

## ASSESSING THE STATUS OF SUSTAINABILITY REPORT OF PETROCHEMICAL AND ENERGY SECTORS IN THAILAND

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### **Abstract:**

The purpose of this preliminary research paper is to identify the initial status of “what” manufacturing disclosure the sustainability performance. It aims to evaluate the comprehensive of sustainability information to be disclosed at plant level and the capability of the manufacturing to report sustainability indicators according to Global Reporting Initiatives (GRI) which are the important part for being accepted sustainability manufacturing in the world. The analysis based on CSR-DIW (Corporate Social Responsibility of Department of Industrial Work) report and registered SD (Sustainable Development) report with GRI of petrochemical, & energy in Thailand during 2012-2013. There are 41 manufacturing that participated in this research. The qualitative and quantitative content analysis would be applied. The research will consider of what manufacturing are able to disclosure the sustainability reporting by assessing against all 84 performance indicators comparing with GRI indicators (G 3.1) at section 5 and definitions. As a result, the manufactures are only able to fully disclosure the sustainability indicators less than half of total indicators mentioned in GRI criteria. Most of disclosed indicator are partial report., we found that the average number of sustainability indicator which manufacturing are able to fully disclosure are 3.9 economic indicators, 10.4 environmental indicators, and 27.9 social indicators which mean only 42.2 indicators from 84 total indicators which are approximate 50% of total indicator against GRI 3.1 criteria. We can initial conclude that Thai single manufacturing are far behind to implement, measure, record, and report the sustainability indicators set up by GRI. The data and mechanism to produce the data is very crucial in order to successful disclosure sustainability report.

*Keywords: sustainability reporting, social responsibility reporting, sustainability indicators, petrochemical and energy in Thailand*

# 1. INTRODUCTION

One of the most crucial driving force for the future is the building up regional collaboration or we called “the single market”, the European Union and its Member States have been implemented the market integration over last two decades. A key objective of single market program is to remove or eliminate the tariffs and non-tariffs barriers between Member States' markets (Ploae, C., 2010).The single market program was established in order to create a large integrated market for goods and services within the member countries and optimize the economics of scales. The ASEAN countries is one of the member of the global state that adopted the single market program and implement among ASEAN members. According to the expansion of single market, the competition in this integrated market was expected to result in efficiency and productivity gains as well as provide more incentives for manufacturing among member countries to invest in product and service innovation within AEC countries. Moreover, It aims to expand the business and manufacturing to member countries. Thereby improving and preparing the dynamic efficiency, productivity, social responsibility and sustainability program are the crucial issues for manufacturing that aim to grow up within the single market or AEC region. Circle of empathy including social responsibility and sustainable development (sustainability) is one of the business megatrends that the manufacturing have to realize in order to run the operation for the next decades. The leading manufacturing in Thailand that can be a regional player in AEC region are the energy and petrochemical sector which are its major sector that contribute to the Thailand economy both market share and total investment, Moreover, its significant impacts to the environment issues and, lastly, high societal security, and occupational health and safety risks.

Most executives know that the social responsibility and sustainable development will directly affect the competitiveness—and perhaps even the survival—of their organizations. The sustainability megatrend will again shuffle businesses into winners and losers, depending on how they react. Okoye P., *et al* (2012) observed that the growing awareness of the social and environmental impact in corporate manufacturing activities (Sani & Allahverdizadeh, 2012) and that make the manufacturing refocus their attention to other performance areas previously neglected (Egbunike *et al.*, 2012). The manufacturing start over the thinking about social responsibility and sustainable development (sustainability) issues as strategic initiatives to create the values through economic, environment, and social performance by anticipate the changing context and responding to needs and expectation of their stakeholders

Historically, while there is no mention of the term corporate sustainability as much rather than social responsibility. Moreover, the sustainability principle has evolved as a result of economic growth, environmental regulation-stewardship, and a push for social justice and equity (Christofi, 2012) aligned with the social responsibility concepts that would contribute to stability, productivity, and security to manufacturing, and society as a whole.

