Corporate Environmental Disclosure Practices in Vietnam

Nguyen Vinh Khuong^{1,2}, Thai Hong Thuy Khanh³, Phung Anh Thu³ & Bui Ngoc Linh^{1,2}

Correspondence: Phung Anh Thu, Faculty of Finance and Accounting, Nguyen Tat Thanh University, Ho Chi Minh City, Vietnam.

Received: January 18, 2020 Accepted: February 24, 2020 Online Published: March 8, 2020

Abstract

The purpose of the paper is to examine the extent of corporate environmental disclosure (CED) made by some major Vietnam listed firms (VLFs) on their annual reports, corporate governance reports and sustainability reports (if any) for the years 2017 to 2018 since some firms have not published sustainability reports for the year 2018 yet. And study also aims to support people with the overview of the importance and level impact of CED for business operations and stakeholders as well. Hence, with the theoretical framework of CED, international experience of CED, and the examination of situation of CED of some major VLFs in Vietnam, we would like to create the motivation, aspiration for readers to learn more about CED so that the form of disclosing environmental information will become familiar with other company annual reports.

Keywords: corporate environmental disclosure, listed firm, Vietnam

1. Introduction

The integrity of society is the crucial element which has to achieve in the operating process of the economic to obtain the sustainable development (Deegan, 2007). In the globalization and industrialization era, the maturation of the global industry has highly negative impact on the environment. Hence, government needs to be in harmony with the environment and the economic growth (Shah, 2007). Nevertheless, in the developing countries, environmental problems have not been paid enough attention which causing several consequences (Pham, 2010). Specifically, the rapid growth of Asian economy, since 1980, boost the environmental pollution most of by the domestic enterprise which have no much mindfulness of responsibility for protect environment, in contrast with the multinational companies (Chen, 2009). So the environmental responsibility has more concern in the developing countries, especially Vietnam.

In recent times, most of the countries in the world make an effort to achieve green growth strategies, especially in Western Europe and East Asia. Particularly, they counteract and eliminate the imported goods which do not comply the production process and the requirement of environmental protection. Not only focus on the profits, Vietnamese enterprises but also need to consider the environmental and social responsibility. There are the multi dimension impact among the environment and the industrial operation. The industrial operation might have the significantly negative or positive impact on the environment and vice versa. This relationship can be clarified via several kinds of research in the corporate environmental disclosure (CED), particularly the environmental perspective of social responsibility (CSR). The corporate environmental disclosure can enhance firm's reputation and image to domestic and foreign partners which is the motivation for enterprises of the partner countries in the Trans-Pacific Partnership Agreement (TPP). As the member of TPP, Vietnam has to publish the environmental information of Vietnamese enterprises leading to enhance the competitiveness and sustainable development in the globally integrated context. Hence, the Ministry of Finance of Vietnam issued Circular No. 155/2015/TT-BTC to require the publishing environmental information from the listed firms which be effective from January 1st, 2016. Nevertheless, the Vietnamese listed firms still have low level of environmental information's disclosure and transparency, and disparity among enterprises. Hence, we investigate the phenomenon of Vietnam's corporate environmental disclosure via raising the firm's awareness of the disclosing environmental information essence. This study contributes to the next implement of environmental information announcement process via providing the efficient orientations and solutions for Vietnamese enterprises.

¹ Faculty of Accounting and Auditing, University of Economics and Law, Ho Chi Minh City, Vietnam

² Vietnam National University, Ho Chi Minh City, Vietnam

³ Faculty of Finance and Accounting, Nguyen Tat Thanh University, Ho Chi Minh City, Vietnam

2. Theoretical Framework and Literature Review

2.1 Legitimacy Theory

Legality describes the actions of an entity which comply with the systems of norms, values, beliefs and definitions of the state (Tilling, 2004). There are several empirical studies employ the legal theory as a framework for investigating the corporate information disclosure policies (Deegan & Gordon, 1996; Guthrie & Parker, 1990). Deegan (2002) supposes the organizations should be adapt to community expectations. Besides, organizations will be penalized in terms of operating under the adverse community expectations. Guthrie and Parker (1990) utilizes legitimate theory to analyze corporate disclosure policies at Australian companies in the 1970s. The authors indicate that the highest level of social publishing has been obtained when the conservationists concentrate to their attention on the mining, steel and oil industries. These results, among other results, show that legal theory is the basis for CSD activities that respond to environmental stress.

