

## **DISCLOSURE OF ENVIRONMENTAL INFORMATION BY COMPANIES LISTED IN SUSTAINABILITY INDEX– ISE**

**Marcos Antonio de Souza**

Doctor in Accountancy – FEA/USP

Professor of Masters Degree in Accountancy of UNISINOS

[marcosas@unisinos.br](mailto:marcosas@unisinos.br)

**Kátia Arpino Rásia**

Mastering in Accountancy by UNISINOS

**Flávia Verônica da Silva Jacques**

Mastering in Accountancy by UNISINOS

**ABSTRACT** - The main purpose of this article is the analysis of environmental information showed in Financial Statements of the partaking companies in the stock book of Sustainability Index – ISE, from São Paulo Stock Exchange – BOVESPA, on Electric Energy, Chemical & Ironworks and Metallurgy sections during the period between 2007 and 2008. The analysis of the Financial Statements published by the 13 researched companies had the purpose to verify which environmental information is showed and how it is presented. The motivation of the study comes from the importance of the disclosure of environmental as a way to account for all the stakeholders, aiming at the correct analysis of the environmental by society, for instance, the captivation of new investors. The current study classifies itself as applied, exploratory and descriptive. It is about a documental research related to proceedings of collected and qualitative data in the analysis. The main results point that the Social Balance is used by all the companies in order to spread environmental expenses by presenting specific indicators. The Administration Report comes after and it is also used by most part of companies to this aim. Despite the disclosure of the companies' involvement, it is observed that the application of environmental indicators is still explored in these sections.

**Keywords:** Environmental Management. Environmental Accountability. Accounting Disclosure.

## 1 INTRODUCTION

### 1.1 Contextualization of the theme

The uncontrolled exploration of environmental resources by great industries during the process of technological development since Industrial Revolution gave start to great considerations from part of the society in general. Organizational strategies have searched for impact reducing of that development in the environment, as a challenge of uniting social responsibility actions, sustainable development, conscious consuming and the reaching of companies' goals.

In Dalmoro, Venturini and Pereira (2009), the concentration on the indiscriminate search of some companies in order to reach short term financial results break out, in some moments, huge ecological disasters. For the authors, the companies introduced in this scenario jeopardize their market survival, affecting their relationship with suppliers, clients, employees, society and other stakeholders, favoring their competitors.

The main elements of social capital mentioned by Braga (2007), on private initiative are concentrated on the human being, technology and environment and in a restricted view; it involves water, air, soil, fauna and flora. In relation to the repercussion in market, the study made by Dalmoro, Venturini and Pereira (2009) shows that the thought out products with ecological and social concernment aggregate commercial value to the entity. The activity of production and facilitation of the commercialization of products with the intention of satisfying the human needs and causing the minimal impact to environment involves modified

products and changes in the process of production as well. These short term changes raise the costs at the rate of adaptation to new technologies, however their advantages will be considerable in a long term period.

According to Hansen and Mowen (2001), the responsible environmental management is an important focus to many companies. Actually, many of them spend considerable amounts of resources each year on environmental activities. They rebound that environmental decisions are often made only to perform environmental resolutions. Nevertheless, they weigh that a coming up pro-active approach means that the management of environmental costs is becoming a high priority and intense interest subject, mainly in function of sustainable continuity businesses.

As a matter of consequence, the voluntary disclosure of environmental investments became a routine in many organizations not only to perform resolutions, but mainly to demonstrate the environmental concern and the social responsibility of the company. Despite this, Saunders and McGovern (1997) complement by debating that ecological marketing has started to be a conditioning factor to business market, or, in other words, operating with suitable environmental practices without offering quality and good prices to customers.

In this context of spreading, Monteiro and Ferreira (2007) detaches that the role of accountability is to show up information about facts and internal/external events to the company, which can affect the environment and patrimony of the organizations. The disclosure of this information matches with the goals and principles of accountability and it is in consonance to the principles of social corporative

responsibility which proclaims ethics on business conduction, the transparency on relationship among the stakeholders and the compromise of the company with sustainable development.

This way, the disclosure of environmental information through accounting reports makes itself necessary because it is able to cause impact in the economical and financial situation of a company, as well as to forward a positive image before the capital market, clients, suppliers, society etc.

## 1.2 Objective and justification of the current study

In view of the prospects of this disclosure, this study has as objective to analyze which is the amplitude of environmental information showed up on the Financial Statements of the partaking companies in Index of Sustainability – ISE, from São Paulo Stock Exchange – BOVESPA, during the period between 2007 and 2008. Most specifically, the study has concentrated on the analysis of Electric Energy, Chemical & Ironworks and Metallurgy companies.

The circumscription of the study on these segments are based on the recognizing of them as potential polluter activities and users of environmental resources, with levels varied from medium to high, according to the classification given on Law 10.165/00

The justification of this current study relies on the importance of environmental information disclosure as a way of to account for all the stakeholders in order to evidence the social responsibility of the companies on environmental prospect and its sustainability as an economical agent.

So, that informational content represents more a referential of sustainable performance of the actions, and it is understood as well by market. This importance is recognized, for instance, on study of Murcia et al. (2008).

Machado, Machado and Corrar (2008) confirm the understanding of Murcia et al. (2008), when they reveal that the companies which adopt conducts environmentally responsible are likely to present better economical results. Botelho (2006) also verified that it has relation between the value of Brazilian companies market, news and information that could evidence social and environmental responsibility. His study has demonstrated that it has positive correlation on company value, as consequence of adoption of social and environmental policies; and negative, due to indirect influences of the non-implantation of them. This way, it is noticed that the relevance of directed studies to investigate the several prospects related to environmental information spreading.

In addition to this introduction, this study includes the section which presents theoretical references that support the development of the theme. Following there is approached the methodological aspects of this research followed by the presentation and analysis of data. Finally, there are the following conclusions and references used in the study.

## 2 THEORETICAL REFERENCES

## 2.1 Historical Context of Environmental Issues

With the objective of establishing a worldwide alliance of cooperation among the countries and searching for deals which respect and protect environment integrity, it was created the United Nations Conference on the Human Environment, passed in Stockholm on June 16, 1972. Dalmoro, Venturini and Pereira (2009) say that United Nations Organization created World Commission on Environment and Development (WCED) with the intention of spreading social and environmental issues also on organizations, by creation of Our Common Future Report (also known as Brundtland Report). This document is responsible for the first official, formal and systematized evaluations on sustainable development.

Obeying the rules established by governments, which came up with the demanding of social manifestations, the companies were obligated to adjust themselves and to concern about replacements for natural resources which were improperly extracted from nature. Besides, rubbish discarding on seas, soil and air must obey patterns and laws, and their negligence can be punished.