According to the definition of social responsibility, Carrol (1999) and Christofi (2012) stated that it was in 1953 that the “Father of CSR”, H. Bowen, introduced the first definition of CSR as:

*[. . .] the obligation of businessmen to pursue those policies, to make those decisions, or to follow those lines of action which are desirable in terms of the objectives and values of our society*

(Bowen, 1953)

However, the social responsibilities in manufacturing level have been discussed among researchers, academics, and practitioners over a last decade. It is generally agreed that the era of sustainability started at the United Nations Stockholm Conference on the Environment in 1972 until Our Common Future in 1987 gave the definition of sustainability in the Brundtland report which is

*Development which meets the needs of the present without compromising the ability of future generations to meet their own needs*

(WCED, 1987)

With regard to the important concept of sustainable development as mentions in the Brundtland report, and for the specific purposes of this research, Social responsibility (SR) may be considered as the business level equivalent to sustainable development and contribute to sustainability

Moreover, the reporting mechanism is the important part of sustainability performance measurement system. It has been developed during the past few decades. But the interest in sustainability development and reporting expanded beyond the social responsibility report. In 2000, the GRI with the support United Nations Environmental Programme (UNEP) in cooperation with the Coalition for Environmentally Responsible Economies (CERES) and Tellus Institute developed the international reporting framework to guide their sustainability efforts and initiatives for businesses. Their guidelines are based on the notion that transparency and accountability about economic, environmental, and social impacts are of interest to a diverse group of stakeholders (GRI, 2008).

However, during the past decade, there are many potential problems and conflicts arising in Thailand from the operations of these industries with key sphere of influence such as NGOs, government, communities around these manufacturing. Therefore, the petrochemical, oil refinery, and gas manufacturing are one of the first priorities of Department of Industries Work (DIW) to encourage on social responsibility and sustainability issues in Thailand. As a result, instead of mandate the regulation to these target manufacturing, Department of Industries Work initiated the projects that are able to promote these manufacturing to step up to the next level of excellence and develop these reporting as the part of communication among key stakeholders.

Consequently, the initial focus on how the industries are able to reduce the economic issues such as costing, reactive monitor the environmental problems with the surrounding the industries, initiate the philanthropy program by donating and charity or implement the new technique to solve the initial problems.

This research mainly deals with the assessment of the CSR-DIW reporting and Sustainability report registered by GRI of the manufacturing from petrochemical, oil refinery, and gas sector in Thailand which applied and involved in CSR-DIW projects. Most of applied manufacturing in these three sectors are large enterprises which operates in Thailand, a few manufacturing owns by Multi National Company. 80% of samples belong to state-enterprises. Most of the manufacturing that involves in this project have strongly background and pioneers in management system such as ISO 9000, ISO 14000, OHSAS/TIS 18000, and TLS 8001.

## **2. LITERATURE REVIEW**

### **2.1. Corporate social responsibility and sustainability context**

During period of 1880-1910, Sustainability word appeared to this global when Ambrose Bierce give the definition in The Devil Dictionary compatible with Robber Baron in US set up the word "Corporate and responsibility". In the past, the way to do business is shown on keeping wages low to make the high margin profit with lack of safety protection during working hour caused a lot of accidents occurred. Consequently, government passed the law and legislation to protect and mandate the manufacturing to protect their labor safely and securely.