2.2 Content and Nature of CED

Among different countries, the pattern of CED reveal in disparate dimension (Djajadikerta, et. Al, 2012). In Europe and Australia, companies are more likely to publish environmental, energy, recycling and pollution information (Deegan et al., 2002). Nevertheless, in Asia, companies reveal their social activities via disclose the information about employees and human resources (see for example Kuasirikun & Sherer, 2004).

Besides, Djajadikerta, et. al. (2012) and Gunawan (2007) emphasize the nature of this information is similar throughout all countries in the world, in terms of neutral, positive and tissue nature. The report instead of negative or quantitative. Positive disclosures cover information on agreement with standards and acceptance of grants (Deegan & Gordon, 1996); while negative disclosures incorporate information about punishments as well as other harmful environmental information (Deegan, Rankin, & Tobin, 2002). Other information, such as employee training, pollution control, product development, environmental campaigns and recycling, is considered neutral disclosure (Ahmad & Sulaiman, 2004).

Previous studies indicate that most companies prefer to employ the descriptive, narrative or qualitative information to report their CSD (Gunawan, 2007) than quantitative information, e.i. images, graphs and charts (Ahmad & Sulaiman, 2004; Kuasirikun & Sherer, 2004). In fact, quantitative and monetary information, to a certain extent, can be utilized to evaluate the feasibility. Therefore, to approach the disclosure of information in corporate social and environmental activities, this study utilizes both of the description and quantitative method.

3. Research Design

The methodology of this paper is mainly to analyze and synthesize documents, textbooks, journals, reliable website, articles and thesis from some countries all over the world regarding CED.

Selection of companies

Based on Forbes list of 40 most valuable brands of Vietnam in 2018, we choose randomly 5 companies which are familiar to the public and represent its industry. They are Vinamilk and Masan Consumer in Food and Beverages industry, Petrolimex in Retail industry, FPT in technology industry and DHG in Pharmaceutical industry.

Information about items included in the Environmental Disclosure Index

Corporate Annual Reports (CARs) utilize the Disclosure Index Approach to make an environmental disclosure assessment. This study constructs the congruous disclosure index via the expectedly environmental information in the Vietnamese corporate annual reports. There is a problem whilst no generally theory and model have been accepted to investigate environmental information, particularly the Environmental Disclosure Index

The nature of environmental disclosures has been clarified by the motivated theories for corporate environmental report. When environmental reporting is considered as a signal for consideration of environmental performance, stakeholders can consider it from both perspectives including economic rationalism or to enhance the link to values. of the public. Therefore, management is more likely to provide objective, verifiable data (referred to as hard disclosure). On the other hand, when environmental reporting verifies companies with poor environmental performance, management is more likely to use a higher percentage in disclosures, such as policies and strategies, easier to imitate and therefore less likely to imitate (Clarkson et al., 2008, 2011).

Moreover, the other environmental disclosure index has been suggested by Clarkson et al. (2008), based on the global reporting initiative (GRI). This index facilitates the investigation to the nature of disclosures via comprising

both "soft" and "hard" disclosure items, which are more objective and verifiable (He et al., 2016). (Table 1. Environmental disclosure index)

Scoring in the Corporate Environmental Disclosure Index

This study employs the environmental disclosure index, which developed by Clarkson et al. (2008). However, there are three modifications to adapt the environmental disclosure index to the Vietnamese context, as explained below. The environmental disclosure index comprises seven categories (A1-A7) covering 42 disclosure items that are further classified as hard disclosure items (categories A1-A4, 26 items) and soft disclosure items (categories A5-A7, 16 items). The distinction between hard and soft disclosure items simplifies the analysis of the nature of disclosure.

The categories and items included in the disclosure index relate to the various environmental performance indicators (EPIs) as shown in Table 1. This study eliminates the External Environmental Performance Awards, which listed in the GRI and involved in the Clarkson et al. (2008) disclosure index (item A2.6), to dodge regular bias towards obtaining a positive relationship with CEP. Clarkson et al. (2008) introduce EPIs on greenhouse gas emissions and on other air emissions as separate parts, A3.3 and A3.4, sequentially. These items are connected in item A3.3 of the index applied in this research because Vietnamese firms that disclose air emissions seldom discriminate between these two varieties of emissions. Moreover, item A3.5 "EPI on toxic release inventory (TRI)" of the Clarkson et al. (2008) disclosure index is eliminated from the index adopted in this investigation because it did not fit the Vietnamese context.

