

APPLICATION OF THE GLOBAL REPORTING INDICATORS TO BUILD ENVIRONMENTAL ACCOUNTING REPORTS OF VIETNAMESE ENTERPRISES IN THE ECONOMIC INTEGRATION PERIOD

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In recent years, the environment has become a global issue. The change in general awareness on corporate social responsibility awareness regarding environmental issues has put business accounting in businesses against challenges: how can accounting activities be performed on environmental factors? not only through the recording and reporting of financial information, but also to demonstrate the role of accountants as an effective tool for managers to administrate environmental issues within each economic unit. Environmental accounting has been worldly recognized as an effective solution to help businesses achieve sustainable business operations, which means both achieving economic benefits and protecting the environment. However, the practice of understanding and gradually applying environmental accounting in Vietnamese enterprises is still limited. This article studies the theory, firstly assessing the existence of traditional accounting system relating to environmental protection. Based on the guiding indicator system in the global reporting initiative (GRI) to propose sustainable development accounting reporting criteria applicable to countries. Building a complete indicator system will be the basis for the foundation of an appropriate accounting system for countries as well as Vietnam in the process of applying this new accounting department.

Keywords: Global Reporting, Environmental Accounting, Economic Integration.

INTRODUCTION

At present, environmental protection issues are becoming the concern of not only individuals but the whole society as well, requiring businesses and economic organizations in the society to pay attention to the matter of recording, measuring, analyzing and providing information regarding environmental protection. In other words, the demand for environmental accounting is increasing and the establishment and development of this accounting department is an indispensable and necessary movement at present and in the future.

Many countries in the world, especially developing countries, are increasingly affected by climate change, resource scarcity, poverty, inequality and alarming rise of CO₂ emissions. Important changes in development policies and strategies of the government as well as enterprises need to isolate economic growth from greenhouse gas emissions. These are premises for developing a sustainable economy that meets the needs of both present and future generations. It requires businesses to pay attention to non-financial information to help stakeholders have a comprehensive view of the business activities and assess the ability to create and maintain value businesses in the future. A “green” model needs to be established to develop a sustainable, low carbon economy (Zyl, 2013). The International Integrated Reporting Council (IIRC, 2013)

provided that reporting system of businesses has undergone a dramatic transition over time with an increasing trend of accountability to stakeholders, including environmental and social issues in general. Therefore, enterprises must report many different areas apart from their business performance. Environmental accounting reports (EAR) is a new tool for organization reporting to explain and provide important and necessary information about environmental-related costs and revenues, guide businesses, project owners in economic decisions, encourage them to make an effort to use the resources, including natural man-made resources, effectively and minimize environmental damage, limiting waste and pollution, changing behaviors and behaviors. The EAR integrates financial and non-financial information in a clear, concise, consistent and comparable manner (IIRC, 2013). In contrast to the previous traditional approach when organizations disclose environmental, social, non-financial information separately from financial information (Villiers et al., 2014). Nowadays, more and more companies are adopting the integrated reporting for a variety of reasons. Some are applying the integrated reporting due to legal pressure, the EAR is mandatory, organizations applying the EAR understand the benefits of application such as enhancing companies' reputation, allocating funds, making more effective decisions to increase profits in the short and long term, and orienting future development. Whether applied in a voluntary or mandatory manner, the application of EAR brings many advantages to organizations as all elements of the EAR are presented to connect the main financial and non-financial information for the purpose of sustainable development.

The change in awareness of corporate social responsibility regarding environmental issues has put traditional accounting in businesses against the challenge of how to perform accounting activities on such novel elements. Accounting not only appears through the traditional role of recording and reporting financial information, but also as an effective tool for financial administrators and users of accounting information, both under the micro and macro scale, in making decisions appropriate to each economic unit or environment. In particular, environmental accounting is very important for industries such as textiles, fisheries, resources exploitation, etc., in which export products need to meet rigorous standards in the production process, including not only product quality but also environmental and social aspects, which allows Vietnamese products to compete with greater reputation in the international market.

Vietnam first enacted the Environment Law in 1993 and the amended Law on Environmental Protection in 2005. The current accounting regime does not have any guiding documents on vouchers, accounts, accounting books or accounting reports related to environmental and social expenses and maintenance of sustainable development that is applied to businesses and economic organizations in the national economy. Meanwhile, the disclosure of information on the environmental impact that businesses have caused has been spreading to many countries since the early 1990s. This fact is reflected when more and more companies are preparing their reports with detailed information on environmental impact. As a result, since the mid-1990s, accounting reports on the impacts that organizations have on the environment have become a practical issue as well as a hot topic and are receiving increasing attention. The development of this acute problem in the early and mid-1990s formed the trend of developing global accounting reports, in addition to financial statements, on environmental policies, practices and environmental impact of reporting units. A global accounting report is a type of sustainability report, which encourages businesses and organizations to report on their environmental performance and to standardize and quantify and quantify social costs and Environmental management and the benefits gained from the activities of the reporting companies accordingly. Some examples of the reporting measures used will be CO₂ quantification results, working and payment terms, financial transparency and similar.

