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EXPLORING THE NATURE OF CORPORATE GOVERNANCE RELATED CLIMATE CHANGE DISCLOSURE OF THE MALAYSIAN COMPANIES

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ABSTRACT

The objective of this paper is to explore the governance related climate change disclosure in the corporate reports of award nominated Malaysian companies. For this, the corporate reports of twenty two (22) Malaysian companies (shortlisted for ACCA Malaysia Sustainability Reporting Award 2016) were analyzed. Content analysis was conducted on the sustainability award nominated reports of the companies under consideration. The findings were explained from legitimacy perspective. It was found that though these award-nominated Malaysian companies are reporting on climate change issues, the extent of governance related disclosure is less. The format of reporting varies from company to company. Also, few governance related climate change issues were reported by these companies. Reporting was mostly done in narrative form. However, through strategic presentation styles, these companies tried to legitimize their activities. This study seeks to contribute to the scant literature on climate change disclosure from the perspective of developing economies (in particular, Malaysia). Another important contribution of this study is that, here, the ‘governance related’ climate change disclosures were taken under consideration.

ABSTRAK

Objektif makalah ini adalah untuk meneroka pendedahan perubahan iklim berkaitan tadbir urus dalam laporan korporat syarikat Malaysia yang dicalonkan untuk anugerah. Untuk ini, laporan korporat dari dua puluh dua (22) syarikat Malaysia (disenarai pendek untuk ACCA Malaysia Sustainability Reporting Award 2016) dianalisis. Analisis kandungan dilakukan berdasarkan laporan penamaan syarikat yang dipertimbangkan. Penemuan ini dijelaskan dari perspektif kesahan. Didapati bahawa walaupun syarikat-syarikat Malaysia yang dicalonkan untuk anugerah ini melaporkan masalah perubahan iklim, tahap pendedahan berkaitan pemerintahan kurang. Format pelaporan berbeza dari syarikat ke syarikat. Juga, beberapa masalah perubahan iklim yang berkaitan dengan pemerintahan dilaporkan oleh syarikat-syarikat ini. Pelaporan kebanyakannya dibuat dalam bentuk naratif. Namun, melalui gaya persembahan yang strategik, syarikat-syarikat ini berusaha untuk mengesahkan kegiatan mereka. Kajian ini bertujuan untuk menyumbang kepada literatur yang sedikit mengenai pendedahan perubahan iklim dari perspektif ekonomi membangun (khususnya, Malaysia). Sumbangan penting lain dari kajian ini adalah bahawa, di sini, pendedahan mengenai perubahan iklim 'berkaitan dengan pemerintahan' telah dipertimbangkan.

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1. Introduction

Climate change remained one of the most talked about issues over the last decade among the politicians, media, academicians and the activists (Bebbington & Larringa-Gonzalez, 2008; Gullberg, 2008; Cosbey, 2009; Hovi *et al*., 2009; Haque & Deegan, 2010; Pellegrino & Lodhia, 2012; UNICEF, 2014; Henderson *et al*., 2018). It is said that, because of several man-made reasons (particularly for the extensive use of fossil fuel and deforestation), the world is getting warmer and the climate is changing (Gupta, 2001; UNEP & UNFCC, 2002; Haque & Deegan, 2010). This climate change has significant adverse social, ecological and economic impacts (Walmsley, 2010; Haque & Deegan, 2010). Some of these undesirable and adverse effects include crisis in the supply of food, water crisis, loss of several species, increased temperature, storms, floods, rise in the sea level and higher mortality rate (Bebbington & Larrinaga-Gonzalez, 2008; Dyer, 2011; Hossain *et al*., 2017; Perera, 2017; Henderson *et al*., 2018). One of the main reasons of this climate change include the burning of fossil fuels such as coal, oil and natural gas (Ahmad & Hossain, 2015; Hossain *et al*., 2017; Henderson *et al*., 2018). This burning results in emission of some harmful Green House Gases (GHGs). Business organizations, all over the world, are one of the major fossil fuel burners (Mustafa *et al*., 2012; Ahmad & Hossain, 2015). Therefore, they are considered as one of the main sources of climate change and global warming.

There is no doubt that businesses pose several risk to the climate change and global warming issues. However, it is also true that climate change also poses risks to the business. These days, businesses all over the world are facing criticisms for being a source of GHG emission that results in global warming and climate change (Prado-Lorenzo *et al*., 2009; Kolk & Hoffman, 2007; Sussman & Freed, 2008; Kauffmann & Less, 2009; Wittneben & Kiyar, 2009; Pellegrino & Lodhia, 2012; Caring for Climate, 2015; Henderson *et al*., 2018). Also different stakeholder groups are creating pressure on the organizations to go for cleaner production so that the organizational activities contribute less in global warming (Pellegrino & Lodhia, 2012; Hossain *et al*., 2017). The business world is also taking this issue seriously and trying to deal with these criticisms (Kolk & Levy, 2001; Pellegrino & Lodhia, 2012). Therefore, it is important for a business to incorporate the policies and procedures related to climate change in their corporate governance matters (Haque & Deegan, 2010).

According to Wittneben and Kiyar (2009), businesses should take the climate change seriously as global leaders and legislators are giving high emphasis on these issues. Moreover, as these days climate change has become a public issue, in order to maintain good public relations, business leaders should take controlling measures for the operations that harm the environment (Wittneben & Kiyar, 2009). Public opinions should be taken into account and public expectations should be met. Thus, businesses should go for cleaner production and they should report their climate change related activities to the stakeholders (Wittneben & Kiyar, 2009; Hossain & Chowdhury, 2012; Ahmad & Hossain, 2015; Hossain *et al*., 2017). These days, corporations in different parts of the world are taking this issue seriously and are reporting (through annual reports, websites and sustainability reports) on climate change issues to the stakeholders (Prado-Lorenzo *et al*., 2009; Haque & Deegan, 2010; Freedman & Jaggi, 2005: 2010; Cowan & Deegan, 2011; Pellegrino & Lodhia, 2012; Ahmad & Hossain, 2015).

