability Index (ISE): The Stock Market Sustainability Indicator of Brazil

What is ISE?: The Corporate Sustainability Index (ISE) was inspired by the good results of the DJSI World. The ISE is a sustainability index that serves to position Brazilian companies in terms of long-term economic, social and environmental performance. This index is the first of its type to take place in Latin America and it is expected to serve as a model to other developing countries concerned with introducing a sustainability index (IFC, 2005, p.1).

Need to launch the index: Globally, the demand for socially responsible investments has been increasing and currently they are popular in the stock markets such as the NYSE. Sustainable companies produce value for investors in the long-term because they are better prepared to

face economic, social and environmental risks. In Brazil, for example, this demand has been fortified and it tends to increase and consolidate rapidly (Bovespa, 2008, p.3b). As a result of this trend, BOVESPA, along with other institutions, launched the ISE in December of 2005 to serve as a reference for the socially responsible investors.

Definition of sustainability: Sustainability is defined as the long-term commitment of companies to higher standards on corporate governance, economic, environmental, and social performance. It concerns three long-term aspects: the companies' relationship with employees, suppliers, shareholders, and communities, the environmental impact of companies' activities, and the management of corporate governance in terms of economic, environmental and social issues.

Foundation of the index: The ISE index based its values on the international triple bottom line concept. In its analysis, the index also added performance indicators related to general aspects of the company, characteristics of products, and corporate governance (Bovespa 2008:3b). The index uses a cluster analysis to evaluate the answers that companies give in the questionnaire and classify the selected companies qualified for the ISE.

Institutions responsible for managing the Index: BOVESPA along with other institutions, such as Getúlio Vargas Foundation (CES/FGV).

Costs: Companies have to pay a registration fee of R\$ 3,000 or approximately 1,630 USD dollars – value based on the year of 2007/2008. Also, an annual fee of R\$ 10,000 or, using an exchange rate of 1USD=R\$1.84 (O Globo, 2009), approximately 5,435 USD dollars for the right to use the ISE logo (Bovespa, 2008, p.23d).

Maximum number of participants: The maximum number of companies in the ISE portfolio is 40. However, fewer companies may comprise the portfolio if, among the eligible universe, there are not 40 companies with high enough standards of sustainability according to ISE

selection criteria. This is the case for the current portfolio, which has 30 Brazilian companies. See Figure 2.

Identification of companies: Companies are invited to be listed in the ISE, but they must be included in the BOVESPA and have liquidity assets among the 150 most traded assets over the 12 months prior to the evaluation. The shares of such companies have to be traded in at least 50% of all trading sessions in the 12 months prior to the evaluation process.

Additionally, companies must satisfy the sustainability criteria established in the annual questionnaire. The final portfolio of the ISE will represent the cluster of companies responsible for the best sustainable practices in the dimensions of the questionnaire (Bovespa, 2008, p.5b).

Participation of companies: Invited companies are required to answer the sustainability questionnaire and submit associated documents. The ISE Board chooses the companies that are better classified in the aspects of relationship with employees, suppliers, and community, corporate governance, and environmental impact of activities (Bovespa, 2008, p.14c).

Exclusion of companies: While listed in the index, companies can be removed from the ISE if: (a) Company does not satisfy some of the inclusion criteria; (b) does not pay; (c) fails to meet the sustainability criteria specified in the questionnaire; (d) goes into judicial receivership or bankruptcy; (e) has significant alteration in the levels of sustainability and social responsibility; or (f) if a considerable portion of shares are withdrawn from circulation on the market, in cases such as public offerings. Necessary adjustments will be made to ensure continuity in the index in all cases (IFC, 2005, p.1).

Advantages to companies listed in the ISE: The included companies gain reputation and credibility in the market by being a company with corporate responsibility; they are recognized as companies that consider sustainability in the long run; and companies that take responsibility for their impact on the environment, and create ways to reduce such impact.