A series of events in a global level has been succeeded as a response to the demanding of some organizations and social manifestations. In 1989, Cleaner Production has been introduced by the United Nations Environment Programme (UNEP). Bem e Schneider (2008) bring out that a cleaner production has as purpose reduction of environmental pollution, by reducing wasted residues and lessening the consumption of natural resources, specially the non-renewable ones. In Brazil, since 1995, the National Center

of Clean Technologies (CNTL) is based on Industry Federation of Rio Grande do Sul (FIERGS), with Regional Department of National Service of Industrial Learning of Rio Grande do Sul (SENAI-RS).

On Rio '92 – the United Nations Conference took place in Rio de Janeiro in 1992 and it was created the Agenda 21. According to Malheiros, Phillipi Júnior and Coutinho (2008), this agenda had the purpose of establishing 21 items of environmental orientation to take over the idea of sustainability on all programs of governmental development.

The creation of Kyoto Protocol in 1997 took place in Japan, with the participation of 175 countries, from these ones 84 made a compromise in order to reduce greenhouse effect emission – GEE, which would start in 2005 about the volume of these emissions verified in 1990. However, as Basseto et al (2006) have cleared this up, it was only in 2006 that the protocol was signed by the 55 partaking countries. This longing to formalize the protocol was due to the resistance of the United States to ratify it and this has culminated in their exclusion.

Specifically, in relation to Brazil, the evolution of legal prospect which regulates the interaction of companies with environment should be considered. There are several laws and resolutions regarding environmental preservation, which are mainly coordinated by the Ministry of Environment through the resolutions of National Council for Environment – CONAMA. It is the deliberative organ from National System for Environment – SISNAMA. It was instituted by Law number 6.938/81, which arranges about National Policy for Environment, regulated by Decree 99.274/90 and lately modified by Law 10.165/00. It

should also be considered the regulations of accounting area which states the ways of disclosing environmental information by companies.

NPA 11, which dated of 1996, from Brazilian Institute for Accounters – IBRACON and objectives the connection between environmental nature and details about the acquisitions of Environmental Activities for the actions of environmental preservation and their passive ones to all the users of their accounting demonstrations and the general public. In general, this pronouncement determines that the environmental activities must be presented in titles and subtitles, the immobilized goods, the expenses with research and development, the stocks used in the elimination process of the pollution agents. In item 9, it evaluates as environmental liability every aggression that it has practiced and practices against environment, which consists in investment values necessary to their rehabilitation as well as fines and compensations in potential. In doing so, the companies which do not recognize nowadays and in the near future, the potential duties from the environmental liability will be clearing unreal expenses and profits.

In reason that the environmental position of the company should be an important objective of Accountancy and Administration, and according to NPA 11, it must take place under the praised parameters or by means of a presentation on background notes in order to demonstrate the real environmental policy of the company. For the audit, the auditor must certify that all the environmental liabilities have been mentioned on the accounting pieces and on their background notes (Ecobalance). In case of companies which attack the environment with more

intensity, the examinations must be deepened to make possible the analysis of the risks of compromising of continuity from the audited company.

In case of fusions and incorporation of companies, NPA 11 from IBRACON states that the auditor must require the execution of environmental audit in order to determine the repercussions on the patrimony values involved. Companies acknowledged as environmental polluters which contingencies should be properly identified and reported by the administrators of this company on the elaboration of the Financial Statements must be presented on background notes.

The Brazilian Accountancy Pattern NBT 15, dated from September 6, 2004, of Federal Accountancy Council, establishes proceedings of disclosure of social and environmental information. This information has as objective to demonstrate to the society the partaking and the social responsibility of the entity. The Demonstration of Social and Environmental Information must be performed to the accounting ones with the data related to the current exercise and the last one, in order not to be confused with the background notes.

About the information related to the interaction of the entity with environment, it should be disclosed:

- a. Investments and expenses with maintenance on operating processes to the improvement of environment;
- b. Investments and expenses with the preservation and recovering of degraded environments;
- c. Investments and expenses with the environmental education for employees, outsources, autonomous and administrators of the entity;

- d. Investments and expenses with environmental education for the community;
- e. Investments and expenses with other environmental projects;
- f. Quantity of environmental, administrative and judicial processes sued against the entity.
- g. Values of fines and compensations related administratively or judicially to the environmental matter;
- h. Liabilities and environmental contingencies.

Still, there are the resolutions from the international organs that regulate the patterns which must be used by the companies for the accounting register of environmental information. In doing so, Gonzáles et al (2002) states that the precedents of the environmental disclosure are based on the American standards of Securities and Exchange Commission – SEC and Financial Accounting Standards Board – FASB.

SEC, which was created in 1934, has as purpose to contribute to the efficiency of the market responsible for the protection of investors and the maintenance of the integrity of the American stocks (SEC, 2009). Starting from 1982, SEC has inserted some specific items of environmental disclosure through Regulation S-K, items 101, 103 and 303, determining that the companies spread the effects of the environment legislation which states the discarding of pollutants on environment and the investments already made, the administrative and judicial actions, the administration reports and the financial analysis on the result, the environmental tendencies and uncertainties. It was also added the standard Staff Accounting Bulletin 92

(SAB-92, 1993), which determines how losses predictions should be quantified.

FASB, which was created in 1973, is the main organ of accounting normalization from United States to establish financial accounting standards and its disclosure, with pronouncements of obligatory observance, which were denominated United States Generally Accepted Accounting Principles – US GAAP. The Statements of Financial Accounting Standards – SFAS, number 5 and 143, which were issued by FASB, are dealt with Emerging Issues Task Force pronouncements – EITF, 89-13 and 90-8.

Before FASB, the elaboration of financial and accounting standards was determined by American Institute of Certified Public Accountants – AICPA (FASB, 2009).

In March 1975, SFAS 5 established accounting standards related to contingences, which were determined as a set of uncertainties, which can be understood in relation to the environmental matters. (FASB, 2009).

In 1989, the pronouncement EITF 89-13 - Accounting for the Cost Asbestos Removal was issued by recommending the capitalization of costs incurred by an entity in the treatment of contaminated areas and disposal (FASB, 2009). Already EITF 90-8 - Capitalization of Costs to Treat Environmental Contamination, defines the treatment of costs incurred by companies to contain, neutralize, prevent and remove environmental contamination on present and future, either voluntarily or by force of law (FASB, 2009).

ISAR / UNCTAD was created in 1982 by resolution of the Economic and Social Council of the United Nations - ECOSOC, to undertake studies in order to standardize the accounting practices at the corporate level. The main

objective is to promote international standardization of accounting practices and disclosure of transnational corporations and it is subject to the Division of Transnational Corporations and Investment, an agency of the United Nations Conference on Trade and Development.

Recommendations regarding environmental disclosure by ISAR / UNCTAD concern about the elements that should be recognized in environmental information such as:

- In Financial Statements: the environmental costs, environmental liabilities so that in background notes are arranged information on the criteria used in determining reserves, environmental damage and explanations contingent environmental liabilities.
- In the annual reports there are some considerations to be presented in the Report of the President, appointments and proposed improvements; in reports by business segment, such as environmental performance data, the Report of Directors, as environmental policy, and the Financial Report Operating as legal problems involving environmental issues. It also proposes the creation of a detailed Environmental Report and to synthesize all the environmental information.
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improvements; in reports by business segment, such as environmental performance data, the Report of Directors, as environmental policy, and the Financial Report Operating as legal problems involving environmental issues. It also proposes the creation of a detailed Environmental Report and to synthesize all the environmental information.