In building the disclosure index, items in all categories other than A3 are calculated dichotomously. One point is conferred if the information is published, and 0, oppositely. Items in category A3 are scored from 0 to 6. One point is conferred for each of the following items:

- (1) performance information is exhibited;
- (2) performance information is displayed relative to competitors or industry;
- (3) performance information is shown relative to earlier years;
- (4) performance information is displayed relevant to goal;
- (5) performance information is exhibited both in full and normalized report; and
- (6) performance information is disaggregated (i.e. by enterprise unit).

Points for all sections are added together to create the final score. This publication index considers hard disclosure by including stiffer published items and allowing extra weight to the A3 hardcopy catalogue, consonant with the marginal GRI emphasis on client information disclosure. These are subject to review and verification (Clarkson et al., 2011). Hard and soft disclosures are independently recognised in Table 1.

Table 1. Environmental disclosure index

| Name of environmental disclosure items | Scores |
|---|-----------------|
| Hard disclosure | |
| (A1) Governance structure and management systems | 0-1, |
| | max. score is 6 |
| 1. Existence of a department for pollution control and/or management positions for | |
| environment management | |
| 2. Existence of an environmental and/or a public issues committee in the board | |
| 3. Existence of terms and conditions applicable to suppliers and/or customers regarding environmental practices | |
| 4. Stakeholder involvement in setting corporate environmental policies | |
| 5. Implementation of ISO 14001 at the plant and/or firm level | |
| 6. Executive compensation is linked to environmental performance | |
| (A2) Credibility | 0-1, |
| | max. score is 9 |
| 1. Adoption of GRI sustainability reporting guidelines or provision of a report | |

| 2. Independent verification/assurance about environmental information disclosed in the environmental report | |
|---|------------------|
| 3. Periodic independent verifications/audits on environmental performance and/or systems | |
| 4.Certification of environmental programs by independent agencies | |
| 5. Product certification with respect to environmental impact | |
| 6. Stakeholder involvement in the environmental disclosure process | |
| 7. Participation in voluntary environmental initiatives endorsed by government | |
| environmental agency | |
| Participation in industry-specific associations/initiatives to improve environmental practices | |
| 9. Participation in other environmental organizations to improve environmental practices | |
| (A3) Environmental Performance Indicators (EPI) | 0-6, |
| | max. score is 48 |
| 1. EPI on energy use and/or energy efficiency | |
| 2. EPI on water use and/or water use efficiency | |
| 3. EPI on air emissions | |
| 4. EPI on discharges, releases and/or spills | |
| 5. EPI on waste generation and/or management (recycling, re-use, reducing, treatment and disposal) | |
| 6. EPI on land and resources use, biodiversity and conservation | |
| 7. EPI on environmental impacts of products and services | |
| 8. EPI on compliance performance (e.g. reportable incidents) | |
| (A4) Environmental spending | 0-1, |
| (11) 21/11 omnormal openions | max. score is 3 |
| Summary of savings to the company arising from environment initiatives | |
| 2. Amount spent on technologies, R&D and/or innovations to enhance environment and/or | |
| efficiency | |
| 3. Amount spent on fines related to environmental issues | |
| Total hard disclosure | |
| Soft disclosure items | |
| (A5) Vision and strategy claims | 0-1, |
| (16) Vision and strategy claims | max. score is 6 |
| 1. CEO statement on environmental performance in letter to shareholders and/or | max. score is o |
| stakeholders | |
| A statement of corporate environmental policy, values and principles, environmental codes of conduct | |
| 3. A statement about formal management systems regarding environmental risk and performance | |
| 4. A statement that the firm undertakes periodic reviews and evaluations of environmental performance | |
| 5. A statement of measurable goals in terms of future environmental performance | |
| 6. A statement about specific environmental innovations and/or new technologies | |
| (A6) Environmental profile | 0-1, |
| , , , , , , , , , , , , , , , , , , , | max. score is 4 |
| A statement about the firm's compliance (or lack thereof) with specific environmental standards | |
| 2. An overview of environmental impact of the industry | |
| 2. 1 in overview of environmental impact of the middsuly | |

| 3. An overview of how the business operations and/or products and services impact the | |
|---|-----------------|
| environment | |
| 4. An overview of corporate environmental performance relative to industry peers | |
| (A7) Environmental initiatives | 0-1, |
| | max. score is 6 |
| 1. A substantive description of employee training in environmental management and | |
| operations | |
| 2. Existence of response plans in case of environmental accidents | |
| 3. Internal environmental awards | |
| 4. Internal environmental audits | |
| 5. Internal certification of environmental programs | |
| 6. Community involvement and/or donations related to environment (if not awarded under | |
| A1.4 or A2.7) | |
| Total soft disclosure | |
| Total disclosure score | |
| Proportion of hard disclosures items (hard disclosure items/total disclosure items) (%) | |