Over the last decade, several important studies were conducted on corporate reporting on climate change issues (Freedman & Jaggi, 2005: 2010; Stanny & Ely, 2008; Prado-Lorenzo *et al*., 2009; Haque & Deegan, 2010; Belal *et al*., 2010; Olson, 2010; Nelson *et al*., 2011; Rankin, *et al*., 2011; Martinov-

Bennie, 2012; Pellegrino & Lodhia, 2012; Hrasky, 2012; Luo, Tang & Lan, 2013; Ahmad & Hossain, 2015). However, most of these studies are mainly based on the developed economies (Hossain *et al*., 2017; Akbas & Canikli, 2018). Other than that very few studies on climate change disclosure focused on the governance related disclosures (such as, Haque & Deegan, 2010). This present study explores the disclosure of governance related issues in the corporate climate change disclosures of a developing economy – Malaysia. Hossain *et al*. (2017), in a recent review on corporate climate change disclosure urged that the future researchers should focus more on the developing economies as this area is still unexplored. This study is a response to that call.

This study, by taking Haque and Deegan's (2010) Climate Change Disclosure Categorization Scheme, explores how many of these disclosure categories are covered by the companies shortlisted for ACCA Malaysia Sustainability Reporting Award (MaSRA) in 2016. Moreover, this study, by focusing on the narratives of the corporate governance related climate change disclosures, also explores how the companies seek legitimacy through these disclosures. That is, the research other than just only focusing on 'what' is disclosed, also explores 'how' the companies disclosed these issues. According to Neu *et al*. (1998) and Pellegrino and Lodhia (2012), companies may try to seek legitimacy by following different strategies of communication. Recently, authors such as Jonall and Rimmel (2010), Beelitz and Merkl-Davies (2012), Craig and Brennan (2012), Higgins and Walker (2012), Tregidga *et al*. (2012), Scharf and Fernandes (2013); Sandberg and Holmlund (2015), Ahmad and Hossain (2015) and Haji and Hossain (2016) emphasized on going for a more meaning-oriented analysis of corporate narratives. This study is a response to that call also. Therefore, the study is an attempt to answer the following questions:

- What corporate governance related climate change issues are disclosed by the companies of Malaysia?
- How do these companies attempt to establish legitimacy in the eyes of the stakeholders through these corporate governance related climate change disclosures?

The next section of the articles focuses on the effects of climate change on Malaysia. After that, a literature review on the studies on corporate climate change disclosure was done. Then the theoretical perspective of the research was described. After that, the methodology of the study was presented. It was followed by the findings and analysis of the study. Finally, based on the findings, the conclusions were drawn.

2. Climate change and its impact on malaysia

Climate change and global warming will result in several adverse effect on Malaysian environment and economy (Tiong *et al*., 2009; Shaffril *et al*., 2011; Begum & Pereira, 2011; Tangang *et al*., 2012; Ahmad & Hossain, 2015). Ecological effects include rise in temperature and sea levels (Tiong *et al*., 2009; Tangang *et al*., 2012). There also remains the possibility of adverse economic impacts. Specially, the rise of temperature will hamper the agricultural productions (MOSTE, 2000). It will adversely affect the rice production and oil palm plantation. Fisheries (one of the significant contributors in Malaysian economy) will also get hampered (Tiong *et al*., 2009; Shaffril *et al*., 2011). According to Shaffril *et al*. (2011, p. 507), climate change will "obstruct fishermen from doing their routine tasks, bring damages to their belongings, reduce the quantity and quality of the sea faunas which will affect their productivity and expose them to diseases". Moreover, climate change may result in frequent flood that will have a negative impact on the water resource management (Tiong *et al*., 2009).

Industrial sector of Malaysia, in many ways, negatively affected the climate. Specially, industries such as metal, mineral, steel and iron, petrochemical, power plants and oil and gas remained as the major sources of GHG emission and thus contributed to global warming (Mustafa *et al*., 2012). Moreover, because of economic growth, the demand and consumption of energy increased in Malaysia (Begum and Pereira, 2011). As a result, the use of fossil fuel increased that proliferated the emission of GHGs (Begum & Pereira, 2011). According to Begum and Pereira (2011, p. 4300): "Appropriate strategic responses and actions *from all the stakeholders* either from government, private or corporate sector or civil society, are necessary to reduce the impact of climate change and GHG emissions in this country". In a survey on the corporate managers of Malaysia, Begum and Pereira (2011) found that these corporate managers are aware of the effects of climate change. Most of the managers in this survey said that climate change issues will negatively affect the company operations and profits. From this it can be said that corporate management should consider this issue seriously and one of the practice that can help in dealing with climate change is to include these matters in their governance policy (Haque & Deegan, 2010).

3. Prior research on corporate climate change disclosure

Though over the years, researchers of social and environmental accounting have produced many works on the climate change related corporate disclosures, few of them are based on developing or underdeveloped economies (Hossain *et al*., 2017; Akbas & Canikli, 2018).

Both theoretical and empirical studies were published on this issue. Theoretical studies focused on topics such as opportunities and challenges related to climate change reporting (Olson, 2010), financial implications of carbon trading (Nelson *et al*., 2011) and emission reporting and assurance (Martinov-Bennie, 2012). Some authors attempted to provide guidelines of carbon accounting (KPMG, 2008; Lovell *et al*., 2010; KPMG, 2012). Other than these, some literature reviews of the research on corporate climate change reporting were also published (Stechmesser & Guenther, 2012; Ascui, 2014; Hossain *et al*. 2017).

Most of the empirical studies on corporate climate change reporting are based on content analysis. These studies mainly focused on the quantity, quality and the determinants of disclosure (Hossain *et al*., 2017). In two studies of Freedman and Jaggi (2005: 2010), the authors focused on the determinants of corporate climate change disclosure. In the first study (Freedman & Jaggi, 2005), the authors conducted content analysis of the web sites, annual reports and environmental reports of the firms in countries that ratified Kyoto Protocol. The second study was based on content analysis of the annual reports, web sites and sustainability reports of the companies in Japan, Canada, the UK and the European Union. Both of these studies were mostly based on the developed economies. The study of Prado-Lorenzo *et al*. (2009) focused on the determinants of climate change disclosure of the companies from the USA, Australia, Canada and the EU. However, the study of Ziegler *et al*. (2011) was a bit different as this study focused on the effect of climate change disclosure on the stock market performance of the company. This study was also based on the developed economies as it focused on the companies dealing in the US and the European stock markets. Berthelot and Robert (2011) examined the climate change disclosure of Canadian oil and gas firms. The authors found that the disclosure level was low. It was found that the firms that have audit committees, greater political exposure and more media visibility disclose more. The study of Peng, Sun and Luo (2015) focused on carbon disclosure of Chinese non-financial companies. The authors found that companies in high-emission sectors disclosed more. Giannarakis *et al*. (2018) examined the determinants of climate change disclosure from the European context. They found that environmental performance positively affects climate change disclosure.