According to Paiva (2006) the degree of evolution of environmental consciousness of a nation and its actions will directly reflect the stage where it is the environmental accounting of this country. This shows the correlation between accounting, law and environmental culture of the countries, instilled in actions to protect the environment. Environmental accounting assists in the process of accountability to government and society, providing reliable information and secreted to the outside public, and protect the company and their decisions about new developments, avoiding possible financial burden due to environmental transgressions.

The collection of sustainable development has been inculcated in the global culture so that companies not only respond to environmental calls, but also to social ones, parallel to the interest of providing returns to shareholders.

## 2.2 Environmental Management

The need of environmental management has been grown during decades. Actually, this concerning with the environmental issue took over a strategic position in order to the companies enjoy the benefits generated from their social and ecologically correct conducts. According to Valle (2000) this represents an improvement

on the management processes that precede this ecological awareness, which sought to secure profits by transferring the organizational inefficiencies for the price of the product. Moreover, there was (1) the lack of concern with waste disposal, (2) the postponement of investments in environmental protection and (3) compliance with the law was observed only in what was essential. These factors culminated in an unbridled exploitation of the environment

The uncompromised position of some companies and the lack of concern with environment, has resulted in further depletion of resources and environmental manifestations, from some layers of society, which implied a social responsible behavior. All these events and the pressures of non-governmental organizations, resulted in the creation of laws and regulations to control the creation and establishment of companies. The creation of specific legislation on environmental crime, Law No. 9.605/98 and the selective action of the financial market and consumers, and to establish limits on the exploitation of natural resources, determined to conduct business of environmental responsibility.

For Valle (2000) the management based in environmental awareness is concerned with eliminating inefficiencies to maximize profits, enhance resources by recycling waste and invest in continuous improvement and total quality. The publicity of these attitudes among consumers increases the company's image, especially when they anticipate the rules arising from the environmental laws. In doing so, environmental projects can be seen as a way of business opportunity and to ensure a sustainable competitive advantage. In addition, the measurement and integration of environmental

spending in strategic cost management emerges as a way of ensuring the survival of these companies.

When Faria and Pereira (20008) deal with specific environmental management practices, they address the elimination of losses, both in energy and water consumption, or through the use of waste contributes to improving the competitiveness of enterprises, and it can even generate new business opportunities. For instance, the reverse logistics helps create value for customers at the lowest possible total cost, and is also the easier of integration between the various parties throughout the supply chain. For Faria and Ferreira (2008) Logistics, in general, is understood as managing the flow of materials and information from the origin to its point of consumption, from there, the concern with the environment investigates how the logistics flow reverse can be managed for the collection and recycling of discarded products.

Ferreira (2003) noticed that the main objective of environmental management should be to provide benefits to the enterprise, aiming to overcome and reduce the costs of degradation caused by other business areas. Therefore, the advantages arising from the implementation of environmental management favor the creation of competitive conditions for the companies, strengthening the market where they operate, causing selective actions in part of this market. The environmental management entity will be able to add benefits when it is necessary in order to management assess the operational process of the company and identify the events which cause environmental impacts, seeking to minimize them at least

Paiva (2006) emphasizes that Brazilian companies as well as the other countries



(United States, Canada, England among others) use environmental indicators in order to spread related events as a way to ease the understanding of several users. These indicators (Environmental Performance Indicators - EPI) represent the environmental performance come from productive processes evaluating

environmental tendencies and situations of the company. There are presented by the author (on Box 1 below) eight eco-indicators which make possible to spread the consequences of environmental investments and the level of caution which companies treat their activities before this issue.

Index	Formulation	Causal Relation	Consequences
General Environmental Investments	Prevention Investments	It indicates the proportion between environmental actives and the total ones of the company.	The company positioning before environmental issues on an extensive way.
	Active Total		
Environmental Operating Investments	Prevention Investments	It brings out the evolution of prevention investments in relation to their fabric park.	The concernment with the quality of fabric park.
	Active Immobilized		
Decrease in Patrimony	Environmental Losses	It shows up the decrease in patrimony percentage because of environmental losses.	The disclosure of the caution level with the operations.
	Liquid Patrimony		
Environmental Losses of the company	Environmental Losses	It verifies how much the losses have implied in goods and rights (total investments).	The disclosure of the awareness by means of environmental disasters.
	Active Total		
Environmental Operating Expenses	Environmental expenses	It indicates how much the expenses have represented on operating revenue.	The demonstration of investments on environmental quality.
	Operating Revenue		
Environmental Expenses and Operations	Environmental Expenses	It demonstrates the expenses with environment.	The disclosure of the meaning of environmental awareness.
	Operating Revenue		
Prevention and Value added generated	Total Expenses with Prevention	It relates the expenses in prevention with the total value added.	The disclosure of expenses with environmental prevention before added values.
	Total Value Added		
Remediation and Prevention	Remediation expenses	It indicates the relationship between remediation and prevention.	The disclosure of the attitudes of companies with the environment.
	Prevention expenses		

Box 1: Proposition of accounting eco-indicators.

Source: Paiva (2006, pp.123).

The environmental information managed with specific systems and under the ambit of an environmental management and disclosed by the indicators presented, provides a reliable diagnosis of environmental events that impact the environment inside and outside the organization. However, it is necessary that besides the analysis of the indicators are established objectives

in accordance with the policies adopted by the company.

Teixeira, Parizotto and Lima (2007) fit the Balanced Scorecard (BSC) as a tool of environmental management. According to them, BSC is a tool to measure the organizational performance which, in addition to providing planning short and long term aspects of financial prospects, customers, the learning and

development, and internal processes, including some prospects such as quality, productivity, performance methods, employee satisfaction. The authors complement that this is possible by the BSC also employ non-financial indicators for monitoring and tracking the goals defined within the strategic vision of the company.

Thus, the joint analysis of eco-indicators as well as the use of planning tools, implementation and evaluation of organizational performance related to environmental issues, allows a fairly comprehensive diagnosis for users of this information.

### 2.3 Environmental Accountancy

The companies concern with the environment and the search for adaptation of its procedures in response to these issues have made several searches over the past decades were implemented. They culminated in a series of propositions about the correct use of natural resources, the best way to dispose of, and planning and measurement of expenses, as a way to control the expenses and project corporate image.

The planning and control of environmental costs have become a way of discovering the causes and effects of spending on the environment from the production process of the entire lifecycle of products from its projection to its disposal. For the implementation of this management of environmental costs, become necessary the information generated by accounting, which in its traditional form can provide little in terms of quality of this information. Paiva (2006) designated the term Environmental Accounting as a source of reporting, in order to assist in the preparation of strategic planning, serve as parameters for managing

environmental activities and provide external information (accountability) of these activities. Thus, environmental accounting can be seen as a tool to identify, record and report environmental events, whose reports are used as inputs for decision making.