The quality of accounting information on the financial statements still reveals many weaknesses, the transparency on the financial statements is still low, affecting the interests of investors, making it difficult for the supervision of state agencies, making reduce trust in the

public. Deegan (2009) presented a number of traditional financial accounting systems related to the recognition, measurement and reflection of economic organizations on social, environmental and sustainable development factors:

1. financial accounting focuses on the information necessary for entities involved in making resource allocation decisions, targeting to those who have financial benefits attached to the unit. Therefore, only financial information or information of an economic nature are provided, without information on social, environmental and sustainable development factors.
2. financial accounting information focuses on materiality, that is, it tends to exclude from social and environmental information reports, because these data are difficult to quantify by cash. Besides, the significance is a subject related to the career evaluation, so subjective. Many professional accounting organizations in many countries have had to set guidelines for materiality, such as the amount or percentage of a specific indicator that is considered material. Therefore, environmental or social factors, which are difficult to quantify, will not be considered material and will not be recognized in the financial reporting system;
3. reporting entities discount debt, especially long-term debt, to its present value. This tends to make future expenditures less important at the present time (Gray, Owen, and Adam, 1996 cited from Deegan C., 2011). Business obligations to the environment, as mentioned above, are difficult to quantify into cash, or if so, when discounting the present value will be of small value, causing the user to believe that it is not important, and thus lacking in interest.
4. financial accounting assumes a business entity assumption, requiring the organization to be treated as a separate entity from its owner, other entities, and entities involved in it. If a business or an event does not directly affect an entity, that business or event will be ignored for accounting purposes. This means that the consequences reported by the reporting entity (e.x. habitat) will be ignored, and therefore performance indicators, such as profitability, will not be accurately reflected in the entity's report.
5. The environmental information presented in the company's annual reports is small, the level of disclosure of environmental information of companies listed on the Vietnam Stock Exchange, on reports and on the website is: relatively low (Hang, 2015), the information is mostly positive and descriptive. Highly profitable corporations often publish more environmental information than other businesses. Therefore, in order to have more environmental information in order to assess the business sense of environmental protection business, it is necessary to promote the implementation of environmental accounting in enterprises in. IFAC (2005) argues that most managers have not yet envisioned the benefits of improved environmental performance, reduced environmental impact, and decisions resulting from environmental accounting information.

In the context that Vietnam is increasingly deeply and deeply integrated with the world, Vietnamese enterprises must gradually standardize in making EAR in the direction of transparency, presentation and presentation of environmental reports in a way science, towards the need to provide complete, multi-dimensional information from investors and partners who want to approach businesses. The trend of EAR is changing the way businesses report, especially listed companies. In an effort to standardize the contents of accounting reports with environmental factors, several international organizations have implemented a system of guidance on forms and contents of financial statements on these contents. At an international level, an emerging and widely accepted source of guidance are the sustainability reporting guidance systems under the global accounting reporting initiative, often abbreviated as GRI. Therefore, this study was conducted to:

1. Introduction of a system of guidelines for preparing sustainable development reports under the whole accounting reporting initiative, including: (1) the group of indicators belonging to economic activities; (2) criteria group belongs to environmental activities; (3) group of indicators belonging to social activities (including labor, human rights, labor safety, product responsibilities).
2. Proposing a number of suitable solutions to encourage and guide the application of sustainable development accounting reporting criteria applicable to enterprises.
3. Support Vietnamese policymakers to have more practical basis and basis for developing an environmental accounting report form for Vietnamese enterprises listed on the stock market.

Overview

Research on Environmental Accounting

Being proactive in environmental management in addition to reducing environmental impacts, can also lead to sustainable economic success. All concerns about the implementation of environmental accounting really increasing profits and concerns about the high investment cost before starting environmental accounting could hinder its implementation. However, companies that perform environmental accounting have achieved positive results on their economic and environmental performance (Khalid et al., 2012). Regulators hardly imagine the benefits of improving environmental performance with reduced environmental impact (IFAC, 2005), so there are many opportunities to reduce environmental costs (Chang, 2007). Most of the environmental costs are often intangible, unspecified because they are allocated as normal costs on a traditional accounting system. IFAC (2005) argues that environmental accounting is not a separate accounting system. It adds value to conventional accounting in providing useful accounting information for business managers to improve efficiency and contribute to sustainable development. Management accounting systems often do not consider the cost of raw materials to produce wastes as environmental costs, so estimates and estimates of environmental costs are inaccurate, showing a lower number realistic (Bartolomeo et al., 2000). The overall objective of environmental accounting is to include the environmental costs that influence decision making within the enterprise. Environmental costs can be traced to specific products or from cost centers. Determining environmental costs in decision making can provide an accurate calculation of environmental costs and then allow for effective environmental control and reduction (Ferreira et al., 2010). The use of environmental accounting can also have a positive impact on both financial and environmental performance, and the structure of environmental accounting applications (environmental information, environmental assessment, compliance with environmental laws, etc and monitoring environmental cost savings) has positive implications for financial results (Wabuyi Jimmy Franklin, 2009). Any improvement in raw material handling efficiency will significantly reduce environmental costs and environmental impact, by installing an environmental management system, which will minimize the cost of raw materials for non-product (Christine Jasch et al., 2010). Besides creating financial efficiency, the studies also show that environmental accounting is a tool to support decision making. Environmental accounting is an important strategic management accounting tool to improve the environmental performance of a company (Gray et al., 1995), environmental accounting is being done in many other forms with common management accounting practices. Another important role of environmental accounting is to support both internal decision making and external reporting, failing to properly measure environmental information can prevent businesses from generating relevant information. This will reduce their commitment to the environment due to the lack of reliable environmental information. The implementation of environmental accounting information, however, is intended to facilitate internal decision making for more than reporting purposes. The published nature of environmental accounting information is internal, confidential, and therefore affects its use. Private information on environmental accounting reporting is useful for targeting, monitoring and evaluating policy options (Harris, 2009). Environmental accounting as a supporting tool for making environmental investment decisions in the context of a clean development mechanism (Burritt et al., 2009), requires environmental information in a system. The system will help management to make better decisions on business issues related to the environment (Moiescu & Mihai, 2006), for example, integrating costs into prices is a way to innovation and an effective method to reduce costs (Franklin, 2009). The implementation of environmental accounting is necessary because the management accountant normally ignores the creation of environmental information (Mokhtar et al. 2014), which will be a comprehensive tool aimed at making balances. Environmental considerations in business decisions (Saremi & Nezhad, 2014), and the use of environmental