4. Results

FPT Corporation (FPT) - Technology industry

With more than 30 years of development, FPT has demonstrated its pioneering and leading technology, telecommunications, education, etc., making FPT a leading IT corporation of the country. With the goal of bringing Vietnam's intelligence to the world, and inspiring millions of young Vietnamese to make a contribution to the nation's prosperity. In 2006, FPT was one of the first technology companies to be listed on the stock market and started publishing annual reports, in which FPT mentioned environmental impacts and activities in a general way in a section called Corporate Social Responsibility. The company did not change its format of environmental reporting until it applied Sustainability Reporting in the annual report for the first time in 2013. In the part Sustainable Development Report, FPT has separated environmental reporting in the Corporate social responsibility and environmental protection.

Being an Information Technology company, FPT has a reason for not presenting much about the environment since its products are all about technology. However, for the purpose of growing sustainably and gaining more trust of investors as well as customers and the society, FPT has to add more information in its reports to the public, especially about the environment because this is a serious matter these years. In engaging in environmental protection activities, FPT ensures the efficient use of natural resources, complies with the provisions of the Law on Environmental Protection, gives priority to using alternative energy sources, and raises awareness of environmental protection. The total score FPT has for both hard and soft disclosure in the CEDI is 17/82, which is quite low for an environmental reporting section. All the information about the environment is found in FPT's annual report only while the corporate governance report does not provide any environmental information.

For hard disclosure, FPT only scores 11/66 because FPT does not have or mention environmental spending, there are only expenditures for young generation investments and voluntary activities, which means there is no score for FPT in A4. Through the annual report of FPT, there is no existence of a department or committee for pollution control or environment management. It seems that this is not the time for FPT to apply ISO 14001 like other companies in core sectors. However, FPT does mention the terms and conditions applicable to suppliers or customers regarding environmental practices: "Suppliers are selected based on a set of criteria including price, reputation, quality, availability and delivery, and social and environmental responsibility. The selection criteria of suppliers can be changed to suit each type of goods/services in order to find the most suitable suppliers to ensure the highest benefits for FPT and its suppliers. Criteria are evaluated on a scale with different weights depending on the group of purchasing services". And stakeholders do involve in setting goals for environment, which become corporate environmental policies. But still, no compensation or saving arises from environment initiatives. So FPT has a score of 2/6 for A1 – Governance structure and management systems.

But in A2 – Credibility, FPT does mention the adoption of GRI sustainability reporting guidelines or provision of a report though not fully. FPT sustainability development report was built up as per GRI frame version G4 following core choice. And FPT's efforts in participating in voluntary environment programs deserve a score of 2 of credibility. About Environmental Performance Indicators (EPI), FPT only presents the figures of energy and water use. There are some statements about discharges and waste management as well but no exact number is mentioned so no score is given. On the other hand, with the two EPI on water and energy use, FPT shows clearly to the public not only the figures throughout a period of years but also disaggregated in locations. That is why the score is 3 for each EPI.

With only few pages about the environment activities, FPT does not score much in soft disclosure either. In vision and strategy claims (A5), FPT has a score of 3 in mentioning corporate environmental policy, values, principles and codes of conducts as well as environmental innovations. There are also periodic reviews and evaluations of environmental performance: "Regular environmental impact assessment reports and compliance with regulations regarding environmental protection. Prioritization of the application of new technologies and environmentally friendly materials that make the most of natural energy sources in order to minimize the impact on the environment during the process of designing offices". 3 points are given to FPT in A6 – Environmental profile for the disclosure of the firm's compliance with environmental standards and an overview of environmental impact of both the industry and the business operations. And a score of 2 in Environmental initiatives (A7) for a description of employee training in environmental protection and community involvement related to the environment, which is disaster relief.

For a technology company, it seems that FPT has improved its report gradually to deserve the title of being a leading IT corporation of Vietnam. To achieve sustainable development, FPT should do more in the field of environment to gain more trust of the public.