Several studies were conducted on the Australian context (see Haque & Deegan, 2010; Cowan & Deegan, 2011; Rankin *et al*., 2011; Pellegrino & Lodhia, 2012; Hrasky, 2012). In the study of Haque and Deegan (2010), the authors concentrated on the corporate governance related climate change disclosures of Australian energy-sensitive companies. First, the authors, by examining a number of documents, developed a disclosure categorization scheme. After that, basing on these categories, they conducted content analysis of the annual reports and sustainability reports of the companies under consideration. The authors concluded that though the disclosures increased over the years, these are not insightful and do not highlight the risks and opportunities related to climate change. Cowan and Deegan (2011) examined how emission reporting are presented strategically to ensure legitimacy. The author concluded that though the companies introduced disclosure after the introduction of emission regulation, these are incomplete in nature. The study of Rankin *et al*. (2011) was done through two stages. At the first stage, the authors attempted to find out the association between the internal organizational systems factors and GHG disclosure. Then, in the next stage, the authors developed an index. Pellegrino and Lodhia's (2012) study was based on four case studies from Australian mining industries. The authors found evidences of several legitimacy seeking strategies in the disclosure. The study of Hrasky (2012a) was based on the top 50 companies in the Australian Stock Exchange. The author found that the more carbon intensive companies go for more substantive disclosure, whereas the disclosure of the less carbon intensive companies are more symbolic in nature.

Ahmed's (2017) study on the USA also highlights the fact that climate change reporting is inconsistent in nature and these are not included in financial reporting. Comyns (2018) commented that, even in case of Multinational Companies (MNCs), the "knowledge on the greenhouse gas (GHG) reporting practices" is limited (Comyns, 2018, p. 65). The authors, by analyzing three cases of oil and gas companies (Exxon Mobil, Royal Dutch Shell and BP), developed a framework (based on institutional theory) to explain the greenhouse gas reporting practices of the MNCs. It can be seen from the findings of all these studies that even in the developed economies, corporate climate change reporting is limited, inconsistent and symbolic in nature.

It can be said that very few studies were conducted from the context of the developing economies. The study of Luo *et al*. (2013) focuses on both developed and developing countries. It was found that the companies of developing countries disclose less. However, the study of Belal *et al*. (2010) was based on a developing economy – Bangladesh. By conducting content analysis on the annual reports and websites of 100 biggest companies (in terms of market capitalization), the authors found that the level of environmental and climate change disclosure is low. Most of these companies ignored disclosing on climate change issues. The study of Amran *et al*. (2011) was based on the companies of Asia-Pacific region. It was found that the climate change disclosure of the companies of this area is low.

In recent years, Turkish companies caught attention of the researchers. The study of Akbas and Canikli (2018) was based on Turkish firms. In this quantitative paper, the authors concluded that "firm size, profitability and institutional ownership have positive impacts on the transparency of Turkish listed firms" (p.1). The authors highlighted the scarcity of research on developing and underdeveloped economies. Another paper that highlighted the Turkish experience is that of Kilic and Kuzey (2019). The authors examined the effect of corporate governance characteristics on carbon emission disclosure. It was found that companies with higher number of independent directors reported more on carbon emission issues. Also the existence of sustainability committees in the company had a positive impact on disclosure. The study of Ararat and Sayedy (2019) examined the effect of gender diversity in the corporate board on voluntary climate change disclosure of the Turkish companies. It was found that the presence of female members in the board increases the likelihood of voluntary climate change reporting.

Very few studies were conducted on Malaysia. Amran *et al*.'s (2012) study on Malaysian companies focused on the determinants of climate change disclosure. In this study it was found that size, profitability, industry membership, government ownership and business network have positive relationship with climate change disclosure. Another study that focused on the climate change disclosure of Malaysian companies is that of Ahmad and Hossain (2015). The authors conducted a discourse analysis of the annual reports of 79 Malaysian companies. It was found that the companies reported on the issues such as energy use, air pollution, tree planting and biodiversity.

However, form this summary of the existing literature it can be seen that very few studies were conducted on the corporations of developing economies. Hossain *et al*. (2017), in a recent literature review on corporate climate change disclosure highlighted the lack of research on developing and underdeveloped economies. The authors emphasized that as many developing and underdeveloped economies are suffering from negative effects of climate change, the researchers should focus on these countries. This present study is a response to that call. Moreover, other than Haque and Deegan (2010), very few studies have focused on the corporate governance related climate change disclosures. Haque and Deegan (2010) highlighted that climate change related corporate governance activities are important for today’s organizations as climate change poses various risks to the corporate sector. The study of Begum and Pereira (2011) highlights that Malaysian corporate managers are considering the issue of climate change as risky for business operations and profit. The study of Haque and Deegan (2010) was also based on a developed economy – Australia. This present study is based on corporate governance disclosure of a developing economy – Malaysia. Currently very limited information is available in this area. The study contributes to this scant literature.