accounting will help to make effective decisions. Competitive advantage and innovation are also a benefit of implementing environmental accounting. Increasing environmental awareness and concerns have helped businesses deal with environmental issues in their production and business processes to perform better, the environmental accounting done will help businesses. There are many innovations in the production and business process and will create a competitive advantage for businesses (saeidi et al., 2011), with the sustainable socio-economic development, the accounting and reporting of natural resources, costs and responsibilities related to the environment are unavoidable, whether in developed or developing countries (Bose, 2006). And better environmental performance provides a competitive advantage that leads to business efficiency through improved financial performance, as well as innovation cannot be a separate part of the enterprise's strategy. Enterprises are advised to focus their attention on innovation as a major source of competitive advantage. Ferreira et al. (2010) argue that innovation is the result of using environmental accounting, and through environmental accounting, businesses can identify opportunities and can create processes renew. The use of environmental accounting can lead to uncovering opportunities to improve manufacturing processes, establishing the basis for calculating savings made by a cleaner production approach. In addition, it is widely believed that the application of environmental accounting will assist businesses to gain a competitive advantage and add value to their businesses by demonstrating social responsibility (Tanc & Gokoglan, 2015). Governments can provide more incentives to encourage environmental protection and businesses can do innovation to ensure production and business activities do not pollute the environment by introducing cleaner production, and environmental accounting will be a cleaner production support tool.

Research on Sustainability Reports

Sustainable development reports are becoming more and more popular globally. Research by Eccles & Krzus (2010) suggests that the process of developing sustainability reports of some US corporations has been taking place since the early 2000s and they have gradually implemented a sustainable development strategy in your corporations. A report is considered to be an emerging reporting trend in report making around the world, where organizations are preparing separate financial and non-financial reports (financial statements, Sustainable Development Report, Social Responsibility Reports). At the same time, organizations also take advantage of the internet to publish more detailed information for stakeholders one report shows that sustainability reporting benefits both organizations and stakeholders, while also contributing to the development of a sustainable economy. This is the best-case study of sustainability reports, the first book of a valuable sustainability report in the world. The support of publishing a single report combining financial statements, social reports, governance and other factors to provide a more comprehensive picture of the business has been well researched by many researchers such as (Eccles & Krzus, 2010; Mammatt, 2009; Elkington & Renaut, 2010; King, 2010), organizations (Johannesburg Stock Exchange, JSE, 2010; GRI, 2010; IIRC, 2011); audit firm (Engelbrecht, 2010; KPMG, 2010; PWC South Africa, 2010; Hespeneide, 2010). In 2010, a number of US companies also participated in the pilot process of preparing IIRC's sustainability reports such as American Electric Power (Energy), PepsiCo (drinks), Edelman (communication), and the Group. Microsoft (software and computer services), Cliffs Natural Resources (mining and industrial metals) Prudential Financial (financial services). In addition, several organizations such as Jones Lang LaSalle, Southwest Airlines and Clorox have recently published sustainability reports. This is also considered as part of a sustainable development strategy to meet the information needs of stakeholders and ensure the efficient allocation of scarce resources (Eccles & Krzus, 2010; Schaltegger & Wagner, 2011; Frias-Aceituno et al., 2012).

Makiwane (2013) argues that a sustainability report will provide useful information to corporate managers to help them plan, budget, and implement strategies that lead to resource use effectively, this will help control or reduce costs for organizations (James, 2013). Sustainability report, that is, represents the financial and non-financial information of the organizations in a report. It is not just about combining financial statements and sustainability reports into one report, but it also has the real meaning of linking business strategy with sustainable development strategy. It helps organizations and stakeholders identify non-preferred financial areas. Although sustainability reporting is a relatively new phenomenon, the level of interest in this report has increased globally and the last focus is on companies adopting and implementing the sustainability report as a new management technology. Although there is a lot of research on sustainability reporting as an emerging phenomenon (Villiers et al. 2014) even studies focus on the results and benefits of sustainability reporting (Stubbs & Higgins, 2014; Adams, 2015; Jensen & Berg, 2012). But there are also studies focusing on why and how organizations approach early adopting sustainability reports (Stubbs & Higgins, 2014). These studies provide insights into the thinking, policies and practices of sustainability reporting. Robertson & Samy (2015) used innovation diffusion theory (DOI) to test managers' perceptions with sustainability reporting; provide a comparative advantage over current practices; compatibility with existing management processes and systems; past experience and needs and its perceived complexity affect the application and dissemination of sustainability reports. A number of other case studies around the world focus on the internal mechanism benefits of sustainability reporting for organizations that apply. The authors argue that in the advantages of sustainability reporting, non-financial factors must be integrated not only in the report but also in every decision-making process of an organization (Jensen & Berg, 2012). Adams (2015) argues that the adoption of sustainability reports improves organizational decision-making and risk management processes. Making the best decisions from the results of the sustainability report will encourage managers to identify and appreciate non-financial factors in their decisions (Hampton, 2012). The sustainability report also assists organizations in changing business expectations, addressing the growing need for information for stakeholders (Eccles & Krzus, 2010). Stubbs & Higgins (2014) argue that the sustainability reporting process allows the integration of financial information and organizational strategies provided by financial statements and sustainability reports system. Eccles & Armbrester (2011) believe that accepting sustainability reports to build long-term sustainability strategies both helps organizations create value in the long run, and provides information to stakeholders. In addition, it helps boost the stock prices of higher institutions.