Companies listed on the index have an advantage over their competitors who are not listed. By being more transparent, included companies provide more credibility for investors, and as a consequence reduce their cost of capital. The creation of the ISE stimulated the development of ethical investment funds interested in buying shares of the companies listed on the index. In short, the ISE is considered as a stamp of excellence in the Brazilian market (Bovespa, 2008, p.38c).

2.3. The Brazilian Enterprise Advice for Sustainable Development / Conselho

Empresarial Brasileiro para o Desenvolvimento Sustentável (CEBDS)

What is CEBDS?: The Brazilian Enterprise Advice for Sustainable Development (CEBDS) is a non-profit organization. It was launched in 1997 through a private initiative as a component of the network of advice associated with the World Business Council for Sustainable Development (WBCSD) (Azevedo, 2006, p.80). The CEBDS is known as a potential voice of the corporate sector on the issues that concern business performance and its relationship with the government and society in Brazil. This organization has consolidated its position as a revolutionary leader in the transformation of the traditional economic model into a new standard of sustainable business performance and it is a synonym for credibility. The organization participates as an active member in the forums, events, and councils associated with several issues regarding the achievement of the sustainable development in Brazil. It also had a decisive participation in the approval of the ISE (CEBDS, 2008, p.33a).

Need to launch: The CEBDS was created to develop a Brazilian institution to be associated with the WBCSD. The goal of this organization is to guarantee the necessary political influence to put together a new concept for economic activity in Brazil.

Definition of sustainability: The sustainability concept in this organization is associated with the idea of sustainable development – a concept that aims to reconcile economic, environmental, and social necessities without undermining the future demands of any of these

three dimensions (CEBDS, 2007, p.1). Sustainable development in this context serves to promote innovation, new technologies, and new markets for companies interested in taking a sustainable path to achieve global competitiveness

Foundation of the organization: Sustainable development is the core principle for guaranteeing a high quality of life for future generations without weakening economic growth and access to natural resources. For the CEBDS, the environmental, economic, and social dimensions are interlaced and inseparable. In addition to sustainable economic performance, corporate sustainability from this organization's perspective is also based on the concept of eco-efficiency and corporate social responsibility. Additionally, this organization believes that communication is a potential key to the implementation of sustainability. In this regard, the CEBDS serves as a space to promote companies' discussion of the complexity that the related sustainability-issues involve and to represent corporations in the dialogue about sustainable development with public institutions and society (Azevedo, 2006, p.80).

Institutions responsible for managing the organization: The CEBDS administrative board is composed of some of the associated companies.

Costs: There is a monthly fee, which is the same for all the associates. However, the CEBDS does not report how much it is.

Maximum number of participants: There is not a established maximum number of companies. Currently 50 companies are members of this organization. See Figure 3.

Identification of companies: There are two ways in which companies can be identified to become members of this organization. The CEBDS can contact them – in this case, such companies are usually big and leading companies in their sectors and have been presenting some sustainable practices in the past years. Or, companies can contact the CEBDS and ask to be a member. In both cases, the CEBDS board does a check up about the companies'

background and accomplishments in terms of sustainability, performs research, and obtains evidence about companies' sustainability performances.

Participation of companies: To participate in this index, companies must fill out a registration form. The CEBDS has 30 days to decide if a company is qualified.

Exclusion of companies: Listed companies can be excluded if they do not pay their monthly fee, or if they behave contrarily to the CEBDS' principles.

Advantages to members of CEBDS: Associated companies are likely to: (a) be differentiated from their competitors, and also maintain a superior position as socially and environmentally responsible companies; (b) influence public policy issues related to sustainable development in both broader and industry-specific perspectives; (c) benefit from the networks that this organization provides, such as contacts with large corporations, different governmental institutions, non-governmental organizations, and academic institutions; (d) share best practices through an exchange of information with national and international organizations; (e) have the latest information about corporate sustainable development trends, (f) access the top information related to corporate social responsibility, eco-efficiency, climate change, biodiversity, and biotechnology; (g) educate and enable executives to face the challenges imposed by sustainability; (h) give visibility to the innovative actions undertaken by the associated companies; (i) stimulate the constant improvement of the associated companies as they move toward a sustainable path; and (j) ensure the existence of the companies in a new worldwide economic standard (CEBDS, 2007, p.1).