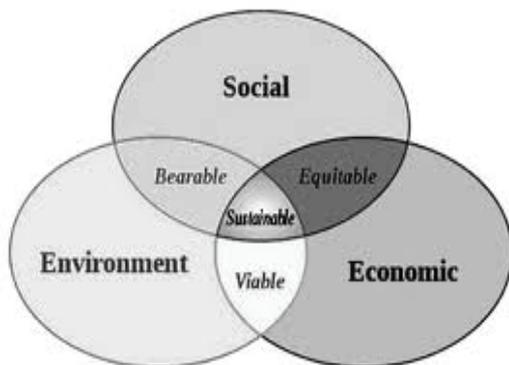
Through legislation, the attitude of business owner changed to be a good morals business by set up win-win situation among business, employee, and customer by sell quality products to customer, provide houses and leisure facilities for their worker. Responsibility for customer on safety product issue and responsibility for worker on occupational health and safety issue become more vital for business to do the right thing. Act protection for consumer in UK and US were passed to mandate the manufacturing

Towards the end of 1900, trade unions become more actively by legal status made employee more freedom to associate in the manufacturing. Since most of Europe and US governments mandated law and legislation in labor law and consumer protection. Environmental issues become more serious issues since there are lacking in natural resource that risk to economy and human life. NGO's and activist became the major role to change the company behavior. At this time, environment become more important part for corporate sustainability issues both local governmental and intergovernmental activities gathering to tackle this issue such as Conference on the human environment in Stockholm in 1972, World commission on environment and development (called the Brundtland commission), in 1983, declare the concept of sustainable development by introducing the sustainable development definition which is "Progress that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Some observers argued that the meeting the needs of the present – a present in which billions lacked their basic needs such as Africa citizens may be the radical concept so the business just focus on philanthropy, environmental and community issues rather than broader sustainability.

Since corporate social responsibility may misinterpreted and focused to only social issues rather than economic and environmental issues, the term “S” disappeared and corporate responsibility (CR) emerged and have synonym with 3 circles of sustainability (See Figure 1). The concept tried to avoid and reduce the significant impacts on economy, environment, and social to maximize the positive way on triple bottom line and contribute to sustainable development.

**Figure 1:** Sustainable development



On view of sustainable development, the businesses need to understand, response, and achieve the mission to stakeholders that the company may influence and have impact with. The businesses have to concern and build the benefit among the balance of economy, society and environment. Corporate sustainability comprised several agenda relate to economy, social and environment such as climate change, greenhouse gas emissions, employee matters, supply chain, reporting system, community involvement, sustainable consumption, privacy, lobbying and bribery, transparency.

Reporting is the crucial mechanism to communicate manufacturing performance to key stakeholders. International agency such as UN, GRI, or SEC stimulate the manufacturing and enterprises around the world to disclosure their performance through the use of reporting system. In order to report, the quality of reports and the content should be standardized. The indicators which represent the economic performance, environmental performance, and social performance were developed. The manufacturing takes the indicator and integrate into strategic planning to measure their success since then.

## **2.2. Corporate social responsibility and sustainability in the thai industry context**

In Thailand, there is no solid record of how CSR was introduced (M. Olesen and P. Prayukvong, 2009), It seems that the MNC in Thailand try to promote the new revolution of industry to THEM Generation influenced by United Nation as UNGC. The UNGC promote the ten principles among MNC and corporation in Thailand in order to increase the awareness among the corporations to be responsible to all aspects of economic, environment, and social. Approximate the first 30 Thai companies involved in this program. Some researcher mentioned that Corporate Social Responsibility came to Thailand through the efforts of multinational companies which use CSR model as the pathway to Sustainability. MNC's started implementing CSR from the strategic levels by aligning CSR philosophy to business strategy with business unit and operation unit around the world. ISO 26000 is the new standard established by International Manufacturing for Standardization. It is used as guidance for the manufacturing which would like to step up yourself to SR firm and SD firm. Operating manufacturing with the environment aspects and social issues have tended to focus on building manufacturing to be CSR on the stakeholder sight. Some of operating manufacturing have intended to sustain their long term relationships with communities rather than short term projects called “philanthropy projects” by supporting the needy and philanthropic assistance depend on the impacts that manufacturing established.