Thus, the studies have proved that environmental accounting becomes a tool to help the operating of business and production activities be better, creating a huge competitive advantage in the trend of globalization. Therefore, the organization of applying environmental protection accounting in general and environmental accounting in particular to enterprises in Vietnam is important, contributing to the creation of sustainable development main business and production activities are business combined with environmental protection, expressing the view of sustainable business and production, protecting the living environment in general and the business environment in particular.

Theoretical Basis

In the context of sustainable socio-economic development, in order to reduce the pressures from stakeholders, in addition to maximizing the value to shareholders of businesses, they have sought to reduce negative impacts on the environment, voluntarily reporting their environmental activities (Akbas1 & Canikli, 2014). Businesses can take the initiative to prevent and reduce environmental impacts, environmental accounting will be a strategic management accounting tool to measure and monitor these actions. Environmental accounting is a support tool for businesses

to effectively manage the environment and report environmental information (Chang, 2007). The failure of conventional accounting systems to report the accounting information necessary to reduce environmental impacts, reduce environmental costs, has led to the emergence of environmental accounting. (Ferreira et al., 2010). Environmental accounting in an enterprise is the collection, processing, inspection, analysis and reporting of information related to the environment in the form of value and in kind for internal and external objects enterprise. EAR of an enterprise is the provision of information on environmental accounting related to the enterprise that has been collected, processed, inspected and analyzed for objects inside or outside the enterprise have interest.

Overview of Vietnamese Businesses

Vietnamese businesses have been growing fast, making a positive contribution to the stable and sustainable growth of Vietnam's economy. Enterprises are the most important economic sector contributing to the scale and economic growth rate of the country. In Vietnam's enterprise system, there are large enterprises, small and medium-sized enterprises (SMEs). A large enterprise is defined by two criteria which are the total capital of over VND 100 billion or the number of employees over 300 employees or more. Large enterprises account for about 5% of the total number of registered businesses but play a crucial and stable role in the Vietnamese economy.

Small and medium-sized enterprises (SMEs) are defined by two criteria which are the total capital of less than or equal to 100 billion Vietnam dong or the number of employees less than or equal to 300 employees. Based on the size of the total capital and the number of employees to identify small and medium-sized enterprises by each field Table 1. Specifically:

Area scale	Large business		Small and medium enterprises					
			<i>Micro businesses</i>		<i>Small Business</i>		<i>Medium business</i>	
	Total capital	Number of employees	Total capital	Number of employees	Total capital	Number of employees	Total capital	Number of employees
I. Trading and service	100 billion	Over 300 people	No more than 3 billion (annual revenue not exceeding 10 billion)	No more than 10 people	No more than 50 billion (annual revenue not exceeding 100 billion)	no more than 50 people	not more than 100 billion (annual revenue not exceeding 300 billion)	no more than 100 people
II. Agriculture, forestry, fisheries and industrial sectors, construction	100 billion	Over 300 people	no more than 3 billion (annual revenue not exceeding 3 billion)	no more than 10 people	not exceeding VND 20 billion (annual revenue not exceeding 50 billion)	no more than 100 people	not more than 100 billion (annual revenue not exceeding 200 billion)	no more than 200 people

According to Vietnam's Enterprise Law, at present, both large and small and medium-sized enterprises (SMEs) have 05 common types of enterprises as follows: State-owned enterprises, limited liability companies, joint-stock companies; Private enterprises and partnerships. Here are the common types of enterprises today, many individuals and organizations established selection.