4. Theoretical perspective

This study draws its explanations from the legitimacy perspective. Over the years, several researchers explained the phenomena of corporate social and environmental reporting through legitimacy theory (see Freedman & Jaggi, 2005: 2010; Prado-Lorenzo *et al*., 2009; Pellegrino & Lodhia, 2012). According to Deegan and Unerman (2011, p. 323): “Legitimacy theory asserts that organizations continually seek to ensure that they are perceived as operating within the bounds and norms of their respective societies, that is, they attempt to ensure that their activities are perceived by outside parties as being ‘legitimate’”. Business organizations are social units and society and business have a symbiotic relationship (Hossain, 2011; Ahmad & Hossain, 2015). As a part of the society, business organizations have to abide by the social rules and regulations. They also have to be respectful to society’s ethical values, bounds and norms. This is seen as a ‘social contract’ between the organization and the society (Ahmad & Hossain, 2015). However, the bounds, norms and expectations of a society may change over time (Deegan & Unerman, 2011). In that case, in order to portray their activities as ‘legitimate’, organizations have to be responsive to these changing norms and bounds. In other words, organizations have to be ‘responsive to the ethical (or moral) environment in which they operate’ (Deegan & Unerman, 2011, p. 323-324). From a normative point of view, a company should not do any harm to the society. Moreover, from a strategic point of view the company should ensure that society does not have any negative perception about the activities of the company (Ahmad & Hossain, 2015). Any negative perception may lead to a ‘legitimacy gap’. In order to appear as legitimate, the company must try to reduce this legitimacy gap by responding to the changing needs of the society. Otherwise the company may face many disadvantageous situations. Society may reject the product of the company. The company may have to deal with lawsuits. There remains a chance that the society will demand for a permanent closure of the business operations of the company. According to O’Donavan (2002), corporate disclosure can be one of the tools that help in minimizing legitimacy gap. Legitimacy gap may arise either because of bad news against the company or a change in social expectations.

Climate change has become an important issue in today’s social and political arena (Kolk & Pinkse, 2007; Pellegrino & Lodhia, 2012). Also because of huge media and NGO coverage, people around the world are getting aware of this issue (Haque & Deegan, 2010; Ahmad & Hossain, 2015). Business organizations are considered as one of the major sources of GHG emission as they consume and burn different types of fossil fuels. Moreover, business organizations face pressures from several international authorities to minimize their carbon emission (Haque & Deegan, 2010). Though at the beginning many multinational companies opposed to minimize carbon emission, later (mainly after the Kyoto Protocol in 1997) they changed their position and attitude (Kolk & Pinkse, 2004; Haque & Deegan, 2010). The perception that businesses are negatively contributing in climate change and global warming may create a legitimacy gap. Companies may try to minimize this gap through climate change reporting (Ahmad & Hossain, 2015). Reports on governance policies and procedures related to climate change may create a perception that the companies are conscious about their GHG emission and is taking necessary steps to reduce this. Therefore, authors such as Deegan and Rankin (1996), O'Donavan (1999), Neu *et al*. (1998), Cho and Patten (2007) and Pellegrino and Lodhia (2012) highlighted the importance of analyzing corporate social and environmental reporting from legitimacy perspective. Corporate climate change reporting, as a sub-topic of corporate social and environmental reporting can also be explained with this theory.

5. Methodology

Sample

The research involves both quantitative and qualitative content analyses of the 2016 ACCA Malaysia Sustainability Award (MaSRA) nominated reports. This is consistent with the study of Haji and Hossain (2016). In this study the authors focused on the corporate narratives of the award winning companies. The award nominated companies were selected with an expectation to understand the best practices of governance related climate change disclosure of the Malaysian companies. As this award was given on the basis of the quantity and quality of disclosure, it can be said the reports analyzed in this study are 'information-rich' (Sandberg & Holmlund, 2015). Sandberg and Holmlund (2015) suggested to analyze 'information-rich' reports in order to get as much information as possible.

In total 49 companies contested for this award. Among these, 24 companies were selected for the final competition. Also it needs to be mentioned here that all these companies did not submit the same report while contesting for the award. The different types of reports submitted by the companies included sustainability reports, annual reports and integrated reports. This study deals only with the reports that were submitted for this MaSRA award. Other reports of these companies were not included in this study. The reports were collected from the respective websites of the companies. However, among the 24 reports, 22 were collectible. Two companies did not upload their award nominated reports in their websites. The content analysis was conducted on these 22 reports. The final sample included 13 sustainability reports, 7 annual reports and 2 annual integrated reports.

Method

The analysis was done by following the governance related climate change disclosure categories proposed by Haque and Deegan (2010). Haque and Deegan (2010) developed a disclosure schema for climate change related disclosure practices. This development of this schema was rigorous in nature as in the development process the authors utilized a number of important documents that highlight the requirements of governance practices.

A content analysis of the reports nominated for the MaSRA award was conducted. Content analysis can be considered as one of the most popular methods applied in social and environmental accounting research (see Grosser & Moon, 2008; Prado-Loranzo *et al*., 2009; Hoque & Deegan, 2010; Pellegrino & Lodhia, 2012; Ahmad & Hossain, 2015). According to Pellegrino and Lodhia (2012, p. 73): "In many prior studies, legitimacy theory is a paradigm that has benefited from the application of content analysis". As this study also draws its explanations from legitimacy perspective, content analysis was considered as a suitable method.

The content analysis was conducted by two coders [one of the authors and one research assistant (a

Master Degree student who has previous experience in content analysis based research projects related to corporate narratives)] (consistent with Hossain, Ahmad & Siraj, 2016). After collecting the award nominated reports from the respective web sites of the companies, the coders discussed on the disclosure categories developed by Haque and Deegan (2010) to develop a plan for the content analysis. By following Haque and Deegan (2010), the following words were used for the keyword search: ‘global warming’, ‘climate change’, ‘gas’, ‘greenhouse gas’, ‘GHG’, ‘carbon’ ‘emission’, ‘governance’, ‘energy’, ‘risk’, ‘pollution’, ‘environment’, ‘air’, CO_2, ‘GRI’, ‘Greenhouse Protocol’ and ‘assurance’. However, our readings of these reports were not limited to these words only. The reports were checked intensively in order to ensure that no disclosure related to climate change remain unnoticed (consistent with Haji & Hossain, 2016). For each of the companies, the narratives were extracted and put in a separate MS Word file so that a qualitative content analysis can also be done. After finishing the coding independently, the two coders went through a thorough discussion on the coded data (consistent with Hossain, Ahmad & Siraj, 2010). The differences were identified and discussed in order to enhance the consistency (Hossain, Ahmad & Siraj, 2016). In this way, the coders identified how many companies reported on each disclosure category [developed by Haque and Deegan (2010)] and how did they report on these issues.