In the past few years there have been a number of joint Thai-international and Thai large enterprises efforts to develop CSR practices. Thailand chapter of the Business Coalition for Sustainable Development (TBCSD) was one of the leading groups to encourage SR practices on business which focused on the treatment of the environment by industrial sector. The Population and Community Development Association (PDA) try to use the strength of Joint Thai-international and Thai large enterprises to assist and support community development initiatives. Another key institute called Thailand Business in Rural Development (TBIRD) which developed innovative practices to encourage the manufacturing in rural area and hire the worker in the area so they will not leave to find the job in the central area or metropolitan. Greater workforce stability compensates for the additional logistics costs. The Stock Exchange of Thailand became interested in CSR and announced the first SET CSR awards. A year later, the SET established a CSR Institute. At the same time the Securities and Exchange Commission set up a working group to promote CSR and establish CSR guidelines for Thai companies. SET established CSR institute

Social responsibility came to the attention to the industry level with the expectation to reduce the community's complaint, take care of environmental and social benefits, and illustrate good governance to public. SR approach stimulated the need of large enterprises to step up to SR firms along with MNC companies. Thai Industry is the one which actively adopted by realizing the importance of CSR in the industrial manufacturing, the Department of Industrial Works established the CSR-DIW Project in 2008. This was set up as a part of the Corporate Social Responsibility – Department of Industrial Work Project (CSR-DIW) by inviting industrial manufacturing, to join the program. Large manufacturing joined the program with the anticipation to further expand their potential to create positive impact on society. CSR-DIW criteria is designed by adopting ISO 26000 standards and transform to the practices since the beginning of drafting ISO 26000 standard. Since 2008, one government agency under the Ministry of Industry called "Department of Industry Work (DIW) that interested with the transformation the manufacturing to SR firm, drafted the criteria called "CSR-DIW" and gave funding that assist the manufacturing implementation.

According to Initial review data collected by the Management System Certification Institute (Thailand) has identified areas of strength and weakness among CSR practices with CSR-DIW criteria in Thai manufacturing .The evidence indicated that Thai manufacturing are strongly focused on good governance, fair operating practice, labor practices and consumer issues since most of manufacturing already certified ISO 9000 rather than the community engagement and development, environment and human rights.

Based on the downloaded report from website of GRI and CSR-DIW , The CSR & SD Reporting in 2012 of Thai manufacturing in petrochemical, oil & refinery, and gas sector have publicly available as following in table 1

**Table 1:** The number of report classified by industrial sector

Industrial Sector	No of CSR-DIW and SD Report 2012
Petrochemical	29
Oil & Refinery	5
Gas	7
Total	41

**2.3. Global Reporting Initiative (GRI)**

GRI has initiated guidelines in an effort to promote social responsibility and sustainability aspects which especially affect the environment and social, wishing the guideline will help manufacturing using the right framework for reporting on sustainability. Massie et al.,1993, Wehrmeyer & Tyteca, 1998 and E. Guenther et al, 2007 indicated that common framework for sustainability reports including sustainability measures and indicators developed by GRI is necessary comparing to financial reporting framework., The evolution of GRI in publishing the criteria starting the first guidelines in 2000, followed in 2002 by a revised second version, and reviewed in 2006 by developed third version, added some indicators by revised third version (G3.1) in 2012 consists of five sections:

- Strategy and Analysis
- Company Profile

- Report Parameter
- Governance, Commitments, and Engagement
- Management Approach and Performance indicators on the economic, environmental and social perspective

All GRI Reporting Framework documents are developed using a process that seeks consensus through dialogue between stakeholders from business, the investor community, labor, civil society, accounting, academia, and others. All Reporting Framework documents are subject to testing and continuous improvement). Five key structures of GRI reporting guidelines comprises of GRI reporting framework, the sustainability reporting guidelines, Indicators protocols, Sector Supplements, Technical Protocols. (GRI G3.1, 2012). The GRI criteria or performance indicators have been used to evaluate manufacturing sustainability reports by researchers in this study, (Aktas, 2013):

#### *The GRI Reporting Framework*

It is intended to design as a general framework for reporting on a manufacturing’s economic, environmental, and social performance regardless of the size of the manufacturing, the sector, or location from small enterprises to multinational companies spread out any geography around the world. It contains general and sector-specific content that agree upon the key stakeholders.