2.4. International Organization for Standardization (ISO) – ISO 14001: Environmental Management System (EMS)

What is ISO 14001?: First published in 1996, the ISO 14001 is an international standard that addresses a set of requirements for implementing an Environmental Management System

(EMS). The EMS applies to the environmental aspects identified by organizations that can be controlled and influenced by the norms of the ISO 14001 (ISO, 2008, p.1b). Since its creation, the ISO 14001 has rapidly become the most important environmental standard in the world.

The EMS assists companies to (a) meet the environmental legislation, (b) establish environmental objectives to all the relevant sectors of any organization, and (c) bring about new objectives after the previous ones had been reached. However, it is relevant to mention that the norms of the ISO 14001 do not, by themselves, state specific levels of environmental performance criteria. If this were the case, then these norms would have to be specific to each business activity, which would require a specific EMS standard for each business (ISO, 2008, p.1a). That is not the intention since it aims to apply to all types of businesses, not being restricted by the size or the type of industry.

Need to launch the ISO 14001: The development of the ISO 14000 norms was inspired by the United Nations Conference in Stockholm in 1972, in which the issues related to human environment were brought to light. Another event that influenced the creation of the ISO 14001 was the Brundtland Report in 1987. This report warned all countries of the necessity of sustainable development through economic development that could be sustained without exhausting natural resources and damaging the environment (AEP, 2004, p.5). In the 1990s, the ISO recognized the necessity to normalize tools of environmental management (AEP, 2004, p.1). In this context, in 1993, the ISO launched the technical committee (TC 207) with the intention to define norms related to environmental issues, such as the ISO 14001.

Definition of sustainability: The ISO 14001 does not have any specific definition associated with sustainability, sustainable development, or the triple bottom line. The ISO 14001 is focused on the environmental dimension for which it proposes a set of requirements to be implemented in the operational processes of companies to emphasize the potential benefits of improving their environmental performance. On the other hand, it also suggests that the

implementation of an appropriate EMS in the long run is likely to bring economic and social benefits.

Foundation of the assessment tool: The ISO 14001 relies on the important role played by the EMS as a tool to monitor the environmental performance of companies from different industries. The whole company must be committed to change its processes and put efforts toward the implementation of an EMS. To put its objective into effect, the ISO 14001 uses the same approach used in the implementation of ISO 9000, called PDCA – Plan, Do, Check, and Act – based on the concept of continuous improvement.

Institutions responsible for managing the assessment tool: The Brazilian association, Associação Brasileira de Normas Técnicas (ABNT), represents Brazilian interests in the international meetings focused on the development of the ISO norms and translates the ISO published norms (Pombo and Magrini, 2008, p.5). Inmetro is the Brazilian accreditation organization in charge of providing credentials to bodies – 20 so far – operating assessment and certification in conformity with ISO 14001 standards in Brazil.

Costs: The costs for the certification vary according to the dimension, complexity, and the type of system implemented by companies. Usually, the high costs for adopting the ISO 14001 norms are likely to be a barrier for smaller companies that cannot afford them. On the other hand, as stressed by Miles (cited in Pombo and Magrini, 2008, p.3), the companies that cannot immediately afford the high costs could start with a basic/general environmental system, which gradually could become more sophisticated. The real prices of assessing the EMS of companies are not publicly available. The time frame to obtain the certification varies from 6 to 24 months (AEP, 2004, p.4).

Maximum number of participants: There is no limit on the number of companies that can have the ISO certificate across the world. Actually, a single company can have more than one ISO 14001 certificates or a multi-site certificate.