1. State-owned enterprise is an enterprise in which the Government holds 100% of charter capital. Currently, state-owned enterprises have the legal entity status and are assigned business capital by the State; take responsibility for production management, economy and compensate or profit with the allocated capital. That is, the

- government is no longer subsidized as before; Businesses must offset these costs by themselves; self-financing of all sources and fulfilling obligations to the government and society as other businesses.
2. Limited liability company includes one-member limited liability company and 2 or more-member limited liability company.
 - a. One-member limited liability company is an enterprise owned by a organization or an individual. The company owner is responsible for the company's debts and other property obligations within the scope of the charter capital.
 - b. A limited liability company with two or more members may not exceed 50 members (members may be individuals or organizations). Members must be responsible for debts and other property obligations of the enterprise within the amount of capital committed to contribute to the enterprise.
 3. A joint-stock company is an enterprise in which the charter capital is divided into equal parts called shares. In a joint-stock company, shareholders can be organizations and individuals and the minimum number of shareholders is 03 and an unlimited maximum number. Shareholders are only responsible for debts and other property obligations of the enterprise within the amount of capital contributed to the enterprise.
 4. Private enterprise: This is a type of business owned by an individual standing up to take responsibility for the laws and operations of the business. Each person can only establish one private enterprise. The owner of a private enterprise may not concurrently be a business household owner or a member of a partnership. Private enterprises have no legal status.
 5. A partnership is a legal form of business operation between two or more individuals who share management and profits. There must be at least two members being co-owners of the company jointly conducting business under one common name (hereinafter referred to as unlimited liability partners); in addition to unlimited liability partners, there may be limited liability partners. Unlimited liability partners must be individuals, responsible for all obligations of the company with all of their assets. Limited liability partners members are only liable for the debts of the company within the amount of capital contributed to the company.

The Theoretical Framework For Environmental Reporting

The disclosure of information about the environmental impacts that businesses caused has been spread to many countries since the early 1990s. This is reflected when more and more companies are making financial statements with detailed information on environmental impacts.

As a result, since the mid-1990s, accounting reports on the impacts that organizations have caused on the environment have become a topical and practical issue and are receiving more and more attention. The development of this practical problem in the early and mid-1990s have formed the trend of conducting annual accounting reports, in addition to financial statements, on environmental policies, executions, and environmental impact of reporting units (Deegan, 2009).

Many accounting terms are used, including Social and Environmental Reports; Sustainable development ability report, Triple bottom line reporting. The triple bottom line report is defined by Elkington (1997) (Deegan, 2009) as a report providing information about an organization's economic, environmental and social activities.

This triple bottom line report provides information that allows readers of the report to evaluate the sustainability of organizations or community activities that are being performed. From this standpoint, for an organization or a community to develop sustainably in the long run, it must be financially secured (such as profitability), it must minimize (ideally, entirely eliminate) negative effects on the environment; and it must act according to social expectations (Deegan, 2009). In an effort to standardize the contents of accounting reports with environmental factors, several international organizations have begun to establish a system of guidance on forms and contents of financial statements on these contents.

At an international level, an emerging and widely accepted source of guidance is the sustainable development reporting systems of the Global Reporting Initiative's Sustainability Reporting Guidelines, often abbreviated as GRI guidelines.

Sustainable development performance indicators are organized into three groups: (1) economic performance indicators; (2) environmental performance indicators; and (3) social performance indicators. When Vietnam or a country builds an accounting system, they should rely on this indicator system to build, design, and develop an accounting system to be able to provide

sufficient data for this system of reporting indicators. The contents of the indicators are detailed according to the following items (GRI, 2011).

Economic Activities In Sustainable Development

Economically, sustainable development refers to the organization's level of economic development at local, national, and international levels Table 2.

Economic Performance	Four core indicators reflecting the economic value was formed and distributed; financial effects and risks from climate change; organizational obligations such as pensions and state subsidies
Market Presence	The core indicators reflect the unit's staff salary concerning the local operating salary; policies, and the spending section correlates with local suppliers; labor hiring process and the proportion of local senior management hired from the local areas of operational units.
Indirect Economic Impacts	A core indicator and an additional indicator reflect the development, investment in infrastructure services; understand and describe indirect economic effects.

Environmental Activities

The group of indicators for sustainable environmental development refers to the organization's influence on the natural system, including ecosystems, land and water. The structure of the group of environmental indicators includes inputs (resources, energy, water) and outputs (emissions, electricity, waste) relating to the operation process Table 3.

Materials	The two basic indicators include the amount of materials used and the percentage of materials from recycled products.
Energy	Indicators reflect energy directly consumed from primary energy sources; energy indirectly consumed from primary energy source; energy savings due to preservation and increased efficiency; indirect energy consumption reduction initiatives.
Water	Indicators reflect the amount of water taken from the source; the influence of taking water; the percentage of water being reused.
Biodiversity	Indicators reflect the location and size of lands which are owned, leased, managed; impacts of activities, products, and services on biodiversity; habitats that are being protected or preserved; current and future strategies or activities that are implemented to control impacts on biodiversity.
Emission, dispersion, waste	Indicators reflect: Direct emissions to the environment; total indirect emissions into the environment; initiatives to reduce emissions to the environment; amount of emissions directly affecting the ozone layer; NO, CO gas combinations.
Products and services	Indicators reflect: Initiatives associated with products to reduce environmental impact; % of sold products and reused packaging materials.
Compliance	Indicators reflect the amount of fines and other non-monetary fines for failing to comply with environmental laws / regulations.
Transportation	Indicators reflects the environmental impact of transported products and materials used for labor transportation activities.
General indicators	Indicators reflect the total amount of each type of expenditure for environmental protection activities.

Social Activities

The assessment indicators of sustainable social development refers to the influence of the entity on the social systems in which it operates. These indicators relate to the practices of workers,

human rights and the larger issues affecting consumers, communities and other people in society. Social activity indicators are reflected in Table 4.