Garcia et al (2008) states that the disclosure of environmental activity of the company should set revenue and spending on environment. Revenues include environmental gains generated from the methods of prevention and rehabilitation of environmental damage. In this context, it should be considered income environmental sales to customers who restrict their transactions to companies that adopt policies of environmental and social responsibility, enhancing its image and social commitment. Although the expenses are related to inputs, labor and depreciation of equipment used in the process of preserving, protecting and restoring the environment, the environmental liabilities are presented as bonds accounted for, either voluntarily or involuntarily incurred, intended for use in stock control, preservation and restoration of the environment.

In Brazil there is a specific standard that social and environmental information can be shown, what there are models, such as the pattern suggested by the Brazilian Institute of Social and Economic Analyses - IBASE and model of the Global Reporting Initiativegri. With the enactment of Law No. 11.638/2007 the Statement of Value Added - SVA for publicly traded companies became mandatory. As Iudícibus , Martins and Gelbcke (2008) say The Social Report is a demonstration that is intended to make public the position of corporate social responsibility. The main goal of this demonstration is the disclosure of accounting information on economic

performance and financial companies, as well as economic returns and social benefit of society. It provides data to users of accounting information, as to (a) generation and distribution of wealth, (2) quality of life in organizations, (3) promotion of human employees, (4) attitude of companies towards the environment and own community.

The Management Report is another way of environmental disclosure policies and actions. Silva et al. (2007) report that the Management Report has a great deal of information about companies and is used by investors in investment decisions. The Securities Commission - CVM proposes, in its Resolution No. 488 of December 31, 2005, in addition to requirements already determined by Law 6404/76, including the following information in the Management Report: description of the economic organization (business, products, services, human resources), performance analysis, sources and cost reports and other factors related to environmental issues. Article 82, this determination also determines that the Notes of publicly traded companies must provide additional information that has not been indicated in the financial statements when they are necessary for a fair presentation.

About it, Murcia et al (2008) add that the aim to attract socially responsible investors, or even to reduce the cost of funds, it can encourage companies to voluntarily demonstrate their environmental information. Although this perspective seems fundraising, Costa and Marion (2007) has considered that the role of business is ruled by laws whose breach can lead to penalties. Among the possible environmental penalties which is noted that companies incur any penalty environment has found difficulties in

obtaining bank loans and investments from third parties, thereby eliminating their main sources of funding

## 2.4 Environmental disclosure

According to Bridge and Oliveira (2004) companies can adopt different forms of disclosure, but they should provide information on quantity and quality to fit the needs of users of financial statements. The authors complement to ensure that the quality of information provided by businesses, legislators and regulators, as the Federal Accounting Council - CFC and the Law of Corporations, have undertaken efforts to define the information to be submitted. However, not all guidelines are mandatory in character and, consequently, it will not necessarily imply in punishment in case of business non-compliance, becoming more a matter of ethics and corporate responsibility in the dissemination of information.

The importance of accounting information in decision-making process of the foreign investor has been a tonic in the business environment. The present research has shown that transparency of accounting information is a key factor when it is invested in a company (McKinsey & Company, 2002).

Iudícibus (1997) emphasizes the accounting disclosure as an intrinsic commitment to its users and its own goals, and concerns the orderly presentation of quantitative and qualitative information, providing an adequate supply of information to the user.

The disclosure refers to all information which can affect the patrimony of the company and it happens through Financial Statements or management

reports, several available methods to achieve this disclosure.

In doing so, Gonçalves and Ott (2002) emphasize that the methods of spreading are not only summed up to Financial Statements, but also to relevant information which can be diffused through administration report in background notes, bulletins, reunions with market analysts/stockholders among others. Iudícibus (1997), Hendriksen and Van Breda (1999) present analytically the following disclosure methods: (1) Pattern and presentation of Financial Statements; (2) Information in parenthesis; (3) Background notes; (4) Charts and supplemental demonstrations; (5) Audit opinions; (6) Directorship report.

As Sá affirms (2002, pp. 59), “all which is related to the elements used to supply the needs of companies, institutions are of interest to Accountancy as a systematic analysis subject”. So, considering that the companies use natural resources to supply their needs, the environmental impacts caused by their activities are of interest to the society, which is directly affected by them.

The disclosure of environmental society contributes to the transparency of company actions and the correct diagnosis of the organization once that it is possible to identify and measure the real patrimonial situation of the entity, as well as the inherent risks to business. In doing so, when accountancy registers, measures and interprets the inner and external events of the ações empresariais, it contributes to the disclosure and relato of environmental information.

Accounting is inserted in this scenario because an important tool for communicating with society entities, and thus, it accounts disclose

environmental information through corporate financial statements. This view is corroborated by Tinoco and Kraemer (2004), which state that the environmental, ecological and social, present in media, have been doing that accountants and managers start to consider them in management systems and accounting, giving rise to the recognition of environmental accounting.

The companies belonged to ISE adopt disclosure rules for their Financial Statements and management reports and as a result, it is supposed that relevant environmental information should be available. In order to these and other companies firm themselves as socially responsible or ecoefficient ones before the capital market and the society, this disclosure is very important through the Financial Statements related to environment. For Tinoco and Kraemer (2004), tempestive and trustable information about environmental assets and liabilities investments, environmental impacts, among others have a strong demand, because the investors use them to make investment decisions.

Thus, starting from disclosure methods presented by Tinoco and Kraemer (2004), companies started to count on these ways to demonstrate transparency on their environmental actions, adding information appreciated by good market relationship practices, with stockholders and the other ones.

## 2.5 Corporate Sustainability Indicators

These indicators are used as tools of analysis. Therefore, they have the function of synthesize information in order to permit a quick visualization and a precise understanding of the economical and financial situation of a

company. So, they must be carefully structured in order to keep only the essential information. Within sustainability context, the establishment of indicators has as objective to measure the level of strategies implantation according to the purposed goals.

Strobel, Coral and Selig (2004) affirm that sustainability indicators do not have the same characteristics of the traditional ones which measure the economical, social and environmental progress because these ones verify the oscillations of these prospects in an independent way. However, sustainability requires a systemic view with multidimensional indicators focused on the connection among economy, environment and society.

The main sustainability indexes are:

- Dow Jones Sustainability Index – DJSI. It was created in 1999 to analyze the performance of some market leader companies. It evaluates the sustainability strategy of companies and their opportunities management as well. Dow Jones (2009).
- Global Reporting Initiative – report of corporate sustainability
- Sustainability indicators GRI (Global Reporting Initiative) – It is a report on corporate sustainability which was developed by the NGO CERES – Coalition for Environmentally Responsible Economies Programme – UNEP from United Nations Environment Programme – UNEP. The report consists on a series of GRI (Global Reporting Initiative) –CERES – Coalition for Environmentally Responsible Economies and for United Nations Environment Programme - UNEP.
- ETHOS Social Responsibility Indicators. They were developed to

analyze and manage social and environmental impacts resulted from the activities of companies. Ethos (2009).