Identification of companies: The ISO 14001 is voluntary and it can be applicable to any company from any industry that desires to establish, implement, maintain and improve an EMS (ISO, 2008, p.1b). The size of a company and its level of representation in its correspondent sector are irrelevant in the assessment of its EMS and thus, do not limit any company to get the certification. Usually, the companies that look for this type of assessment are medium to large ones – due to the high costs involved – and are likely to be companies whose activities impact the environment directly. In Brazil, the industries that have the highest number of the ISO 14001 certifications are the automotive, petrochemical and chemical, and services industries (Pombo and Magrini, 2008, p.2).

Participation of companies: The participation of companies in getting ISO 14001 Certification depends on the EMS that companies develop. Once the EMS is created, then companies have the opportunity to contact and hire one of the bodies doing assessment and certification for ISO 14001. The entity performs the assessment and evaluates whether or not the EMS of a particular company is in conformity with the ISO 14001 requirements. If so, then the company will get the ISO 14001 certificate, otherwise necessary adjustments should be done. The implementation of an EMS can be extended to the whole company or only to one of its specific operations. The point is to cover with an appropriate EMS all the activities of a company that are likely to harm the environment.

Exclusion of companies: The certificates can be suspended or cancelled if: (a) companies do not execute the periodic audits; (b) do not pay the entity that assessed their EMS, (c) the results of the periodic audits do not satisfy the requirements addressed in the ISO 14001; and (d) companies do not implement the necessary corrective actions.

Outcomes of ISO 14001 in Brazil: Currently, more than 2300 Brazilian companies have ISO 14001 certification (Pombo and Magrini, 2008, p.7). Among the Brazilian companies, Petrobrás stands out with the largest number of certificates. This company alone has 41

certificates in accordance with ISO 14001 (Pombo and Magrini, 2008, p.11). It is pertinent to mention that companies that already have the ISO 14001 certificate, such as Petrobrás, are suggesting to their suppliers that they also put time and effort toward implementing an EMS in accordance with the ISO 14001 norms. Therefore, this can be a good way to increase the number of companies with ISO certification, and consequently collaborate to increase environmental quality.

Advantages to companies certified according to the ISO 14001 norms: According to the ISO 14001, the companies that get its certification are likely to have the following advantages: (a) fortifying a company's image and the participation in the market; (b) preserving natural resources and energy; (c) developing a well-structured production process capable of improving production efficiency and environmental performance and decreasing costs; (d) developing products and technologies that are more environmentally friendly; (e) having better control of the environmental risks and reduction of associated costs through the monitoring that guarantees risk prevention and/or minimization; (f) providing better communication and relationship with employers, stakeholders, distributors, suppliers, government, and society; (g) improving work conditions; (h) meeting the certification criteria of a company's clients; and (i) improving companies' and society's awareness of the importance of environmental friendly behavior, among others. These advantages make the time and money costs of implementing the EMS worthwhile in the long run (Denardin and Vinter, 2000, p.3 and AEP, 2004, p.3).

CONCLUSION

At the end of this paper, it is important to recall and stress that the focus of it has been to describe four sustainability assessment tools. Although not all Brazilian companies are eligible to be participate in these assessment tools – because they are not big enough for

example – they should not disregard the valuable information provided through these comparisons. An understanding of each index can help managers of companies choose the steps they should take as they approach sustainability in their businesses – and also try to be listed, if they are eligible. Additionally, it is critical to acknowledge that all the data provided in this work is based on information provided by the assessment tools and associated organizations. No independent assessment of a company was performed by the authors. While this paper has been limited to a description of four assessment tools used by Brazilian companies attempting to validate the sustainability of their business practices, it would also be beneficial to conduct a comparative analysis of these tools and evaluate their real potential to increase companies' competitive advantage. This will require further research, probably incorporating a thorough analysis of the sustainability approach of an individual company in comparison to its competitors.