#### *The Sustainability Reporting Guidelines*

It consists of Principles for defining report content to make sure the quality of reported information. It also includes Performance Indicators and the guidance on specific technical topics in reporting

#### *Indicator Protocols*

It contains the protocols definitions, compilation, guidance, and other information to assist manufacturing to report and interpret the meaning consistency.

#### *Sector Supplements*

It guides the manufacturing on how to apply the Guidelines in a specific sector, and include the additional sector-specified Performance Indicators that manufacturing should be used and reported.

#### *Technical Protocols*

It provides guidance on issues in reporting, such as setting the report boundary.

GRI aims to design as one-size-fits all guidelines regardless of size, sector, or location based on the principle of what to report and how to report. The report content and process to report each indicator have been developed

According to the principle of GRI, the analysis in this research focuses on what and how to report based on the economic, environmental and social aspects align with the GRI guideline performance indicators version G3.1. These performance indicators comprise quantitative and qualitative. Most of these indicators focus mainly in environmental and social issues such as GHG emission, biodiversity initiatives, climate change, human rights, etc. Performance indicators is divided into 2 sub-indicators- core indicator and additional indicators as shown on table 2

**Table 2:** The distinction between core and additional indicators

Aspects	Core indicators	Additional indicators	Total indicator
Economic	7	2	9
Environmental	17	13	30
Social	31	14	45
Total	55	29	84

The list of GRI 3.1 indicators on section 5: Management approach and performance indicators that relate to social responsibility and contribute to sustainability is shown on table 3 total of 84 indicators under 28 aspects (core indicators, additional indicators)

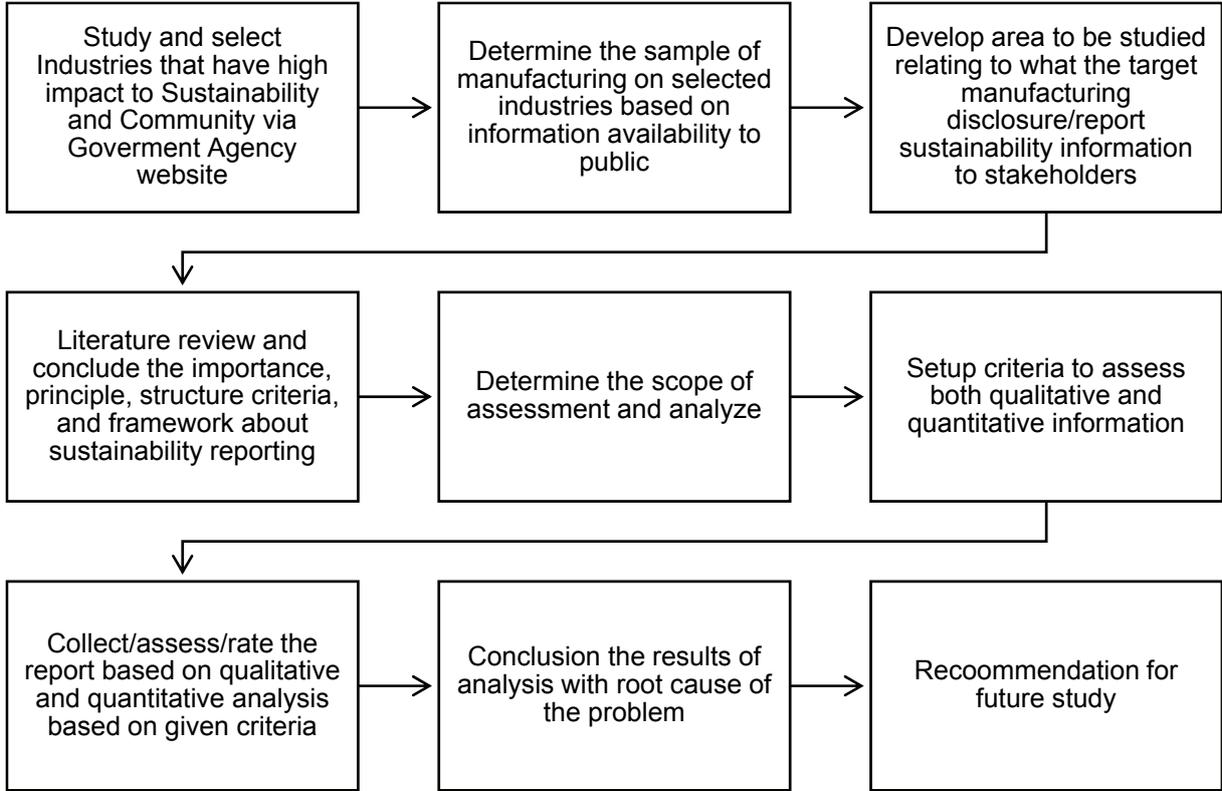
**Table 3:** The aspects of GRI indicator (GRI 3.1, 2012)