- Company Sustainability Index – ISE. It is constituted by Brazilian companies with stocks in BOVESPA which detaches in corporate governance and concerns about environment. Bovespa (2009).

Introduced in 1999, DJSI measures the financial performance and the sustainability of world's leading companies. It provides deep analysis on societies in their economical prospect, environmental and social performance, by evaluating issues as corporate governance, risk management, brand, climate change mitigation, sets of rules and labor practices. DJSI has global recognition and its role works as a reference point to investors all around the world.

The indexes based on GRI can be used to check the organizational performance towards laws, rules, codes, patterns, organizational performance standards and voluntary initiatives; they also demonstrate the compromise to sustainable development. GRI promotes and develops a standardized approach of communication to stimulate the search for sustainable information, which will benefit the organizations that use similar information reports.

The ETHOS Institute has as objective to contribute for internalization of values and practices on management culture and processes which provide the contribution to a more sustainable and fair society.

ISE arose in 2005, which was started from BOVESPA initiative with other organizations and it is composed only by stocks of companies that detaches

because of their social responsibility and sustainability in a long time period.

## 2.6 Index of Sustainability – ISE

Beginning from a strong worldwide tendency of valorization of socially responsible companies, ISE (Index of Sustainability) arose in Brazil in 2005.

By BOVESPA initiative together with the effort of many institutions – ABRAPP, ANBID, APIMEC, IBGC, IFC, ETHOS Institute and the Ministry of Environment – an index of stocks was created and considered as a referential to socially responsible investing, which are able to strengthen the capital market.

For the operationalization and development of ISE, these organizations have established a Deliberative Council which started to count on United Nations Environment Programme (UNEP) in their constitution.

The investors that search for the companies members of ISE to apply their resources consider that these “sustainable” companies are able to produce more values to the stockholder in a long period of time, because they are well-prepared to face economical, social and environmental risks. Besides, they demonstrate with transparency their company actions, because of the rules to account for BOVESPA and by this, forwarding reliability.

ISE objectives to show the return of a stock book composed by stocks of companies committed to social responsibility and the company sustainability, and to promote and motivate the good practices on Brazilian company sphere.

The stock book selection criterion starts through a pre-selection that happens by a questionnaire forwarded to the 150

companies which have the most liquid Bovespa stocks, from which Deliberative Council chooses the ones with better classification. This classification obeys established criteria in a chart organized by dimension scales, referring to relationship of the companies with employees, community, corporate governance, environmental responsibility and so on, and transparency compromise, the verification of the impact caused by products, the legal accomplishment, the protection to minority and the conduct of corruption combat are strongly evaluated.

According to imposed criteria on General Dimension, it is identified if the compromise with sustainable development is formally inserted in company strategy and if this company has a formal compromise in order to combat corruption.

On Nature Product dimension, it appears that the normal consumption or use of products produced or marketed by the company or its subsidiaries may cause chemical and mental addiction as well as risks and damage to health and physical integrity of the user / consumer or other ones. It analyzes the corporate governance dimension if the company guarantees the rights of "tag-along rights for common shares and above what is legally required.

It is identified that the economic and financial dimension, whose processes and procedures implemented in the management of business opportunities consider social and environmental prospects of short, medium and long term.

And finally, the Environmental Dimensions, where is the business environment as its policy and its environmental performance and it sorts them into groups: A, B, C, D, E and IF.

The companies that use renewable resources (wood, paper, water and energy) are in Group A and in Group B there are the companies which use non-renewable resources (copper, oil and fertilizers), in Group C companies use raw material and inputs (textiles, automobiles, etc.). Group D match companies Transport and Logistics, Group E, refers to companies within the Group Services and IF, it is the Financial Institutions insurers.

According to BOVESPA, when a company is in the ISE stock book, there are many advantages, for example, to be recognized by the market as a company that works with corporate social responsibility, with long-term sustainability and concerned about the environmental impact of their activities.

Because ISE is considered a "seal of quality", the companies in its portfolio are considered highly credible by the market, which provides the strengthening of the image, brand, product and shareholders.

### 3 METHODOLOGICAL PROSPECTS

#### 3.1 Research Classification

The classification of basic research as applied to fall, dealing with real problems related to performance of the companies, as understanding given by Lakatos and Marconi (2005).

As a matter of goals, and based on Gil (2002), the research is exploratory and descriptive. Firstly, it is exploratory because it aims to provide greater familiarity with the subject and the

problem in order to make it more explicit. And it is descriptive, because that primarily aims to describe reality as it is about the characteristics of a given population.

As a matter of technical procedures, they were developed to search for documentary stamp collecting data, based on the published financial statements (Management Report - RA, Background Notes - BN and Social). Thus, data were obtained directly from the website of the Stock Exchange of São Paulo. According to Gil (2002) this type of research draws on materials that have not yet received an analytical treatment or can be reworked in accordance with the objects of research.

The procedures adopted in the presentation and analysis of qualitative data to identify as a view, as Richardson (1999) no employment of statistical techniques based on the analysis process. The qualitative approach does not intend to enumerate or measure homogeneous units or categories of subject matter.

#### 3.2 Population and samples

The survey sample has consisted of companies with shares traded on the BOVESPA ISE members, comprised of thirteen companies operating in the sections of Electricity, Chemistry and Metallurgy and Metallurgy, between 2007 and 2008.

The sample used is composed of segments of potential polluting activities and the use of environmental resources, in medium and high levels, according to the classification given by Law 10.165/00. Chart 2 shows the companies surveyed:

<i>Segments</i>	<i>Companies</i>
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<i>Segments</i>	<i>Companies</i>
Chemical	Braskem S.A.
Electric Energy	Celesc Elétricas de Santa Catarina S.A Companhia Energética de Minas Gerais – CEMIG Cemig Geração e Transmissão S.A CESP - Companhia Energética de São Paulo Companhia Energética do Ceará – COELCE CPFL Energia S.A. Eletrobrás Participações S.A. Eletropaulo Metropolitana Eletricidade de São Paulo S.A EDP Energias do Brasil Light S.A.
Siderurgia e Metalurgia	Gerdau S.A. Metalúrgica Gerdau S.A.

Chart 2 –Analyzed companies.

Source: all the researched data.