Petrolimex (PLX) - Retail industry

With the tradition of the Vietnamese revolutionary petroleum industry, generations of leaders, officers and workers have made wholehearted and tireless efforts to build, develop and diversify Petrolimex's selected businesses with oil as the core. The Group has promoted many products to be the Vietnamese leading brands such as PLC, PGC, Pjico, Vipco, Vitaco, etc and they are still striving to move further forward. Switching to joint stock model operating under Enterprise Law, Petrolimex continues to play a pivotal role in the development of Vietnam petroleum market, contributing to the stabilization of the national macro-economy, assurance of social security and sustainable growth. In 2017, PLC marked a turning point when officially listing on Ho Chi Minh City Stock Exchange (PLX code), being in the Top 50 Vietnam best listed companies, taking the first place in revenue. At the same time, Petrolimex published Sustainability Report for the year 2017 for the first time and presented more clearly about the environment than previous annual reports from 2016 backwards.

Vietnam National Petroleum Group main business scope is to trade in petroleum and petrochemical products contributing to the cause of socio-economic development, meeting people's demand, ensuring the energy security and playing its predominant role in stabilizing and developing the national petroleum market. For that reason, liquid waste, air waste and emergency environmental incidents are the most remarkable environmental effects of Petrolimex. Therefore, Petrolimex environmental protection activities are executed in the whole system of mentioned infrastructures with the highest level of guarantee on environmental safety. The modern and synchronous infrastructure system makes the reserve and transportation safe, reduces loss, wastage and cuts cost as well. These are the most meaningful projects in both economic and environmental aspects.

However, despite the above-mentioned efforts of Petrolimex, it only has a total score of 33/82 for CEDI, which comprises 21/66 for hard disclosure and 12/16 for soft disclosure. It seems that the first Sustainability Report of Petrolimex does not come to the public's high expectation about environmental information for a petrol corporation. In detail, in the part hard disclosure, Petrolimex has a department for pollution control and/or management positions for environmental management at the group's bureau called Group's Occupational Safety and Health - directly under the responsibility of one Deputy Chief Executive Officer. It also has a public issues committee in the board, which is Social Environment and Sustainable Development Unit. The Group also mentions the involvement of stakeholders in setting corporate environmental policies, executive compensation regarding the environment. It presents the terms and conditions applicable to suppliers related to environmental practices. There is no ISO 14001 implementation, which is a great omission to the report. So the score for A1 – Governance structure and management systems is 5/6. For Credibility (A2), Petrolimex scores 8 for adopting GRI sustainability reporting guidelines or provision of a report and has certification of environmental programs by independent agencies and product certification with respect to environmental impact. Petrolimex also shows the spirit of a leading company in oil sector for participation in many organizations regarding improving environmental practices. The Group cooperates with local Department of Natural

resources and Environment, People's committee of districts to issue a report on environmental impact assessment, commitment form on environmental protection, environmental licenses and execute environmental monitoring and annual environmental pollution supervision in line with regulations. This is to prove that Petrolimex has independent verification about environmental information disclosed in the report periodically. Petrolimex also works with world class petrol brands: Tankstore, Audex, Nippon Oil, Idemitsu, Tatsuno, Oval, ect, regional countries and biggest petrochemical refining countries: America, Italia, Japan and Singapore, etc. No stakeholder involvement in the environmental disclosure process is noted.

To the part A3 – EPI, Petrolimex makes an effort to present all the related figures of environment, such as water, discharges, waste management and resources use. It also discloses the environmental impacts of products and services and compliance performance. However, the report just stops at giving figures of the year and there is no comparison to previous years or to the rivals and industry. No target is mentioned for the numbers disclosed either. The only difference is in air emissions, discharges, releases and spills since Petrolimex presents disaggregated performance data by plants. Petrolimex also discloses clearly about compliance performance with reportable incidents through a period of years. So the total score for EPI is 10/48. Besides, the Group provides the amount spent on fines related to environmental issues as well.

Petrolimex scores 12/16 in the soft disclosure for more statements in general about the environment. These include 6/6 in A5 — Vision and strategy claims. The Group only loses 1 point in not giving an overview of corporate environmental performance relative to industry peers which is not presented in other companies' report either. Petrolimex has a substantive description of employee training in environmental operations and reponse plans in case of accidents. The Group also donates a lot to improve the environment. However, no internal environmental awards, audits and certifications is noted. As can be seen from the CEDI of Petrolimex, it can be concluded that Petrolimex has put effort in improving the quality of its report on the environment but the public need more of hard disclosure than soft one, so Petrolimex should consider this matter as soon as possible.

