Energy Reporting Practices among Top Energy Intensive Industries in Malaysia

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Abstract: This study content analyses the energy content in the corporate report of top 30 Malaysian energy-intensive companies. Motivated by the gap among prior corporate social responsibility and environmental reporting studies in respect of energy, this study provides evidence of Malaysian companies’ initiative to reduce energy consumption. While the evidence suggests that not all 30 companies have reported energy-related information, the findings provide an overview on the response of energy intensive companies in relation to Malaysian government initiatives on energy.

1. Introduction

Global warming and climate change are two critical issues that are expected to give significant impact to humankind. Scientific and political communities have long debated on tackling these issues which include mitigating the emissions of greenhouse gas (GHG) emissions, particularly with respect to energy use \cite{1}. It is reported that Malaysia is the third-largest energy consumer in the ASEAN region and its per-capita energy consumption is currently relatively high for the region, at 61\% of the OECD average \cite{2}.

With the increase of energy consumption, Malaysia is undertaking a comprehensive planning to develop and formulate an Energy Policy for Malaysia (2013 – 2050) that encompasses all relevant sectors as well as incorporating current issues and future challenges related to energy. Prior to this, the Tenth Malaysia Plan (10th MP) 2011-2015 emphasizes on green technology that vested in National Green Technology Policy and new renewable energy act and feed-in tariff mechanism. As national guidelines and policies deliver a common message to mitigate the emissions, there is a call for business leaders to also confront the issue of climate change \cite{3}. This is because industries are dependent on fossil fuel for their production and manufacturing activities which contribute to the GHG emission \cite{4}. The industrial sector uses more energy than any other end-use sectors, currently consuming about 37\% of the world’s total delivered energy \cite{5}.

With the visibility of efforts to shift Malaysia towards becoming a more energy efficiency intensive country and the contribution of industrial sector in energy usage, it is an obligation of energy intensive industries to demonstrate their commitment in supporting government initiatives particularly in relation to energy. Therefore, it is the aim of this study to explore the extent of energy disclosure made by the energy intensive sectors among public listed companies in Malaysia. A self-developed index is used to measure the quantity of energy related items being reported in the annual reports, stand-alone reports and also the corporate websites.

2. Regulatory Environment and Energy Reporting

Malaysian government has embarked on various strategies to enhance its’ energy-based initiatives. The most prominent strategy is the introduction of various energy based policies. Among those are the introduction of National Energy Policy (1979), National Depletion Policy (1980), National Biofuel Policy (2006), National Green Technology Policy (2009), and National Renewable Energy Policy (2010). Currently, a final draft of National Energy Efficiency Action Plan is introduced in January 2014. The plan outlines strategic actions that are needed for an effective and efficient implementation of energy efficiency programs. The introduction of National Green Technology Policy (2011-2015) provide details on the strategy to restructure the energy subsidies on natural gas and electricity used by industry sector as well as discounted energy pricing mechanism for selected industrial users.

With several energy policies being implemented by the government that acts on behalf of the public, this means a company is now being bequeathed with legitimacy based on its ability to operate...
within the bounds imposed by the society in order to enjoy continued access to products and resource markets [6]. Corporate reporting, therefore, has become one of the strategies used by companies to educate the public or to communicate the changes that have been made, in response to the pressure made by the government/public to contribute to energy-based initiative. Nonetheless, with financial reporting being the center of attention since the existence accounting, the reporting of non-financial based information in Malaysia has only been made compulsory in year 2007 with the mandatory requirement of Corporate Social Responsibility (CSR) reporting to all Malaysian public listed companies (PLCs) [7].

As reporting becomes a mean for companies to legitimize their action, it lead to an apparent link between accounting research and legitimacy theory that revolves around the annual report and related disclosures [8]. Prior studies on climate change reporting (see for example [9]; [10]), CSR reporting (see for example [11]; [12]) and environmental reporting (see for example [13]; [7]) are among studies that have evaluated companies disclosure, in response to pressure resulting from social contract, in different forms of corporate reports. Most of these studies have also incorporated energy based information as part of the information being evaluated. A CSR reporting study conducted by [14], for example, reported only small minority (1 percent) of companies in industrial sector disclose information related to on energy. Nonetheless, with energy-based information being incorporated with other types of sustainability information, the analysis can be regarded as being very limited. To the knowledge of this study, there is only one study that put a specific focus on energy reporting and it is conducted by [15]. This study which is based in South African developed a guideline for the development and implementation of effective energy reporting. Unfortunately, [15] only focuses on preparing a special energy report for a company’ energy management system that may not be able to represent overall energy initiatives implemented by the company. Taking into consideration the importance of energy conservation issue in Malaysian and the lack of focus on energy reporting per se, it is the objective of this study to provide a close examination of energy information reported by top energy intensive companies in Malaysia.

3. Sample Selection and Research Methods
Energy-based disclosure is examined for the 30 largest Malaysian public listed companies, by market capitalization, focusing only on energy intensive sectors. Only the largest Malaysian companies were chosen to conform to the view suggested by [16] that large companies are more likely to be more progressive and innovative because they have the financial resources that enable this type of reporting. Energy intensive sectors include all companies under iron and steel, cement, pulp and paper, chemical, textile, aluminum, oil and gas, electricity and heat, ceramic, glass, wood, coal mining and transport.