#### 4 Presentation and analysis of data

The Chart 3 shows the environmental information more prominent, which

were extracted from the Directors Reports, Social and Background Notes related to the period between 2007 and 2008:

<b>Company</b>	<b>Administration Report</b>	<b>Social Balance</b>	<b>Background Notes</b>
Braskem S.A	<ul style="list-style-type: none"> <li>• Partaking of ISE Bovespa;</li> <li>• Research and development of Environmental Projects;</li> <li>• Projects about Carbon Credits;</li> <li>• Adherence Progr. PNUD from United Nations Organization.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicators related to the operation of the company and environmental projects.</li> </ul>	-
Celesc S.A.	<ul style="list-style-type: none"> <li>• Project of Carbon Spreading;</li> <li>• Environmental Education and Projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicators related to the operation of the company and environmental projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Provision of devaluated without investment in Cubatão Hydroelectric</li> </ul>
CEMIG	<ul style="list-style-type: none"> <li>• Partaking of ISE Bovespa;</li> <li>• World leader in “utilities” on DJSI World;</li> <li>• Research and development of environmental projects;</li> <li>• Environmental</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicator related to the production and operations of the company.</li> </ul>	<ul style="list-style-type: none"> <li>• Public lawsuit to compensate the environmental damage New bridge hydraulic Power plant.</li> </ul>



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Company	Administration Report	Social Balance	Background Notes
	Programs		
CEMIG GT S.A.	<ul style="list-style-type: none"> <li>• Partaking of ISE Bovespa;</li> <li>• Certification ISO 14001/2004;</li> <li>• Environmental program.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicator related to the production and operations of the company.</li> </ul>	<ul style="list-style-type: none"> <li>• Provision in reason of actions referring to environmental contingencies and lawsuit from IEF – State green Institut;</li> </ul>
CESP	<ul style="list-style-type: none"> <li>• It is the signatory of the International Declaration on Cleaner Production (UNEP);</li> <li>• Certifications on Version NBR ISO 9001:2000.</li> <li>• Environmental projects and programs.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicator related to the production and operations of the company.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental preservation areas;</li> <li>• Provision to judicial proceedings of environmental nature.</li> </ul>
COELCE	<ul style="list-style-type: none"> <li>• Partaking of ISE Bovespa;</li> <li>• Environment Management System (SGA) certified by the standard ISO 14001:2004.;</li> <li>• Environmental projects and programs.</li> </ul>	<ul style="list-style-type: none"> <li>• Environment indicators related to Environmental education Residue Management, environmental licensess residues management, foresting and external programs and projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Investments in Environmental education;</li> <li>• Partaking in environmental actions.</li> </ul>
CPFL	<ul style="list-style-type: none"> <li>• Mechanism projects of Clean development – MD;</li> <li>• Quality Management – (ISO 9001:00) Environemtal Management (ISO 14001:04), Certified commercialized.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicators related to the operations of the company, external projects and goals.</li> </ul>	<ul style="list-style-type: none"> <li>• Information of complaining about environmental damages and duties increases.</li> </ul>
Eletrobrás Participações S.A.	<ul style="list-style-type: none"> <li>• Reduction of CO<sub>2</sub> and CERs;</li> <li>• Environmental projects and programs.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicators related to the operations of the company, external projects and goals.</li> </ul>	-
Eletropaulo S.A.	<ul style="list-style-type: none"> <li>• Investment in environmental projects and actions;</li> <li>• Certified by NBR ISO 14001:2004, the Environmental Management System (SGA)</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicators related to the operations of the company, external projects and goals.</li> </ul>	<ul style="list-style-type: none"> <li>• Repairing actions on environmental damages;</li> <li>• Demonstratives of costs related to SGA – Environmental Management System.</li> <li>• Mechanism projects of Clean development – MDL.</li> </ul>
EDP Energias do Brasil	<ul style="list-style-type: none"> <li>• Partaking on ISE;</li> <li>• Mechanism projects of Clean development and environmental projects;</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicators related to the operations of the company, external projects and goals.</li> </ul>	-

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Company	Administration Report	Social Balance	Background Notes
	<ul style="list-style-type: none"> <li>• Management System by rules ISO 14.000 and OHSAS 18.000;</li> <li>• Global Reporting Initiative (GRI): concessão do selo "GRI CHECKED B+";</li> </ul>		
Light S.A.	<ul style="list-style-type: none"> <li>• ISO 14.001 certification under the ambit of Environmental Management System;</li> <li>• Cleaner Production and Emissions Zero projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental indicators related to operations of the company, external projects and goals.</li> </ul>	<ul style="list-style-type: none"> <li>• Emission of gases of greenhouse effect;</li> <li>• Environmental Management System;</li> <li>• Environmental projects.</li> </ul>
Gerdau S.A.	-	<ul style="list-style-type: none"> <li>• Investments in programs and external projects.</li> </ul>	-
Metalúrgica Gerdau S.A.	-	<ul style="list-style-type: none"> <li>• Investments in programs and external projects.</li> </ul>	-

Chart 3- Disclosed Information by the companies.  
Source: all the researched data.

The Chart 3 shows up the analyzed companies by a few Social environmental indicators, with the exception of Gerdau Group, which provides investments in programs and external projects. The Management Report is used by most companies to drill some programs and environmental projects. For this purpose some companies also use the Background Notes, adding the information regarding legal proceedings, provisioning and contingencies. However, the role of information collected by businesses does not fit the environmental standards of disclosure contained in determinations of NBCT CFC 15 and 11 of the NPA IBRACON.

Despite the Gerdau Group, the other companies do not mention environmental information in the Management Report and Notes, using the Social report only to demonstrate some environmental investments, it was emphasized on its Annual Report:

- 1- Investment in environmental protection technologies and social projects;
- 2- The certification of Gerdau (ISO 14001) increased to 40 the number of industrial plants with this certification;
- 3- The largest iron recycler in Latin America;
- 4- The group focuses on engaging suppliers that share its policy of respect with people and the environment through its policy of spreading the production chain;
- 5- As for environmental liabilities, it reports the existence of potential liabilities and also the potential costs of cleaning and repairing of local environment without being quantified

In Chart 4 there are prepared items on the requirements of Rule 15 from NBC T-CFC:

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Environmental Disclosure on Social Balance of 2007 and 2008 of the companies on Electric Energy, Chemical & Ironworks and Metallurgy sections

Resolution CFC nº 1.003/04 - NBC T15 - Environmental Information		Braskem	Celulosa	CEMIG MG	CEMIG GT	CESP	Coelce	CPFL	Eletrobrás	Eletropaulo	EDP	Light	Gerdauro	Gerdauro Metallurgic
1	Expenses and investments to improve the environment	1	1	0	0	0	1	1	1	1	1	1	1	1
2	Investments and expenses on prevention and recovery of degraded environments	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Investment and spending on environmental education for employees, contractors, individuals and managers of the entity.	0	0	0	0	0	1	0	0	0	0	0	0	0
4	Investment and spending on environmental education for the community	0	0	0	0	0	1	0	0	0	0	0	0	0
5	Investments and expenses on other environmental projects.	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Amounts of environmental, administrative and judicial proceedings sued against the company.	0	0	0	0	0	0	0	0	0	0	0	0	0
7	Amount of fines and compensations related to environmental matters administratively or judicially.	0	0	0	0	0	0	0	0	0	0	0	0	0
8	Liabilities and environmental contingencies	0	0	0	0	0	0	0	0	0	0	0	0	0

Chart 4 – Researched companies according to NBC T 15.