Economic indicator	Environmental indicator	Social Indicator
Economic performance (4,0)	Materials (2,0)	Investment and procurement practice (3,0)
Market presence (2,1)	Energy (2,3)	Non-discrimination (1,0)
Indirect economic impacts (1,1)	Water (1,2)	Freedom of association and collective bargaining (1,0)
	Biodiversity (2,3)	Child labor (1,0)
	Emissions, effluents, and waste (7,3)	Forced and compulsory labor (1,0)
	Products and services (2,0)	Security practices (0,1)
	Compliance (1,0)	Indigenous rights (0,1)
	Transport (0,1)	Assessment (1,0)
	Overall expenditure (0,1)	Remediation (1,0)
		Employment (3,1)
		Labor management/relations (2,0)
		Occupational health and safety (2,2)
		Training and education (1,2)
		Diversity and equal opportunity (1,0)
		Equal remuneration for woman and man (1,0)
		Local community (3,0)
		Corruption (3,0)
		Public Policy (1,1)
		Anti-competitive behavior (0,1)
		Compliance (1,0)
		Customer health and safety (1,1)
		Product and service labeling (1,2)
		Marketing communication (1,1)
		Customer privacy (0,1)

The fourth version of the guidelines (G4) is under the development and expected to release in May 2013 and it is assumed that the relevance of the guidelines will increase when the new issue is launched.

### 3. RESEARCH METHODOLOGY

Figure 2: Overview of research approach



This preliminary research paper focuses on the quantitative and qualitative of each voluntarily CSR-DIW report and GRI report published by the petrochemical, oil refinery, and gas industry operations in Thailand which applied and involved in CSR-DIW projects and GRI report downloaded from website. It considers the following question (Willis, 2003, E. Guenther, H. Hoppe, and C. Poser, 2007).

*What are the manufacturing reporting comply with the criteria of GRI?*

The assessment of CSR-DIW and GRI report, as performed in this analysis, has been illustrated in corporate with the evaluation the complete CSR information. The samples are collected from the Department of Industry Work under Ministry of Thai Industry who initiated the CSR-DIW project and categorized the reports regarding the publication year and sector of industry. Department of Industry Works started CSR-DIW project since 2008, but unfortunately, the first 30 manufacturing were not required to submit the CSR-DIW report after successful implementation of CSR-DIW criteria and GRI website that it can be downloaded. Thai companies which registered with GRI are more than 100 companies, but the companies declared that GRI reports that complied with G3 and G3.1 are only 30 companies in the area of Airport services, Telecommunication, Cement, Paper, Oil & Refinery, Petrochemical, Exploration. It is noticed that most of Thai companies would do corporate GRI reports instead of individual or single site reports. In 2013, there were 10 reports from petrochemical industries, 3 reports from oil refinery, and 20 reports from gas industries from CSR-DIW projects and GRI website related to targeted industries.