Vinamilk (VINAMILK) - Food industry

Vietnam Dairy Products Joint Stock Company is a company producing and trading milk and dairy products as well as related machinery and equipment in Vietnam. According to the United Nations Development Program, this is among the 15 largest companies in Vietnam in 2007. Vinamilk is a leading company in the dairy processing industry, currently occupying 54.5% of liquid milk market share, 40.6% of powdered milk market share. In addition to strong domestic distribution with a network of more than 220,000 points of sale covering all 63 provinces and cities, Vinamilk products are also exported to 43 countries around the world. After more than 40 years of consumer launch, Vinamilk has built 14 manufacturing factories, 2 logistics enterprises, 3 branches of sales offices, and a dairy factory in Cambodia (Angkormilk) and a representative office in Thailand.

Vinamilk was officially list on HOSE on 19 January, 2006. Since then, Vinamilk has published annual reports in which it did not refer to the environment but only voluntary activities for the community. Not until 2010 did Vinamilk start adding information about the environment through the section "Environment and the Community" in its annual report but the information was just general about water, energy, resources use and waste and was given no exact figures. In 2011, Vinamilk presented about the environment in more pages than the previous years and added the comparative percentage of resources used through a period of 3 years. And Vinamilk finally published the first Sustainability Report separating from the annual report in 2012 with more detail about environmental impacts of its activities. There has been a section Sustainable Development in any annual report of Vinamilk from 2012 onwards but the information given about the environment is always general. Vinamilk spent more statements on the volutanry programs than on the environment so we would like to evaluate Vinamilk on the environmental reporting in its Sustainability report only.

In general, Vinamilk scores 50/82 for the total points of CEDI. This is a quite high score compared to other companies in the dairy industry with a clear and detailed sustainability report. Vinamilk did make an effort to disclose clearly and abundantly any information about the environment. In detail, for hard disclosure, Vinamilk has 34/66 points with 4 points in A1 – Governance structure and management systems, 8 points for A2 – Credibility, A3 – EPI has 19 points and 3 points are given to A4 – Environmental spending. There exists a department for pollution control and public issues committee in Vinamilk management positions. Vinamilk also apply terms and conditions to its suppliers regarding environmental practices and implement ISO 14001 at the firm level as well. But as other companies in Vietnam, there is no information about stakeholder involvement in setting policies about corporate environment and executive compensation regarding environmental performance either. As for Credibility (A2), like

the above-mentioned information, no stakeholder involvement is noted in the environmental disclosure process and Vinamilk does not disclose any environmental organization it participates in to improve environmental practices.

The most detailed part is Environmental Performance Indicators (EPI). Vinamilk describes and discloses many information about the environment. Not only does the company present the figures but it also compares with the previous years and divides into each process. So the score is 3 for energy, water and resources use, air emissions and releases. About recycling waste, the company compares its figures to the targets so the score is 2. And Vinamilk also state the environmental impacts of its products and services as well as compliance performance with no incidents or fines.

The most noted difference between Vinamilk and other companies' reports about the environment is the part environmental spending. The group discloses all the savings arising from environmental initiatives and the spending on technologies to enhance the efficiency and make less impact on the environment. As the compliance with the Environment Law, the amount Vinamilk spent on fines related to environmental issues is nil. The total score of hard disclosure was half as much the standard but this is a remarkable report among other companies' sustainability reports. In soft disclosure, Vinamilk scores full of the standard score, so the mark was 16/16.

DHG Pharma (DHG) - Pharmaceutical industry

DHG Pharma, given significant challenges in the market, has endlessly strived for constant devotion, which enabled itself to successfully retain its top 40 most valuable trademarks in Vietnam as well as its leading position in the domestic pharmaceutical industry. DHG first adopted sustainability report in 2015 after nearly 10 years publishing annual reports. However, in those annual reports, DHG did put effort in voluntarily presenting more information about the environment and the classification of employee coaching in environmental management and operations as well as environmental events with exact figures. Although the amount of information is not much, about 1 page, but it shows that DHG cares about the environment and wants to enhance the quality of its report to the public.

Therefore, the total score for its newest sustainability report on environmental information is 53/82, 5 points over Vinamilk for the quality and quantity of information DHG has given to its report. This proves that DHG's reports are credible and full of useful and transparent information.