The analysis of Chart 4 shows that most companies do not use the Social to detail the environmental information required by CFC rule. Have only a few indicators to measure the achievement of goals set and check the environmental performance compared to the previous years. Thus, the Balance Sheet does not include most of the requirements determined by NBC T 15 of CFC.

The Management Report is used by most companies to disclose certain environmental information in a comprehensive manner, on programs and environmental projects, but it does not mean that the costs and environmental investments, the amount of fixed assets and inventory would be the most representative investment on environment. The same can be said

about the Environmental Liabilities, which are not shown, although it shows the incidence of environmental damage, lawsuits and the need to repair the environment.

In Chart 5 are prepared items on the requirements of environmental information in Notes 11 to the second NPA IBRACON:

According to Chart 4, the explanatory notes published in the vast majority of companies do not fit the regulatory determination, a fact that is surprising in view of Chemicals, Energy, Metals and Iron and highly polluting, according to IBRACOM chosen for analysis considering that the NPA states 11 which are arranged in these Notes contingencies and risks relating to environmental impacts.

The information of the analyzed companies show that despite the existing rules issued by the Brazilian and CFC for the disclosure and standardization of environmental information, there is no uniformity regarding the content should be presented in notes and Social Report.

Shares companies presented in the Management Report shows the concern with the monitoring of pollution levels in order to contain them, which requires investments to measure greenhouse gas emissions, for the preservation of areas, development projects and creation programs for pollution prevention and environmental education. Also the companies are willing to report this information as some investments and environmental costs incurred to protect the environment. This information represents some of the requirements for international standards determined by the SEC and FASB. But the content of these standards follows a rigorous and detailed standardization, determining disclosure policies costs, contingencies, environmental assets and liabilities. In the case of ISAR / UNCTAD, it includes the preparation of an specific Environmental Report.

## 5 CONCLUSIONS

Environmental awareness as an approach inculcated in the culture and action plan of the companies that enables its development, making the environment becomes a business opportunity, strengthening corporate image and ensuring improvements in their quality of production, eliminating losses and inefficiencies in the production process.

Environmental Disclosure of the companies in Chemical, Electric Energy, Siderurgy and Metallurgy segments from 2007			
NPA 11 - IBRACON Background Notes			
	Return on Environmental Investment	Environmental Position of the company	Environ- mental contingen- cies (if the company is a polluter).
Braskem	0	0	0
Celesc	0	0	0
CEMIG MG	0	0	0
CEMIG G T	0	0	1
CESP	0	0	1
Coelce	0	0	0
CPFL	0	0	0
Eletrobrás	0	0	0
Eletropaul	0	0	0
EDP	0	0	0
Light	0	0	0
Gerdau	0	0	0
Gerdau Metallurgy	0	0	0

Chart 5 - Analysed Companies according to  
NPA 11 from IBRACON.

Data analysis revealed that companies with shares on the BOVESPA, members of the Corporate Sustainability Index - ISE - demonstrate their information of environmental nature through the Social Report, the Reports of Directors and also in Notes. In the universe of research considered the segments of Energy, Chemical and Steel and Metallurgy, between 2007 and 2008 found that the Social Report is used by most companies for disclosure of some indicators and objectives. The Report of Directors for the back of investments in

environmental projects and programs where the firms surveyed operate. However, much of this information should be detailed according to NBCT 15 Social and Environmental Information Statement, established by that standard, which should be subject to be reviewed by an independent auditor, and be published with this report, when the entity is subject to follow this procedure.

The background Notes are used by only some of these companies to fulfill their real function, information about risks and contingencies, as determined by IBRACOM.

The content of environmental information observed has demonstrated the involvement of enterprises in environmental projects and programs,

with an effective planning and management of these activities. However, it is necessary to the companies show their environmental information in a standardized and detailed in accordance with auditing standards, which define the disclosure of costs, environmental assets and liabilities and their segregation in specific records.

Globalization and competitiveness in international markets are forcing the convergence of Brazilian standards to follow those standards. The result of this convergence between the standards will increase the rigor in detail and in the number of reports in order to inform about the expenditures, investments and business impacts of the environment.

## REFERENCES

BASSETO, L. Inês; GUELBERT, T. Ferreira; KOVALESKI, J. Luiz; LESZCZYNSKI, A.A. Charcitut; LIMA, I. Alberton. Crédito carbono: uma moeda ambiental como fator de motivação econômica. In: ENEGEP, XXVI. Fortaleza, 2006.

BEM, F.; SCHNEIDER, V. E. Análise do Benefício-custo em práticas de produção mais limpa em uma empresa da cadeia moveleira do Brasil. In: Congresso Brasileiro de Custos, XV Curitiba, 2008. Anais... Curitiba: ABC, 2008, CD ROM.

BOVESPA, Bolsa de Valores de São Paulo. Disponível em: <<http://www.bovespa.com.br/Principal.asp>>. Accessed on: June 08, 2009.

BRAGA *et al.* Contabilidade ambiental. São Paulo: Atlas, 2007.

BRASIL. Lei nº 11.638, de 28 de dezembro de 2007. Diário Oficial da União, Brasília: MP, 2007. Disponível em: <[http://www.planalto.gov.br/ccivil\\_03/\\_Ato2007-2010/2007/Lei/L11638.htm](http://www.planalto.gov.br/ccivil_03/_Ato2007-2010/2007/Lei/L11638.htm)>. Accessed on: April 14, 2009.

CFC. Institucional. Disponível em: <HTTP://www.cfc.org.br>. Accessed on December, 13 2009.

CHICAGO CLIMATE EXCHANGE. CCX (2009). Disponível em: <[www.chicagoclimatex.com/content.jsf?id=821](http://www.chicagoclimatex.com/content.jsf?id=821)> Accessed on: 07/31/2009.

COSTA, R. S.; MARION, J. C. A Uniformidade na evidenciação das informações ambientais. Revista Contabilidade e Finanças. São Paulo, n.43, p.20-33, Jan/Apr. 2007.

DALMORO, M.; VENTURINI, J. C.; PEREIRA, B. A. D. Marketing verde: responsabilidade social e ambiental integradas na envolvente de marketing. Revista Brasileira de Gestão de Negócios, São Paulo, v.11, n.30, p.38-52, Jan/Mar 2009.

DOW JONES. Dow Jones Sustainability Index. Disponível em:  
<<http://www.sustainability-indexes.com>> Accessed on: Jun. 12 2009.

ETHOS, INSTITUTO. Guia de elaboração do balanço social. Available on:  
<<http://ethos.org.br>> Accessed on: Jun. 12, 2009.