All of the indicators in the reports were analyzed into two elements. Firstly, the indicators will categorize reporting as reported. The reported status will classify into sub-elements which are partial reported and fully reported. Otherwise, it will categorize as not reported based on the categorization of GRI 3.1. Fully reported will be rated when the manufacturing can show clear evidence and information required by GRI 3.1 on the report. If there are missing some evidences and information, partially reported will be rate on each indicator. Otherwise, the indicator is scored as not reported when there is no evidence on the report. Since there are 5 sections based on GRI 3.1, the first four sections which are strategy and analysis, company profile, report parameters, and governance, commitments, and

engagement required mostly general information that hardly assess the truth and completeness. That can be categorized only reported and not reported. The sector supplement will be excluded and will be considered separately.

The reports were assessed and rated the using specific rules governing decisions over all relevant indicators by five raters and, in order to further validate the choices, the results were compared to an independent report (Novkov 2007) the acceptable error rate of 1%, choices had to be corrected. All corrections were from 'not reported' to 'partially' (Guenther *et. al* 2007).

As the analysis presented in this research paper, is part of a dissertation, the rules governing decisions will be subject to improve.

**4. RESEARCH FINDINGS AND CONCLUSION**

This research paper focuses on the quantitative and qualitative of each voluntarily CSR-DIW report published by the independent manufacturing in petrochemical, oil refinery, and gas sectors in Thailand. In order to prevent the dictate and bias analysis, 5 experts will assessed the CSR-DIW report and score the fully report, partially report, and no report to each sustainability indicator on section 5. The evidence of each indicator may vary depend on the environment and social aspects of each sector or manufacturing. There is a quantity-quality discrepancy in the reported indicators.

There are 41 analyzed manufacturing CSR-DIW report and SD report that are available for public access through internet website. The total indicators required reporting equal to 3444 indicators (41 manufacturing \* 84 indicators). The average indicators are as follows:

**Table 4:** The average indicator can be reported per manufacturing (Combination of fully and partially report)

Indicators	Total indicators (# of indicators * # of manufacturing)	# of indicators can be reported (Fully/Partially)	Average indicator be reported (Fully/Partially) per manufacturing
Economy	369	190	4.63
Environment	1230	671	16.36
Social	1845	1446	35.26
Total	3444	1971	56.25

From table 4, we can analyze that:

- The average total indicators, that the manufacturing are able to report both fully and partially report, are approximately 60% of total indicators required by GRI which is 48 indicators from 84 indicators.
- The average environmental indicators that are able to report is less than 50% of total environmental indicators which are 16 indicators.
- The social indicators, the manufacturing are capable to report more than 80% of its indicators

**Table 5:** The average indicator can be reported per manufacturing (Only fully report)

Indicators	Total indicators (# of indicators * # of manufacturing)	# of indicators can be reported (Fully reported)	Average indicator can be reported (Fully reported) per manufacturing
Economy	369	160	3.92
Environment	1230	427	10.41
Social	1845	1143	27.87
Total	3444	1350	42.2

From table 5, we can analyze that:

- Approximate 3.9 economic indicators, 10.4 environmental indicators, and 27.9 social indicators can be fully reported by the manufacturing.

- Total 42.2 indicators that the manufacturing are able to fully reported from 84 total indicators which are approximate 50% of total indicators
- Thai single manufacturing are far behind to implement, measure, record, and report the sustainability indicators set up by GRI. The data and mechanism to produce the data is very crucial in order to successful report.