Although the idea of sustainability has been brought into the business setting over the past 20 years, a lot of changes are still taking place. Approaches, actions and strategies still need to be improved. Hence, some of the companies currently listed in the assessment tools may not be as sustainable as they appear. The description of the assessment tools did not involve an analysis of the documents or information provided by any individual company. For this reason, there is no conclusive data to assert that listed companies are sustainable. However, the limitations of this study foreshadow potential topics to be developed in future research.

Currently, there is no perfectly sustainable company or a perfect sustainability index. In fact, the concept of sustainability in business is still very new and evolving. Some actions have been taken, and the assessment tools serve to illustrate them. Nonetheless, such assessment tools are not perfect, nor are the listed companies. Given this description of the assessment tools, it should be stressed that a specific set of requirements must be met in order

to consider a company sustainable today. In this context, the assessment tools themselves serve as a measure to promote sustainability in business.

Companies, in Brazil and elsewhere, should be encouraged to follow a more sustainable path –taking into account their own reality and limitations. Having a stronger awareness of the benefits of being listed by sustainability-based indices (such as DJSI-World and ISE), of participating in sustainability-related organizations (such as CEBDS), and carefully examining their internal process from an environmental perspective (via ISO1400 certification assessment) should stimulate more companies to behave more sustainably. Thus, although the journey toward becoming a sustainable company is still very uncertain and long, it is not impossible.

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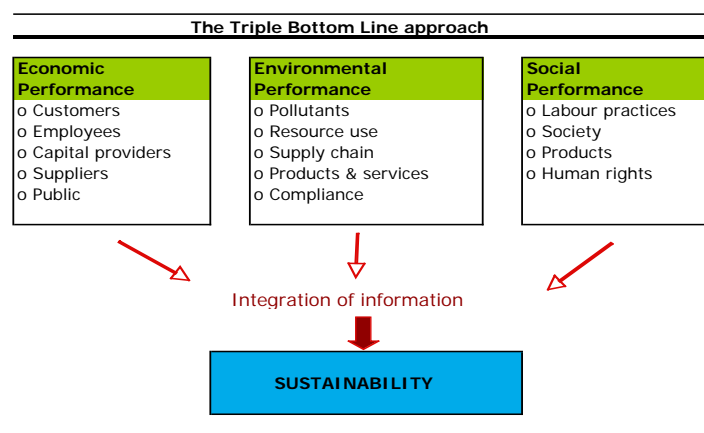
Figures

Figure 1. The Triple Bottom Line

Figure 2. Companies Listed in the ISE (Sectors)

Figure 3. The Current 50 Member Companies Listed in the CEBDS

Figure 1. The Triple Bottom Line.



Source: Adapted from Elkington. Found in Business Ethics.

Figure 2. Companies Listed in the ISE (Sectors)