FARIA, A. C.; PEREIRA, R. S. Os Custos na Logística Reversa de Embalagens de Agrotóxicos Pós-consumo: Estudo de Caso do INPEV. In: Congresso Brasileiro de Custos, XIV, 2008, Curitiba. Anais... Curitiba: ABC, 2008. CD ROM.

FERREIRA, A. C. S. Contabilidade Ambiental: uma informação para o desenvolvimento sustentável. São Paulo: Atlas, 2003.

FASB – Financial Accounting Standards Board. Disponível em:<http://www.fasb.org>> Accessed on: December, 13 2009.

GARCIA, R.; SANTOS, A. R.; KÜHL, M. R.; PACHECO, V. Contabilidade ambiental e sustentabilidade um estudo sobre as empresas do ISE. In: Congresso Brasileiro de Custos, XIV, 2008, Curitiba. Anais... Curitiba: ABC, 2008. CD ROM.

GIL, A. C. Como elaborar projetos de pesquisa. 4ª Ed. São Paulo: Atlas, 2002.

GLOBAL REPORTING INITIATIVE. Sustainability reporting guidelines – 2002. Disponível em: [www.globalreportinginitiative.org](http://www.globalreportinginitiative.org) . Accessed on: Jun 12, 2009.

GONÇALVES, Odair; OTT, Ernani. A evidenciação nas companhias brasileiras de capital aberto. In: ENANPAD, 2002; Salvador.

GONZÁLEZ, Carlos Larrinaga; MONEVA, José Mariano Abadia; MARACULLÁ, Fernando Llena; FENECH, Francisco Carrasco; RUIZ, Carmen Correa. **Regulación contable de La informacion medioambiental**. Normativa española e internacional. Madrid: AECA, 2002.

HANSEN, D. R.; MOWEN, M. M. Gestão de Custos: Contabilidade e Controle. São Paulo: Pioneira Thomson Learning, 2001.

HENDRIKSEN, Eldon S.; VAN BREDA, Michael F. Teoria da contabilidade. São Paulo: Atlas, 1999.

IBRACON. NPA 11 – Normas e procedimentos de auditoria – Balanço e ecologia. São Paulo : Ibracon, 1996. Disponível em <http://www.icbrasil.com.br/juri/default.asp?id=82> Acesso em 13 de dezembro de 2009.

IUDÍCIBUS, S. MARTINS, E. GELBCKE, E. R. Manual de Contabilidade das Sociedades por Ações. 4ª Ed. São Paulo: Atlas, 2008.

IUDÍCIBUS, Sérgio de. Teoria da contabilidade. 5ª Ed. São Paulo: Atlas, 1997.

ISAR/UNCTAD. Accounting and financial reporting for environmental costs and liabilities. 1998a. Disponível em: <http://www.unctad.org>> Accessed on December, 14 2009.

LAKATOS, E. M.; MARCONI, M. A. Fundamentos de Metodologia Científica. 6ª Ed. São Paulo: Atlas, 2005.

- MACHADO, M. R.; MACHADO, M. A. V.; CORRAR, L. J. A Relação entre investimentos sociais e desempenho financeiro. In: Congresso Brasileiro de Custos, XIV – Curitiba. Anais... Curitiba: ABC, 2008, CD ROM.
- MALHEIROS, T. F.; PHILIPPI JÚNIOR, A.; COUTINHO, S. M. V. Agenda 21 Nacional e Indicadores de Desenvolvimento Sustentável: contexto brasileiro. Saúde Soc. São Paulo, v.17.n.1, p.7-20, 2008.
- MCKINSEY & COMPANY E KORN/FERRY INTERNATIONAL. Panorama de Governança Corporativa no Brasil. São Paulo, 2001.
- MINISTÉRIO DO MEIO AMBIENTE. CONAMA. Conselho Nacional do Meio Ambiente. Available on: <<http://www.mma.gov.br>> Accessed on: 04/13/2009.
- MONTEIRO, Paulo Roberto Anderson; FERREIRA, Aracéli Cristina de Sousa. A evidencição da informação ambiental nos relatórios contábeis: Um estudo comparativo com o modelo do ISAR/UNCTAD. Revista de Gestão Social e Ambiental, v.1, n 1, p. 82-101, Jan/Apr. 2007.
- MURCIA, Fernando. Da-Ri; ROVER, Suliani.; LIMA, Iran.; FÁVERO, Luiz P. L.; LIMA, Gerlando. A. S. F. Disclosure verde nas demonstrações contábeis: características da informação ambiental e possíveis explicações para divulgação voluntária. UNB Contábil, v.11, n.1-2, p.260-278, 2008.
- PAIVA, P. R. Contabilidade Ambiental: Evidencição dos Gastos Ambientais com Transparência e Focada na Prevenção. São Paulo: Atlas, 2006.
- PONTE, Vera Maria Rodrigues; OLIVEIRA, Marcelle Colares. A prática da evidencição de informações avançadas e não obrigatórias nas demonstrações contábeis das empresas brasileiras. Revista Contabilidade & Finança n. 36, p.7-20, set./dez., 2004.
- RICHARDSON, R. J. Pesquisa social: métodos e técnicas. 3ª Ed. São Paulo: Atlas, 1999.
- ROBLES JÚNIOR, A. Custo da Qualidade. 2ª Ed. São Paulo: Atlas, 2003.
- SÁ, Antônio Lopes. Teoria da Contabilidade. 3. ed. São Paulo: Atlas, 2002.
- SAUNDERS, T.; MCGOVERN, L. The bottom line of green is black. 10ª Ed. New York: Harper Collins, 1997.
- SEC- U.S. Securities and Exchange Commission. Regulation S-K. Available on:<http://www.law.uc.edu>. Accessed on December, 13 2009
- \_\_\_\_\_. - Institucional. Disponível em:<http://www.sec.gov>. Accessed on December 13 2009.
- SILVA, C. A. T.; RODRIGUES, F. F.; ABREU, R. L. Análise dos Relatórios de Administração das Companhias Abertas Brasileiras: um Estudo do Exercício Social de 2002. Revista de Administração Contemporânea, v. 11, n. 2, p.71-92, Apr./Jun. 2007:
- STROBEL, J. S.; CORAL, E.; SELIG, P. M. Indicadores de Sustentabilidade Corporativa. In: ENANPAD, XXVIII – Curitiba. Anais... Curitiba: ANPAD, 2004, CD-ROM.
- TINOCO, João Eduardo Prudêncio; KRAEMER, Maria Elisabeth Pereira. Contabilidade e gestão ambiental. São Paulo: Atlas, 2004.

TEIXEIRA, J. R. M.; PARIZOTTO, L. E.; LIMA, M. S. A inserção da variável ambiental no Balanced Scorecard: o caso de uma unidade de negócios da Petrobrás. *In*: Congresso Brasileiro de Custos, XIV – João Pessoa. Anais... João Pessoa: ABC, 2007, CD ROM.

VALLE, C. E. Como se preparar para as Normas ISO 14000: qualidade ambiental. São Paulo: Pioneira, 2000.

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