In detail, with hard disclosure, DHG scores 81/66. For A1 – Governance structure and management systems, because of the lack of the implementation of ISO 14001 and stakeholder involvement in setting corporate environmental policies, DHG has a mark of 4/6. As in Credibility (A2), DHG scores 8/9 as a result for its clear and transparent report with only a lack of the involvement of stakeholders in the environmental disclosure process. The company's EPIs are also presented in a very detailed way but some indicators only meet one requirement of CEDI. Those are environmental impacts of DHG's products and services and its compliance performance. Other EPI, on the other hand, are presented in statements, tables and graphs which are easy for readers to understand and eye-catching as well. The energy, water and resources use score 3/8 for being presented according to a period of years and also mentioned with targets. DHG seems to be a company which really care about the environment through a clear and careful presentation about air emissions, releases and resources use. Because these EPIs are not only detailed in tables to compare with previous years but also with other areas of operating as well. It is obvious that they also have goals for each of the EPI. Not lose to Vinamilk, DHG proves that it can give as much transparent information as it can to the public for showing the environmental spending, including the savings and amount spent on technologies, research and development and innovations to enhance the environment. There is no fines related to the environment. Therefore, DHG score a full 3/3 in A4 – Environmental spending.

With soft disclosure, there is no doubt that DHG will have a high score for its presentation. The company receives full marks for A5 – Visions and strategies claims and A7 – Environmental initiatives. DHG only loses 1 point for not mentioning an overview of corporate environmental performance relative to industry peers. So the total soft disclosure mark for DHG is 15/16. DHG is the company with the highest CEDI up to now

Masan Consumer Holdings - Food and beverages industry

Masan Group is one of the largest companies in the Vietnamese private sector, focusing on Vietnam's consumer and resource industries. The group has many achievements in building, acquiring and managing large-scale business platforms to develop and exploit long-term potentials in the consumer and resource sectors.

Established Masan Consumer Holdings is the main platform for the Group to invest in consumer-related activities in Vietnam. The companies that own the Group's shares include Masan Consumer and Masan Brewery.

Masan Consumer is one of the largest consumer goods companies in Vietnam. The company manufactures and sells all kinds of food and beverages including soy sauce, fish sauce, chili sauce, instant noodles, instant noodles, instant coffee, nutritious cereals and bottled beverages. Through Vinh Hao affiliated company, Masan Consumer has participated in bottled beverage industry. Starting operations in 2000, the company has developed more product categories, sales revenue and domestic distribution channels to establish a leading position in the market of consumer food and beverages among Vietnamese brands.

It is regretful that Masan Consumer Holdings has not applied Sustainability report, but the only company in Masan group that publish this kind of report is Masan Resources. However, Masan Consumer does provide information about the environment. But the total score for this section is quite low compared to other companies' score because of its incomplete form of environmental reporting which is called environment sustainability in its annual report in the year 2018. Therefore, the mark for CEDI of Masan Consumer Holdings is only 28/82, with 17/66 for hard disclosure and 11/15 for soft disclosure.

In detail, for the 5 pages of Environment Sustainability, Masan Consumer has made it to present some useful information for the public. Such as in A1 – Governance structure and management systems, there exists a department for pollution control and environment management. There was no statement regarding the application of ISO 14001 at the plant or firm level but there are prizes of Masan Consumer winning this title, so it is still 1 point for the company. And the company also apply conditions to suppliers regarding environmental practices as well. So Masan Consumer scores 4/6 for A1. As for A2 – Credibility, Masan Consumer has a total 5/9 for its product certification with respect to environmental impact and its effort in participating in environmental initiatives. Because of no sustainability report is applied so Masan Consumer does not adopt GRI or have any independent assurance about environmental information disclosed either. The company's EPIs are all referred but no comparison to precious years, targets or disaggregated, so each EPI only scores 1 for being presented. As a result, no savings or spending on environment initiatives is mentioned.

In soft disclosure, Masan Consumer does state all of its visions and strategy claims so it scores a full 6/6 for A5. With no overview of corporate environmental performance relative to industry peers, the company has 3 points in A6 – Environmental profile. And it is found that the company does not mention any response plans in case of environmental accidents or internal awards related to the environment, so Masan Consumer only has a score of 3/6 for A7 – Environmental initiatives. It is hoped that Masan Consumer will adopt Sustainability Report soon to provide consumers and investors with more information about the environment to put more trust in the company's products.