Table 4	
INDICATORS THAT REFLECT ASPECTS OF SOCIAL ACTIVITIES	
Social activities: performance indicators of workers	
Recruitment	The indicators reflect the total number of employees by each type, labor contracts, the proportion of newly recruited workers, remuneration policies and turnover rate.
Labor-management relations	The indicators reflect the proportion of employees working under the cooperating agreement, in which the minimum working time is flexible.
Occupational health and safety	The indicators reflect the percentage representing the total workforce participating in the occupational health and safety committee, as well as the rate of accidents, work-related diseases, absenteeism and turnover rate, by region and by gender, along with relevant workplace training programs, occupational health and safety topics agreed upon between employers and employees.
Education and training	The indicators reflect the annual training hours for each employee, each job type; skills management programs; Percentage of employees who receive annual comments and assessments regarding work performance.
Diversity and opportunities	This indicator reflects the diversification in the labor force by qualification, by gender in the management team. Thereby, it also reflects the level of fairness in the unit.
Social activities: Performance indicators relating to human rights	
Investment and profit in reality	The indicators reflect: (1) the percentage of investment agreements, contracts involving human rights provisions; (2) how many partners are concerned about human rights; (3) number of hours of staff training on human rights.
Non discrimination	The indicator reflects the number of racial discrimination cases and the number of cases handled.
Freedom of association and cooperation agreement	The indicators reflect the right to join associations, organizations, and the right to agree to cooperate.
Child labor	The indicator reflects activities that relate to child labor. Rate of risks associating with child labor.
Forced labor	The indicators reflect the activities in which labor are forced according to the subjective discretion of managers.
Security practices	This indicator reflects the percentage of security personnel trained in human rights policies or procedures during operation.
Rights related to localism	Indicators reflect the number of cases of violence, assault related to local properties of employees, and the number of cases that were processed.
Social activities: Indicators of social activities	
Local community	Indicators describe the percentage of activities that are committed to the local community, with activities assessment, and development programs; activities that may adversely affect the community; as well as ways to prevent negative impacts on local communities.
Corruption	The indicators reflect: (1) The percentage and the total number of business units analyzed and assessed concerning risks related to corruption; (2) the percentage of employees trained in anti-corruption policies; and (3) actions that need to be taken to combat corruption.
Public-related policy	The indicators reflect the implementation and application of public policies throughout the unit. An additional indicator reflects the amount and contributions to political parties, politicians, and other social organizations.
Anti-competition practices	Indicators reflect the legal actions against unfair competition, antitrust problem-solving methods for consequences.
Compliance	The core indicator reflects the amount of fines and the number of cases with non-monetary fines due to non-compliance with laws and policies.
Social activities: Performance indicators of product responsibility	
Customer health and safety	Indicators reflect how health and safety effects on consumers are evaluated on a more completed direction.
Product labels and service	Indicators reflect types of information about the product and service requested, as well as number of violations and customer satisfaction.

Marketing connections	The indicators reflect the compliance with laws and standards related to marketing campaigns.
Customer privacy	Indicators reflect the number of customer complaints regarding privacy breaches or information loss.
Compliance	A core indicator reflects the amount of fines and the number of cases with non-monetary fines for non-compliance with laws and policies related to products and services.

RESEARCH METHODOLOGY

This study applied qualitative research methods: Use expert interview tool to assess the existence of traditional accounting systems related to environmental protection and opinions on the use of the guiding indicator system in the global reporting initiative (GRI) developing environmental accounting reporting criteria in listed companies. The purpose of the interviews is to complete the system of guidelines for making sustainable development reports under the whole accounting reporting initiative, including: (1) the group of indicators belonging to economic activities; (2) criteria group belongs to environmental activities; (3) target group belongs to social activities. In this study, a total of 20 in-depth interviews were conducted. Respondents include: (i) 5 business executives (directors, financial directors) who are responsible before the law for the legality of the financial statements: 10 accountants (7: chief accountants, heads Department of Finance and Accounting, person in charge of accounting and 3 accountants) are those who directly prepare the financial statements of enterprises and 5 university lecturers who are directly teaching environmental accounting.

“The benefits of applying global accounting reports for businesses in vietnam and recommendation for global reporting initiative application - preparing environmental accounting reports to apply in vietnamese enterprises”.

Benefits of Applying Global Accounting Reports to Vietnamese Businesses

All interviewed experts said that: First, the benefits of sustainability reporting are a vital step towards achieving a sustainable global economy. Reporting enhances companies' accountability for their impacts and therefore enhances trust, facilitating the sharing of values on which to build a more cohesive society. The availability of sustainability information can be used by governments to assess the impact and contribution of businesses to the economy and to understand which issues are being tackled by which players. Widespread sustainability reporting practices, creating transparency, can help markets function more efficiently and indicate the health of the economy; and help drive progress by all organizations towards a smart, sustainable and inclusive growth.

Second, organizations can use reporting to inform their risk analysis strategies and boost their business. A growing number of companies see sustainability reporting as a means to drive greater innovation through their businesses and products to create a competitive advantage in the market. Governments, businesses and stakeholders all directly benefit from it, and the positive impact on social, environmental and human rights issues is evident. Specifically, for organizations, sustainability reporting adds value in a number of areas: Building trust Transparency about non-financial performance can help to reduce reputational risks, open up dialogue with stakeholders such as customers, communities and investors, and demonstrate leadership, openness and accountability. Improved processes and systems internal management and decision-making processes can be examined and improved, leading to cost reductions by measuring and monitoring such issues as energy consumption, materials use, and waste.