6. Findings and analysis

It was found that all the 22 sample companies disclosed at least one issue identified by Haque and Deegan (2010). However, the extent of disclosure was less. The findings are presented in Table 1. In this table, the number of companies disclosing each sub topic was presented along with the percentage in the sample (consistent with other social and environmental reporting related studies such as Grosser & Moon, 2008; Ahmad & Hossain, 2015; Hossain, Ahmad & Siraj, 2016).

Table 1. Disclosure on governance related climate change disclosure by malaysian companies

Topic	Sub-topic	No. of Companies	% of sample (n=22)
Board oversight	Existence of board committee over sighting environmental affairs	--	--
	Existence of board committee for climate change issues	1	4.55%
	Board conducting periodic review of climate change related performance	1	4.55%
Senior management engagement and responsibility	CEO/Chairperson articulating views on climate change issues	12	54.55%
	Existence of risk management team dealing with GHG issues	--	--
	Senior executives having relationship with govt./media/community regarding climate change	6	27.3%
	Performance assessment tool to identify gaps in GHG management	--	--
	Senior management compensation linked with climate change performance	--	--
Emission accounting	Conducting annual inventory of direct/indirect emission from operations	15	68.2%
	Calculation of GHG emission savings and offsets from projects	1	4.55%
	Setting an emission baseline year to estimate	2	9.1%

	future GHG emission trends		
	Setting absolute GHG emission targets	3	13.64%
	Third party verification process for GHG data	2	9.1%
	Specific policy to purchase from or develop renewable energy sources	1	4.55%
	Specific requirements for suppliers to reduce GHG emission	--	--
	Policy of providing product information	1	4.55%
Research and development	Policy to develop energy efficiency by using low emission technology	10	45.45%
	Policy to invest in R&D of low emission technology in terms of energy	--	--
Potential liability reduction	Strategies to minimize potential regulatory risks and physical threats to assets related to climate change	--	--
Reporting/ benchmarking	Specific framework to benchmark GHG emission in comparison to competitors/other companies	--	--
	Policy of compliance with GRI or any other comparable format	17	77.27%
Carbon pricing and trading	Policy for trading in regional/international emission trading schemes	--	--
	Policy to assist government/other stakeholders to develop emission trading schemes	--	--
External affairs	Public policy to support collaborative solutions for climate change	--	--
	Policy to promote climate friendly behavior within the community	3	13.64%

Among the eight main topics, none of the sample companies reported on the issues such as ‘potential liability reduction’ and ‘carbon pricing and trading’. Only one company reported on ‘board oversight’ of climate change issues. Among the 25 sub-topics (under 8 main topics), none of the companies reported on 11 sub-topics. Two issues that got high importance from the sample companies include ‘Policy of compliance with GRI or any other comparable format’ (77.27%) and ‘Conducting annual inventory of direct/indirect emission from operations’ (68.2%). A detail discussion on these disclosures is presented here.

Board oversight

Only one of the sample companies reported on board oversight. The company, by mentioning a board committee responsible for sustainability matters reported the following on climate change issues:

> “**WHAT HAS THE COMMITTEE DONE DURING THE FINANCIAL YEAR?**
>
> Climate Change
>
> a. Reviewing the risks around water management and of rising sea levels and its potential impact on Plantation Division’s estates and the mitigating actions taken and planned.
> b. Deliberating on reporting options for Land Use, Land Use Change and Forestry emissions and sequestration in the carbon inventory of the Sime Darby Group.
> c. Deliberating on the contents of the interim report from the High Carbon Stock Study

> Steering Committee". (Sime Darby Berhad, Annual Report 2015, p. 172)

In this report this company has covered two sub-topics related to 'Board Oversight'. Firstly, they highlighted that they have a board committee that is responsible for dealing with the sustainability issues and this committee is also looking after climate change matters. Secondly, this board is responsible for making a review of the report of the High Carbon Stock Study Steering Committee. The company used highlighted bold heading and alphabetical points to draw readers' attention. It can be said that in this way the company tried to manage the impression of the stakeholders (Brennan *et al*., 2009). The company, by highlighting the board's activities related to climate change issues, tried to convince the society that they are 'concerned' and 'committed' to the changing expectations of the society. They tried to highlight that they are understanding and recognizing the 'changing terms of the social contract' (Pellegrino & Lodhia, 2012, p. 75) and aligning their activities with the 'social values' (Pellegrino & Lodhia, 2012). This can be considered as a legitimacy seeking behavior (Pellegrino & Lodhia, 2012).

As mentioned earlier, only one sample Company reported on the two sub-topics of 'board oversight'. As only one of the companies reported on this issue, it can be said that (based on this sample) this particular governance related climate change issue is not getting much importance from the Malaysian companies. As this kind of reporting is not mandatory and the reporting is still in a developing stage, companies are not yet reporting some of the issues.

Senior management engagement and responsibility

Sample companies reported on two sub-topics related to 'senior management engagement and responsibility' [as identified by Haque and Deegan (2010)]. These are: (1) 'CEO/Chairman articulating views on climate change issues' (12 companies representing 54.55% of the sample) and (2) 'Senior management having relationship with govt./media/community regarding climate change' (6 companies representing 27.3% of the sample).

When the companies expressed their 'views' on climate change issues, in most of the cases it was not presented separately as 'senior management's view'. These were mostly presented as some general statements in the reports. However, in these studies, these views were considered as the 'views of senior management'. Two examples of the 'views' on climate change are presented here:

> "The imperative of sustainability relating to the environment involves the Group's stewardship through ***'Care for Environment'***. Our environmental footprint is one of the materiality aspects and the Group believes that it has an important role in identifying opportunities to create value, ***reduce carbon emissions and identify how the daily operations can help to reduce greenhouse gases ("GHG"), address climate change*** and also promote environmental protection, conservation and biodiversity enhancement". (IJM Plantations Berhad, Annual Report 2016, p. 72). [Authors' emphasis].

> "Like many corporations all over the world, ***Kulim is taking proactive actions to address climate change issues in its investments and business planning***. As part of our commitment to continuous improvement, we have action plans and targets for a range of sustainable development metrics. By focusing on resource management, waste management as well as pollution and ***emission monitoring***, we minimize the environmental impact from our daily operations". (Kulim (Malaysia) Berhad, Integrated Annual Report 2015, p. 142). [Authors' emphasis].