5. Conclusion

After the analysis and synthesis, the overall scores for five listed companies are as follows: FPT with 19/82 points, Petrolimex with 33/82 points, Vinamilk with 50/82 points, DHG with 53/82 points and Masan Consumer with 28/82 points. These scores are not high compared to those of developed countries. Though the volume is not competitive to the companies of developed nations, VLFs have strived to show the care for the environment by reporting more information about this issue in their reports, especially Vinamilk and DHG.

The research results have provided interesting findings on the level of corporate environmental disclosure of some listed firms in Vietnam. For management, raising awareness level for CED with content through publication. This may not indicate that businesses will fulfil CED requirements in terms of quality of disclosure.

Although companies are committed to providing high quality products and services under affordable prices. That is a prerequisite for businesses to be responsible for the environment. However, this may change the motivation for CER publication for other purposes. Given the developing country, the theoretical and normative framework for voluntary and compulsory declarations is quite limited in Vietnam. From there, make a difference between companies and create information gaps for information users. However, with the goal of sustainable development, the disclosure of this information gradually becomes more urgent in the future.

In this study, the author used the content analysis method for the annual reports and the sustainable development reports of the enterprises based on the lists of surveys which were built and adjusted according to the references of previous studies. Thus, the scoring of corporate environmental disclosures developed by the author is inevitably subjective. Therefore, in the future, when Vietnam's economy grows and standards of CED are standardized, measurement of information disclosures will be easier and more reliable.

Acknowledgment

This research is funded by University of Economics and Law, Vietnam National University, Ho Chi Minh City, Vietnam.

References

- Ahmad, N., & Sulaiman, M. (2004). Environment disclosure in Malaysia annual reports: A legitimacy theory perspective. *International Journal of Commerce and Management*, 14(1), 44-58.
- Chen, J., & He, M. (2009). Sustainable Development and Corporate Environmental Responsibility: Evidence from Chinese Corporations. *Environment Ethics*, 22, 323-339.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2008). Revisiting the relation between environmental performance and environmental disclosure: An empirical analysis. *Accounting, Organizations and Society*, 33(4-5), 303-327.
- Clarkson, P. M., Li, Y., Richardson, G. D., & Vasvari, F. P. (2011). Does it really pay to be green? Determinants and consequences of proactive environmental strategies. *Journal of Accounting and Public Policy*, 30(2), 122-144.
- Deegan, C. M. (2007). Australian Financial Accounting (5th ed.). Macquarie Park, N.S.W., McGraw-Hill.
- Deegan, C., & Gordon, B. (1996). A Study of The Environmental Disclosure Practices of Australian Corporations. *The Accounting Review*, 26(3), 187-200.
- Deegan, C., Rankin, M., & Tobin, J. (2002). An Examination of the Corporate Social and Environmental Disclosures of BHP from 1983-1997: A Test of Legitimacy Theory. *Accounting, Auditing & Accountability Journal*, *15*(3), 312-343.
- Djajadikerta, H. G., & Trireksani, T. (2012). Corporate social and environmental disclosure by Indonesian listed companies on their corporate web sites. *Journal of Applied Accounting Research*, 13(1), 21-36.
- Garriga, E., & Mele ´, D. (2004). Corporate social responsibility theories: Mapping the territory. *Journal of Business Ethics*, 53(1/2), 51–71.
- Gunawan, J. (2007). Corporate Social Disclosures by Indonesian Listed Companies: A Pilot Study. *Social Responsibility Journal*, *3*(3), 26-34.
- Guthrie, J., & Parker, L. D. (1990). Corporate Social Disclosure Practice: A Comparative International Analysis. *Advances in Public Interest Accounting*, *3*, 159-176.
- Kuasirikun, N., & Sherer, M. (2004). Corporate Social Accounting Disclosure in Thailand. *Accounting, Auditing & Accountability Journal*, 17(4), 629-660.
- Pham, V. D. (2010). *Corporate social responsibility in Vietnam: Reality and Urgency. Civil* Law *network*. Retrieved February 12, 2019, from http://thongtinphapluatdansu.edu.vn/2010/02/20/4438/
- Shah, K. U. (2007). Determinants of Corporate Environmental Responsibility in Emerging Economies: Evidence from the Oil, Gas and Chemical Sectors of Trinidad and Tobago. *PhD thesis* at George Mason University, USA.
- Tilling, M. (2004). Refinements to Legitimacy Theory in Social and Environmental Accounting. *Commerce Research Paper Series*, Flinders University, South Australia.