Third, progressing vision and strategy comprehensive analysis of strengths and weaknesses, and the engagement with stakeholders that is necessary for sustainability reporting, can lead to more robust and wide-ranging organizational visions and strategies. Importantly,

companies can make sustainability an integral part of their strategies. Reducing compliance costs measuring sustainability performance can help companies to meet regulatory requirements effectively, avoid costly breaches, and gather necessary data in a more efficient and cost-effective way. Competitive advantage companies seen as leaders and innovators can be in a stronger bargaining position when it comes to attracting investment, initiating new activities, entering new markets, and negotiating contracts.

Recommendation For Global Reporting Initiative Application - Preparing Environmental Accounting Reports To Apply In Vietnamese Enterprises

Most of the respondents (17/20 = 85%) appreciated that EAR are important for businesses that care about managing environmental costs and increasing the effectiveness of environmental protection programs. Based on the information gathered on the Environmental Cost account, the accountant can summarize and set up an Environmental accounting report with the following basic contents Table 5.

Table 5				
ENVIRONMENTAL ACCOUNTING REPORT				
Part 1: Overview of the business.				
This section usually covers the following contents:				
<ol style="list-style-type: none"> 1. Introducing general information of the business 2. Commitments on responsibilities and obligations to the environment 3. Enterprises' policies concerning the environment 4. Environment management system of the enterprise 5. Introducing the content, scope and purpose of the report 				
Part 2: Summary of information on environmental costs and benefits for enterprises				
Summary of information on costs and environmental benefits in monetary forms				
Expenses		This period	Last period	Differences
1. Direct environmental costs				
1.1. Labor costs				
1.2. Depreciation of equipment for treatment				
1.3. Equipment maintenance costs				
1.4. Taxes and fees				
1.5. Fines, damages				
1.6. Other costs				
2. Indirect environmental costs				
2.1. Environmental management costs				
2.2. Research and development costs				
2.3. Costs relating to social activities on the environment				
Summary of information on environmental costs in non-monetary forms				
Types of activity	Indicator	Last period	This period	Differences
Input resources for production and business activities	<ul style="list-style-type: none"> - Total amount of input energy (J) - Volume of input energy by type (J) - Volume of circulating supplies (t) - Volume of water used 			
Output of production and business activities related to the volume of final products and services	<ul style="list-style-type: none"> - The amount of energy used which had impacts on the environment - The amount of raw materials used which had impacts on the environment - The volume of recycled packaging collected 			

Output of production and business activities related to waste and discharge	- The volume of toxic emissions - The total amount of waste – The total amount of wastewater. Quality of wastewater			
Other activities	Volume of products / materials transported Wastewater area NoiseVibration			
Part 3: Summary of information on environmental benefits				
Content		Volume		Total
1. Revenue / Income - Revenue from selling scraps of the manufacturing process - Revenue from the sales of products using recycled materials - Investments from sponsors				
2. Cost savings - Energy saving costs - Cost of efficient waste discharge				

CONCLUSION

Currently, environmental protection issues are becoming a concern of not only individuals but also the whole society. Traditional accounting by existing assumptions and principles has not been able to fully and accurately record environmental content or factors. This is the premise for the establishment and development of current environmental accounting. Environmental accounting is very important for industries such as textiles, seafood, etc., in which export products need to meet rigorous standards in the production process, not only in terms of product quality but also regarding environmental and social elements.

This article firstly analyzes the shortcomings of the traditional accounting system relating to the contents of identification, measurement, recording and presentation of new environmental objects. Then, based on the guidance system for making sustainable development reports under the Global Reporting Initiative's Sustainability Reporting Guidelines (GRI), the article proposes a system of indicators, in addition to existing financial statements, which economic organizations need to present, including:

1. The group of indicators belonging to economic activities.
2. The group of indicators belonging to environmental activities
3. The group of indicators belonging to social activities (including labor, human rights, labor safety, product responsibilities).

Based on that, the authors have built an environmental accounting report form for Vietnamese enterprises under the condition of economic integration.

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REFERENCES

- Adams, C.A. (2015). The international integrated reporting council: A call to action *Critical Perspectives on Accounting*, 27, 23-28.
- Tanc, A., & Gokoglan, K. (2015). The impact of environmental accounting on strategic management accounting: a research on manufacturing companies. *International Journal of Economics and Financial Issues*, 5(2), 566-573