In both of these reports, the companies highlighted their commitment to climate change. They portray themselves as 'conscious' about environmental and climate change issues. Also, they are highlighting some of their activities to deal with these issues. Somehow they wanted to portray themselves as 'caring' for the environment. However, these statements are mostly 'rhetorical' (Brennan *et al*., 2009; Higgins & Walker, 2012; Hossain, Ahmad & Siraj, 2017) in nature. The statements are persuasive and are presented to create a positive impression in the readers mind. The companies used 'positively charged vocabulary' (Sandberg & Holmlund, 2015) such as 'important', 'create value', 'continuous improvement' and 'proactive' to create a positive impression in the mind of the readers. However, both of these companies used 'unspecific information' (Sandberg & Holmlund, 2015) to describe the issues. Though they have highlighted their action plans, these descriptions are 'vague' (Sandberg & Holmlund, 2015) in nature. As climate change issues and the impact of business activities on climate change are getting importance from different stakeholders, the companies tried to 'legitimize' their activities through highlighting that they are concerned about changing 'social values' (Pellegrino & Lodhia, 2012).

Though the companies did not mention about any direct relationship with the government/ media/ community, some companies mentioned their climate change related activities that are linked with different initiatives taken by government and other climate change monitoring groups. The following are two examples where the companies highlighted their activities that are in line with governmental initiatives:

> "GREEN TECHNOLOGY FINANCING: The finance sector has immense influence on and responsibility for investment flows. More of the available capital could be steered towards ***low-carbon, climate-resilient activities***. Some institutions are already allocating capital and steering financial flows towards such activities. For us, one concrete step is to support the ***Green Technology Financing Scheme (GTFS) introduced by the government of Malaysia in 2010***". (Maybank, Sustainability Report, 2015, p. 68). [Authors' emphasis].

> "In reflecting our sustainability efforts, we have taken into consideration the context of both Malaysia and the region. Climate change has impacted business practices and will only have an ever more important role in the future. ***In line with the Malaysian government's commitment and focus on sustainability, we have embraced green technology*** – and continue to encourage our customers to do the same". (Fuji Xerox, Sustainability Report 2015, p. 2) [Authors' emphasis].

In both of these examples the companies attempted to create a positive impression about themselves by highlighting their activities related to the use of green technology (that is also highly supported by the government). In this way, they are responding to the changing expectation of the Government. By relating their activities to the governmental expectations, the companies made an attempt to portray themselves as 'responsible citizens' who are caring/conscious about the environment and society. By highlighting the fact that their activities are in line with the vision of the Government, the companies are 'explicitly' recognizing their 'social license to operate' (Pellegrino & Lodhia, 2012, p. 74). This is another example of 'legitimizing' the existence and operations of the companies.

Emission accounting

One sub-topic of emission accounting got huge importance from the sample companies. These companies (15 companies representing 68.2% of the sample companies) mentioned their annual direct/indirect emission from operations. These companies, in most of the cases, used quantitative data to disclose this issue. Most of these companies also used tables, graphs and charts to highlight the GHG emission over the years. That means, the companies tried to make 'substantive' disclosure on this issue. The following is an example of reporting on GHG emission:

> "The Company's greenhouse gas (GHG) emissions are actively monitored using the International Petroleum Industry Environmental Conservation Association (IPIECA) GHG Accounting and Reporting Guidelines in combination with the renowned SANGEA emissions calculations tool for accuracy and reliability in reporting. ***Considerable reduction in flaring activity in FY2015 lowered our GHG emissions by nearly half to 2.25 million tonnes from 4.08 million tonnes in FY2014.*** Various short and long-term initiatives are being undertaken to reduce this level further". (Petronas Gas, Annual Report 2015, p. 164) [Authors' emphasis].

In this example the company has reported their GHG emission for both 2014 and 2015. They presented a 'performance comparison' (Brennan *et al*., 2009). Brennan *et al*. (2009) recognizes performance comparison as an impression management strategy. Also, the company highlighted the fact of lowering carbon emission with the help of quantitative data. According to Higgins and Walker (2012), this kind of factual description helps in enhancing clarity and integrity of the reports. The description is highly 'positive' (Pellegrino & Lodhia, 2012) and 'self-laudatory' (Frost *et al*., 2005). In addition to this, some companies reported on GHG Protocol classification introduced by World Business Council for Sustainable Development (WBCSD) and World Research Institute (WRI). In the following example, the company mentioned this standard:

> "Our emissions accounting is based on the internationally recognized GHG Protocol established by the ***World Business Council for Sustainable Development (WBCSD) and World Research Institute (WRI). Emissions accounting is based on the GHG Protocol*** classification of direct and indirect emissions". (Media Prima, Sustainability Report 2016, p. 29). [Authors' emphasis].

By following this GHG Protocol, companies reported on direct and indirect emissions under three sections called 'Scope 1', 'Scope 2' and 'Scope 3'. Scope 1 includes GHG emission from company owned machinery and vehicles. Scope 2 includes GHG emission from company activities that are controlled by another entity. Scope 3 includes air travel GHG emission based on number of employees travelling or the distance travelled. By highlighting their 'voluntary reporting commitment' (Pellegrino & Lodhia, 2012), the company sought legitimacy. The following is an example of reporting following GHG Protocol:

> ***Scope 1*** covers emissions from company owned vehicles used by our engineers for customer support. In FY2014, Scope 1 ***carbon footprint remained at 375.80t CO2*** (***a decrease of 3% from FY2013***.) The source of the Scope 2 emissions is mainly electricity consumption in our headquarters at Menara Binjai, 5 branches and 4 services depots. In FY2014, the total carbon footprint within ***Scope 2*** was ***886 tCO2***, 35% of our overall carbon footprint. Scope 3 covers transportation of products into, within and out of Malaysia. In FY2014, total carbon footprint under ***Scope 3*** was ***1,240 tCO2***, 50% of the total carbon footprint. Used machines are returned to our eco-manufacturing site in Thailand. Products are transported by air, land and sea. ***Our Scope 3 carbon footprint increased*** by 54% from FY2013. The majority of ***this increase is attributed to*** higher volume of machines distributed due to the volume of sales this year. (Fuji Xerox, Sustainability Report 2015, p. 20). [Authors' emphasis].