The study adopts content analysis method to assess energy-based information in the three main types of corporate report i.e. annual reports, stand-alone sustainability reports and corporate websites. Both annual and sustainability reports were for the 2014 financial year. Meanwhile, the analysis for the corporate websites disclosure was performed in the month of November, 2014. The website analysis was limited up to three levels of the homepage/sitemap, unless further links indicate the disclosure of energy information beyond the third level. This is reasonable as it is expected that stakeholders will spend less time going through various sections of the website to evaluate company environmental policy and performance [17]. The extent of disclosure was then measured using self-developed index that is modified from the Global Reporting Initiative (GRI) index. Each of the energy-based information found was then classified into several categories i.e. monetary, non-monetary, declarative, to provide more insight on how the information was reported.

4. Findings and analysis
Table 1 describes the number of energy-related items found in the 30 Malaysian energy intensive companies’ annual report year 2014, sustainability report year 2014 and websites. A total of 143 energy-related items were found in the companies’ annual report making it the most popular venue of reporting. This is contributed by the fact that it is mandatory for Malaysian PLCs to produce this report annually. Nonetheless, taking into consideration the analysis was conducted on energy-intensive industries, the non-existence of energy-related information in 5 (only 25 companies currently report the energy-based information) of the companies could provide an indication the non-
existence of activities related to energy-based initiative or companies unwillingness to report such information. The analysis also shows website as the next popular venue followed by sustainability report. It is important to highlight that only 2 companies chose to produce a separate report on CSR.

Table 1: Quantity of energy reporting by forms of reporting

| No. | Items                                | Annual Report | Sustainability Report | Websites |
|-----|--------------------------------------|---------------|-----------------------|----------|
|     |                                      | TQ | M  | NM | D | TQ | M  | NM | D | TQ | M  | NM | D |
| 1   | Energy consumption of organization   | 37 | 9  | 19 | 9 | 2  | 0  | 2  | 0 | 0  | 0  | 0  | 0  |
| 2   | Initiative to reduce energy consumption | 47 | 0  | 0  | 47 | 13 | 0  | 2  | 11 | 14 | 0  | 0  | 14 |
| 3   | Energy governance & ethics            | 18 | 0  | 0  | 18 | 6  | 0  | 0  | 6 | 2  | 0  | 0  | 2  |
| 4   | Energy based achievement & awards     | 9  | 0  | 0  | 9  | 6  | 0  | 0  | 6 | 2  | 0  | 0  | 2  |
| 5   | Reduction of energy consumption       | 12 | 1  | 7  | 4 | 9  | 0  | 7  | 2 | 0  | 0  | 0  | 0  |
| 6   | Renewable energy                      | 20 | 0  | 0  | 20 | 11 | 0  | 0  | 11 | 3  | 0  | 1  | 2  |
|     | Total scores                          | 143 | 10 | 26 | 107 | 47 | 0  | 11 | 36 | 21 | 0  | 1  | 20 |
|     | Total companies                       | 25  | 2  | 15 |

Note: TQ: Total Quantity; M: Monetary; NM: Non-Monetary; D: Declarative

For each type of corporate report, item ‘initiative to reduce energy consumption’ has been recorded as the most reported item. This indicates Malaysian companies’ initiative to support their government agenda in becoming energy-efficiency nation. YTL Corporation, for example, reported the following information in their annual report:

‘Overall, YTL has a two-fold strategy in pursuing green practices Group-wide. Firstly, we have a monitoring system put into place to measure and track energy usage. Secondly, we are pursuing and steadily increasing renewable energy usage, wherever possible’

In addition to item related to energy efficiency initiative, information related to RE has also being among the most reported item indicating companies’ initiative to support or possibly invest in RE project. Malaysian Airport, for example, reported the following information in their sustainability report:

“One mode of renewable energy that we have embarked on is solar power system at KL International Airport (KLIA).”

Analysis on different categories of reporting shows most of the information are declarative in nature. The subjective nature of declarative information may have contributed to its popularity as it will make it harder for the information to be refuted or audited. Nonetheless, it is important to highlight the existence of companies who willingly produce quantitative information which include monetary information. Malaysia Marine and Heavy Engineering Holdings Berhad, for example, reported the following information in the annual report:

“Almost 100% of spent lubricating oil, spent hydraulic oil, electric/ electronic and acid battery waste in the yards were sent for recovery as value waste. This resulted in a saving of approximately RM0.5 million in overall 3R activity in MHB”

5. Conclusion
This study began by discussing Malaysian government initiative to strengthen its energy-related policies and the need for the industrial sector as one of the largest users of energy to support these initiatives. In response to this issue, this study is motivated to initiate a first study, within the context of Malaysia, to explore the extent of energy-based information in the corporate reports of top 30 Malaysian energy-intensive companies.
In summary the observed statistics shows that 25 out of 30 the companies have voluntarily provided energy-based information with most of the information are declarative in nature. While the figure represents 83% of total sample, the fact that the study was conducted on energy intensive industries could be alarming as it signal the possibility that some of energy-intensive companies are not that willing to invest or support government energy-based initiatives. While findings the exact factors leading to these findings is beyond the scope of this study, the fact that this issue is currently being discussed at international level and the companies will continue using energy to sustain its operation, the need for energy-based disclosure is still there if the companies want to legitimize their position among the society. It is also the role of the regulators to facilitate provision of such information without comprising the need of various parties including the companies.

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