- Bartolomeo, M., Bennett, M., Bouma, J.J., Heydkamp, P., James, P., & Wolters, T. (2000). Environmental management accounting in Europe: Current practice and future potential. *The European Accounting Review*, 9(1), 31-52.
- Burritt, R. (2009). Environmental management accounting for cleaner production: The case of a Philippine rice mill. *Journal of Cleaner Production*, 17(4), 431-439.
- Chang, H.C. (2007). *Environmental Management Accounting Within Universities: Current State and Future Potential*, Unpublished PhD Thesis, RMIT University.
- Jasch, C., Ayres, D., & Bernaudat, L. (2010). Environmental Management Accounting (EMA) case studies in honduras – an integrated UNIDO Project. *Issues in Social and Environmental Accounting*, 4(2), 89-103.
- Craig, D. (2009). *Financial Accounting Theory* (3rd Edition). McGraw Hill.
- Eccles, R., & Krzus, M. (2010). Integrated reporting for a sustainable strategy. *Financial Executive*, 3, 29- 33.
- Elkington, J., & Renaut, J. (2010). Holy Grail of integrated reporting. Retrieved from: <http://www.sustainability.com/researchandadvocacy/eventsarticle.asp?id%41694>.
- Khalid, F.M., Lord, B.R., & Dixon, K. (2012). *Environmental management accounting implementation in environmental sensitive industries in Malaysia*, 6th NZ management Accounting Conference, Massey University, Palmerston North, 22-23 Nov 2012.
- Ferreira, Moulang., & Hendro. (2010). Environmental management accounting and innovation: An exploratory analysis. *Accounting, Auditing & Accountability Journal*, 23(7), 920-948.
- Moisesescu, F., & Mihai, O. (2006). *Environmental financial accounting*. The Annals Of "Dunărea De Jos" University of Galați Fascicle I - 2006, Economics and Applied Informatics, Year XII, 79-84
- Frias-Aceituno, J., Aziza, R.L., Isabel, M., & Garcia, S. (2012). Explanatory factors of integrated sustainability and financial reporting. *Business Strategy and the Environment*, 23, 56-72.
- Gray, R., Owen., & Adams, C. (1996). *Accounting and Accountability: Changes and Challenges in Corporate Social and Environmental Reporting*, London: Printice Hall.
- Gray, R., Kouhy, R., & Lavers, S. (1995). Corporate social and environmental reporting: A review of the literature and a longitudinal study of UK disclosure. *Accounting, Auditing & Accountability Journal*, 8(2),47-77
- Saremi, H., & Nezhad, B.M. (2014). Role of environmental accounting in enterprises. *Ecology, Environment and Conservation* 20(3).
- Hampton, R. (2012). Brace yourself: More regulatory changes. *Accountancy SA*, 22-23.
- IFAC. (2005). *Environmental management accounting*, New York: IFAC.
- James, M.L. (2013). Sustainability and integrated reporting: opportunities and strategies for small and midsize companies. *Entrepreneurial Executive*, 18, 17-28.
- Jensen, J., & Berg, N. (2012). Determinants of traditional sustainability reporting versus integrated reporting: an institutionalist approach. *Business Strategy and the Environment*, 21(5), 299-316
- King, M. (2012). Comments on: integrated reporting and the integrated report, Public Lecture, International Corporate Governance, Johannesburg.
- Mammatt, J. (2009). *Integrated sustainability reporting and assurance*, paper for CIS corporate governance Conference on 10 to 11 September 2009.
- Makiwane, T. (2013). Evaluation of corporate intergated reporting in South Africa- An exploratory enquiry. *Journal of Economic and Financial Sciences*, 6(2), 421-438.
- Ministry of Finance, (2014). Circular guiding the enterprise accounting regime.
- Nga, H.T.T (2014). *Environmental accounting for Vietnamese enterprises*. Retrieved from: <http://www.cdcslaocai.edu.vn/index.php>
- Mokhtar, N., Zulkifli, N., & Jusoh, R. (2014). The implementation of environmental management accounting and environmental reporting practices: A social issue life cycle perspective. *International Journal of Management Excellence*, 4(2), 515-521.
- Harris, R. (2009). *Environmental accounting applications for Sustainable Consumption and roduction policies*, 14th Meeting of the London Group on Environmental Accounting, London Group, Canberra, Australia, 27-30 April 2009.
- Robertson, F.A., & Samy, M. (2015). Factors affecting the diffusion of integrated reporting- a UK FTSE 100 perspective. *Sustainability Accounting Management and Policy Journal*, 6(2), 190-223.
- Saeidi, S.P., Sofian, S., & Saeidi, P. (2011). *Environmental management proceeding*. Conference Master Recources, Penang, Malaysia, 13-14 June 2011
- Schaltegger, S., & Wagner, M. (2011). Sustainable entrepreneurship and sustainability innovation: Categories and interactions. *Business Strategy & the Environment*, 20(4), 222-237
- Bose, S. (2006). Environmental accounting and reporting in fossil fuel sector: A study on bangladesh oil, gas and mineral corporation (Petrobangla). *The Cost and Management*, 34(2), 53-67.
- Stubbs, W., & Higgins, C. (2014). Intergrated reporting and internal mechanisms of change. *Accounting, Auditing & Accountability*, 27(7), 1068-1089.

- The Guidelines for Sustainable Development Reporting of Global Reporting Initiative's Sustainability Reporting Guidelines (GRI), (2011). Retrieved from: <https://www.globalreporting.org/resourcelibrary/g3.1-guidelines-incl-technical-protocol.pdf>
- Villiers, C.D., Rinaldi, L., & Unerman, J. (2014). Integrated reporting: Insights, gaps and an agenda for future research. *Accounting, Auditing and Accountability Journal*, 27(7), 1042-1067.
- Zyl, A.S. (2013). Sustainability and integrated reporting in the south african corporate sector. *Journal of Sustainability Management*, 1(1), 19-42.
- Franklin, W.J. (2009). *The application of environmental management accounting on financial performance of cement industry in uganda: case of Tororo cement industry and mountain enterprise Tororo (Uganda) limited*. The Degree of Master of Science in Accounting & Finance of Makerere University, September 2009.