It can be seen from this example that the company tried to go for a substantive disclosure by putting quantitative information about carbon emission. It helped to enhance the integrity of the report (Higgins & Walker, 2012). This is an example of legitimacy seeking behavior. The company also made a 'performance comparison' (Brennan *et al*., 2009) in relation to the increase/decrease of emission in case of Scope 1. Though in case of Scope 1, a good news was reported, in case of Scope 3, this performance comparison appeared to be a 'bad news'. According to Higgins and Walker (2012), in many cases, this 'self-criticism' through bad news helps to improve the 'credibility' of the statement. However, the company applied the tactic of 'defense' (Sandberg & Holmlund, 2015) by justifying the reason of this increase in carbon footprint. The company tried to justify this increase in emission by attributing it to another good news – increased sales. They wanted to make a balance by connecting a 'bad news' to a 'good news'. This can also be considered as an attempt to reduce possible 'legitimacy gap'.

Some companies mentioned the process they followed in calculating GHG emission. The following is an example for that. The company is mentioning the way they are improving their carbon data over time. This company also highlighted their baseline year [a sub-topic under the topic 'emission accounting' of the disclosure index developed by Haque and Deegan (2010)] for representing emission trade. Only two companies in the sample (9.1%) highlighted this baseline year.

> "Our Plantation Division contributes towards the majority of the Group's carbon emissions and our carbon strategy at this point in time focuses on reducing the carbon emission intensity of the Division. The Group has ***a primary target of achieving 40% reduction*** of our Plantation Upstream emissions intensity by 2020 against our ***2009 baseline***. The Sustainability Management System (SMS) continues to be the platform for data collection, data consolidation and report generation for Sime Darby carbon management. This year, further integration between the SMS and Plantation Division's management systems have progressed, where once completed, actual Palm Oil Mill Effluent (POME) and Chemical Oxygen Demand (COD) values will be used, ***which will improve accuracy of the carbon data***. Monitoring and measurement of the actual values of carbon emissions from the majority of sale operations in Motors Division have also begun this year which led to increased accuracy of the Division's emissions". (Sime Darby Berhad, Annual Report 2015, p. 40) [Authors' emphasis].

The company described their effort to improve the accuracy of carbon data by highlighting several initiatives they took for this purpose. This kind of factual data may help the company to enhance the 'integrity' of the report (Higgins & Walker, 2012). This can also be taken as an evidence of legitimacy seeking behavior.

Moreover, as mentioned earlier, some of these companies used visuals such as graphs, charts and pictures to report on carbon emission. According to Hrasky (2012b), these visuals can be considered as impression management tools. As these contain quantitative information, readers may consider these as substantive information (Brennan *et al*., 2009; Hrasky, 2012; Hossain, 2017). This can also be considered as a legitimacy seeking strategy.

Only one company (4.55% of the sample) mentioned about emission savings and offsets from the projects:

> "Carbon Neutral Press machine which has offset 78 tonnes of carbon emission via one climate protection project – a Reforestation project in Togo, West Africa named Project TOGO". (Nets, Sustainability Report 2015, p. 13).

Another sub-topic under 'emission accounting' (Haque & Deegan, 2010) is the report on 'absolute emission target'. Only three of the sample companies (13.64%) mentioned this. For example, Axiata mentioned that by 2018, they want to reduce Carbon Dioxide - CO_2 emission by 40%. The following company also highlighted this issue. The company also mentioned their baseline year (Haque & Deegan, 2010). This kind of statement relating to 'commitment to success' are persuasive in nature and sometimes help to improve the 'credibility' of the reports (Higgins & Walker, 2012):

> "The target is to ***reduce the Group's overall carbon footprint to 80.2%*** of the 2012 baseline emission by 2017". (Kulim (Malaysia) Berhad, Integrated Annual Report 2015, p. 37). [Authors' emphasis].

Only one company (4.55%) disclosed their policy on depending on renewable energy sources. This is another sub-topic under 'emission accounting' (Haque & Deegan, 2010):

> "As part of our drive towards environmental sustainability, Nestlé made the ***commitment to purchase 100% renewable electricity energy*** within the shortest practical time frame. This is in line with the 21st Conference of the Parties (COP 21) to the United Nations Framework Convention on Climate Change held in December 2015". (Nestle, Nestle in the Society Report 2015, p. 35).

None of these companies disclosed any 'specific requirement for suppliers to reduce emission'. However, only one company (4.55%) mentioned about policy of providing product information related to GHG emission:

> "Fuji Xerox has developed EA-Eco toner, a special toner that enables more than 20^{0} C lower fusing temperature compared with conventional EA toner. With EA-Eco toner, which enables both lower fusing temperature and high-gloss printing, power consumption can be reduced by approximately 40% in glossy mode compared with conventional Fuji Xerox EA toner, leading to a significant reduction in the carbon dioxide emissions. We have developed a method to calculate our solutions' contribution to customers' CO2 emissions. ***In fiscal year 2014, customers' CO2 emissions were reduced by 3,206 ktCO2 globally, surpassing our goal of 3,075 kt-CO2".*** (Fuji Xerox, Sustainability Report 2015, p. 18). [Authors' emphasis].

In this statement the company highlighted their environment friendly product that emits less carbon. They also mentioned about developing a method to calculate how much carbon their customers are emitting by using their product. By incorporating a 'performance comparison' over the years (Brennan *et al*., 2009) through quantitative data regarding the reduction of emission, the company tried to enhance the integrity of the report (Higgins & Walker, 2012). Moreover, through this statement, the company is 'educating society about their internal changes' (Pellegrino & Lodhia, 2012, p. 74). According to Pellegrino and Lodhia (2012), this is considered as legitimacy seeking behavior as the company is highlighting its understanding of the 'changing terms of social contract' (Pellegrino & Lodhia, 2012, p. 75).