BRAZILIAN COMPANIES (30)	SECTORS (13)	SECTOR (%)
1 DASA - DIAGNOSTICOS DA AMERICA S/A	ANALYSIS/DIAGNOSTIC	0.638
2 ELETROPAULO METROP. ELET. SAO PAULO S/A	ELECTRIC ENERGY	
3 CESP - CIA ENERGETICA DE SAO PAULO	ELECTRIC ENERGY	
4 TRACTEBEL ENERGIA S/A	ELECTRIC ENERGY	
5 CPFL ENERGIA S/A	ELECTRIC ENERGY	
6 ELETROBRAS - CENTRAIS ELET. BRAS. S/A	ELECTRIC ENERGY	
7 CEMIG - CIA ENERGETICA DE MINAS GERAIS	ELECTRIC ENERGY	
8 COELCE - CIA ENERGETICA DO CEARA	ELECTRIC ENERGY	
9 LIGHT S/A	ELECTRIC ENERGY	
10 CELESC* - CENTRAIS ELETRICA DE SANTA CATARINA	ELECTRIC ENERGY	
11 AES TIETE S/A	ELECTRIC ENERGY	
12 EDP - ENERGIAS DO BRASIL S/A	ELECTRIC ENERGY	13.945
13 BANCO DO BRASIL S/A	FINANCIAL INSTITUTIONS	
14 BANCO UNIBANCO S/A*	FINANCIAL INSTITUTIONS	
15 BANCO ITAU S/A	FINANCIAL INSTITUTIONS	
16 BANCO BRADESCO S/A	FINANCIAL INSTITUTIONS	54.695
17 ODONTOPREV*	HEALTH SERVICES	0.271
18 PERDIGAO S/A	MEAT/DERIVATIVES	
19 SADIA S/A	MEAT/DERIVATIVES	2.872
20 VOTORANTIM CELULOSE E PAPEL VCP	PAPER AND PULP	
21 SUZANO PAPEL	PAPER AND PULP	1.464
22 NATURA	PERSONAL CARE PRODUCT	1.086
23 BRASKEM	PETROCHEMICAL	0.555
24 DURATEX*	SANITARY METAL FITTINGS	0.457
25 GERDAU MET	STEEL INDUSTRY/METALLURGY	
26 GERDAU	STEEL INDUSTRY/METALLURGY	8.081
27 TIM PART S/A*	TELECOMMUNICATION	
28 TELEMAR*	TELECOMMUNICATION	6.743
29 EMBRAER - EMPRESA BRASILEIRA DE AERONAUTICA	TRANSPORTATION/MATERIAL	2.996
30 SABESP - CIA SANEAMENTO BASICO EST SAO PAULO	WATER/SANITATION	1.288
* Companies included in the index on November 2008.		
Simultaneously, Aracruz, CCR Rodovias, Copel, Iochpe-Maxion, Petrobras and WEG were excluded from the ISE.		

Source: From BOVESPA, 2008, p.1a

Figure 3. The Current 50 Member Companies Listed in the CEBDS

Associated companies - CEBDS	
1	3M do Brasil Ltda.
2	Abралatas - Associação brasileira de latas
3	AB Ltda.
4	Alcoa Alumínio S.A.
5	Amanco do Brasil S.A.
6	AmBev - Companhia Brasileira de Bebidas
7	Aracruz Celulose S.A.
8	Arcelor Brasil
9	Banco ABN AM RO Real
10	Banco do Brasil
11	Banco Itaú
12	Banco Bradesco S.A.
13	Basf
14	Bayer S.A.
15	Bolsa de Mercadorias & Futuros - BM & F
16	BP Brasil Ltda.
17	Brasken S.A.
18	Caixa Econômica Federal
19	Cia. Energética de Minas Gerais - CEMI G
20	Cia. Brasileira de Petróleo Ipiranga
21	Cia. Siderúrgica Paulista - COSIPA
22	Companhia Vale do Rio Doce
23	Coca-Cola
24	Copesul - Companhia Petroquímica do Sul
25	Du Pont do Brasil S.A.
26	EcoSecurities Brasil Ltda.
27	Eletronuclear S.A. - Eletronuclear
28	Energias do Brasil
29	Furnas - Centrais Elétricas S.A.
30	Gerdau Açominas S.A.
31	GDK S.A.
32	Holcim Brasil S.A.
33	Lorentzen Empreendimentos S.A.
34	Menezes, Lopes, Dessimoni e Abreu Advogados
35	Michelin
36	Natura Cosméticos
37	Nestlé Brasil Ltda.
38	Organizações Globo
39	Organização Odebrecht
40	Plantar S.A. - Planejamento, Técnica e Adm. de Reflorestamentos
41	Petróleo Brasileiro S.A. - Petrobras
42	Philips
43	Shell Brasil S.A.
44	Solvay do Brasil Ltda.
45	Souza Cruz S.A.
46	Syngenta Seeds Ltda.
47	Tristão Comercial e Participações S.A. (Grupo Tristão)
48	Usiminas - Usinas Siderúrgicas de MG S.A.
49	Varig S.A. (Viação Aérea Rio Grandense)
50	Votorantim Participações

Source: From CEBDS, 2008, p.76b