## REFERENCE LIST

1. Aktas, R., Kayalidere, K., and Kargin, M., (2013), 'Corporate Sustainability Reporting and Analysis of Sustainability Reports in Turkey, *International Journal of Economics and Finance* 5 (3), 113-125
2. Bowen, H., (1953), *Social Responsibilities of the Businessman*, Harper & Row, New York, NY.
3. Brundtland Report (1987), *Our Common Future, The World Commission on Environment and Development*, Oxford University Press, New York, NY.
4. Callodo, L., and Fensterseifer, J., (2011), *Corporate Sustainability Measure From An Integrated Perspective: The Corporate Sustainability Grid*, *IJBIT* 33 (3) January, 44-53
5. Chirstofi, A., Christofi, P., and Sisaye, S. (2012), Corporate Sustainability Historical Development and Reporting Practices, *Management Research Review* 35 (2): 157-172
6. CSRQuest, (2010), *Strategic CSR Corporate Responsibility and Sustainability*, 1-10, K-Net Group, Retrieved from: [www.csrquest.net/default.aspx?article13126](http://www.csrquest.net/default.aspx?article13126)
7. Delai and Takahashi, S. (2011), Sustainability measurement system: a reference model proposal, *Social Responsibility Journal* 7 (3): 438-471
8. Epstein, M.J., (2004), The identification, measurement, and reporting of corporate social impacts: past, present, and future, *Advances in Environmental Accounting and Management* 2: 1-29.
9. GRI (2008), *Sustainability Reporting Guidelines*, Global Reporting Initiative", Retrieved from [www.globalreporting.org/ReportingFramework/ReportingFrameworkDownloads](http://www.globalreporting.org/ReportingFramework/ReportingFrameworkDownloads)
10. GRI (2009), *About GRI Global Reporting Initiatives*, Retrieved from [www.globalreporting.org/AboutGRI](http://www.globalreporting.org/AboutGRI)
11. GRI (2012), *Sustainability reporting guidelines*, Retrieved from [www.globalreportinginitiative.org](http://www.globalreportinginitiative.org)
12. GRI (2012), *Technical Protocol*, Retrieved from [www.globalreportinginitiative.org](http://www.globalreportinginitiative.org)
13. Ioannou, I., & Serafeim, G. (2012). *The Consequences of Mandatory Corporate Sustainability Reporting, Working Paper*, Harvard Business School.
14. ISO 26000 (2012), *Social Responsibility Guidance*, International Manufacturing for Standardization
15. Keeble, J., Topiol, S., and Berkeley, S. (2003), Using Indicators to Measure Sustainability Performance at a Corporate and Project Level, *Journal of Business Ethics* 44, 149-158
16. Lopez, F., and Sanchez, G (2011), *Challenges for Sustainability Assessment by Indicators*, Leadership and Management in Engineering, pp. 321326, October
17. Okoye P. V., Egbunike F. C., and Meduoye O. M. (2013), Sustainability Reporting: A Paradigm for Stakeholder Conflict Management, *International Business Network* 6 (5): 157-167
18. Olsen M. and Prayukvong P. (2009), *Research on the CSR development in Thailand*, The network of NGO and Business Partnership for Sustainable Development (Thailand), January
19. Ploae C., (2010), "The Revitalization of the EU's Single Market", *The Romanian Economic Journal*, Year XIII, no. 36 June, 79-93
20. Rourke D. O. (2004), "Opportunities and Obstacle for Corporate Social Responsibility Reporting in Developing Countries", University of California Berkeley, March
21. Schneider A., and Meins, E. (2012), *Two Dimensions of Corporate Sustainability Assessment: Towards a Comprehensive Framework*, Business Strategy and The Environment, 211-222
22. SEC (2010), *Securities and Exchange Commission*, Retrieved from [www.sec.gov/rules/interp/2010/33-9106.pdf](http://www.sec.gov/rules/interp/2010/33-9106.pdf)
23. UNGC (2009), *Overview of the UN Global Compact*, United Nations Global Compact, Retrieved from [www.unglobalcompact.org/AboutTheGC/index.html](http://www.unglobalcompact.org/AboutTheGC/index.html)
24. Warhurst (2002), *Sustainability Indicators and Sustainability Performance Management*, Mining and Energy Research Network, Warwick Business School, University of Warwick, UK, March