It was mentioned earlier that many of these companies went for colorful tabular, pictorial and graphical representation to highlight their carbon emission. In most of the cases, these representations were done by using quantitative figures. According to Higgins and Walker (2012), these quantitative figures may appear to the readers as representation of 'facts' and thus these can enhance the clarity and integrity of the reports. As in most of the cases the companies had to highlight 'quantitative' information, sometimes they had to communicate 'bad news'. For example, Sunway Construction highlighted an increase in carbon emission in the year of 2015. They put the following explanation along with the graph:

> In 2015, SunCon's CO2 resulting from purchased electricity increased by 23.04% despite electricity consumption only increasing by 13.41%. This increase was due to an 8.49% upward revision of the emission factor produced by the ***Malaysian Green Technology***

> ***Corporation for the Peninsular Grid*** this year. (Sunway Construction, Annual Report 2015, p. 83) [Authors' emphasis].

However, it can be seen that the company linked this reason for increase in emission to an external factor. Brennan *et al*. (2009) also highlighted this issue as 'attribution of organizational outcome'. Through corporate narratives, the companies may attempt to explain the reasons behind poor organizational performances. Usually the negative performances are attributed to external issues (Brennan *et al*., 2009).

It can be said that, the reporting on 'emission accounting' got high importance from the part of these award nominated Malaysian companies. The companies tried to present these informations with facts and numbers. In this way they tried to enhance the integrity and credibility of the reports (Higgins & Walker, 2012). Moreover, in many cases, they made 'performance comparisons' (Brennan *et al*., 2009) to enhance this credibility. Most of the companies, while presenting the amount of carbon emission, presented a comparison with the emission of previous years. This attempt to enhance credibility can be seen as an attempt to seek legitimacy.

Research and development

According to the disclosure categorization proposed by Haque and Deegan (2010), two issues can be highlighted under the topic of research and development. These are: (1) policy to develop energy efficiency by using low emission technology and (2) policy to invest in R&D of low emission technology. Though ten companies in the sample (45.45%) disclosed on the first sub-topic, none of the sample companies discussed the second one. In the following examples, the companies expressed their commitment towards energy efficiency:

> "**Improved energy efficiency** We are ***committed to utilizing energy-efficient technologies to reduce energy per-unit cost of production***, which translates into lower production cost and a reduction in overall energy intensity and carbon footprint". (Petronas Gas, Annual Report 2015, p. 63). [Authors' emphasis].

> "Our main environmental footprint consists of office materials and energy usage. ***We have processes in place to make continuous improvements in energy efficiency, emissions reduction and resource conservation.*** We will be able to report on our emissions in 2016. These processes are driven by our Energy Management Committee". (CIMB, Sustainability Report 2015, p. 24) [Authors' emphasis].

These disclosures are mostly rhetorical/persuasive (Brennan *et al*., 2009) in nature and in many ways, lack detailing. From the two statements presented here, the readers can know about the commitments of the companies towards energy efficiency. Much cannot be learned about how they will ensure that. The companies used some 'positively charged vocabulary' (Sandberg & Holmlund, 2015) such as 'improved', 'continuous improvement' and 'reduction in overall energy intensity'. According to Sandberg and Holmlund (2015), this 'vague' style of reporting is an impression management strategy. However, here the companies are highlighting that they are concerned about the 'changing terms of the social contract' (Pellegrino & Lodhia, 2012, p. 75) and thus are aligning their activities with social values.

The expressions in these statements can be considered as an example of 'legitimacy seeking behavior' as through these statements the companies showed concern towards to an important demand of the society – to mitigate the risks related to climate change matters. The companies made an attempt to persuade the readers that they are operating within the bounds and norms of the society.

Potential liability reduction

Haque and Deegan (2010) suggested the companies to disclose strategies to minimize potential regulatory risks and physical threats to assets in relation to climate change. None of the sample companies reported on this issue.

Reporting/benchmarking

Haque and Deegan (2010) mentioned that companies may highlight two reporting/benchmarking issues: (1) framework to benchmark GHG emission in comparison to competitors and/or other companies and (2) compliance with GRI or any other format. Though none of the sample companies disclose the first issue, 17 companies (77.27%) reported on the second one. The GRI-G4 framework was seen as the most popular format that the companies mentioned. However, as mentioned earlier, some companies also followed the GHG Protocol developed by WBCSD and WRI. In the following example the company mentioned about the GHG Protocol:

> "SunCon's emissions accounting is based on the internationally recognized ***GHG Protocol established by the World Business Council for Sustainable Development (WBCSD) and World Research Institute (WRI).*** Emissions accounting is based on the GHG Protocol classification of direct and indirect emissions". (Sunway Construction, Annual Report 2015, p. 83) [Authors' emphasis].

Other than these, one company (Petronas) mentioned about HSE Mandatory Control Framework (MCF). It can be said that these award nominated companies took the issue of following a reporting format seriously. However, different companies followed different formats. Highlighting the fact that they have followed a particular format of a recognized authority may help in enhancing the credibility and integrity of reporting. This can also be taken as an example of legitimacy seeking behavior.

Carbon pricing and trading

According to Haque and Deegan's (2010) disclosure categories, there are two 'carbon pricing and trading' related issues that a company can disclose: (1) policy for trading in regional/international emission trading scheme and (2) policy to assist government/other stakeholders to develop emission trading scheme. However, none of the sample companies reported these issues.

External affairs

Two issues can be disclosed in terms of 'external affairs' (Haque & Deegan, 2010). These are: (1) public policy to support collaborative solutions for climate change and (2) policy to promote climate friendly behavior within the community. None of the companies reported on the first issue. Three sample companies (13.64%) reported on the second issue. Some examples are presented here:

> Our tree planting programme was successful and we have already reached our goal to ***plant 10,000 mangrove trees by 2015***. We have raised awareness on climate change by involving our distributors in the tree planting programmes. (Fuji Xerox, Sustainability Report 2015, p. 29) [Authors' emphasis].

> ***Nestlé is doing its part to address problems caused by climate change and global warming*** by reducing specific energy consumption and the emission of greenhouse gases from its operations. ***Increasingly, Nestlé is helping its stakeholders adapt to climate change impacts – both to support their livelihoods and the environment; sharing good practices with different stakeholders and reducing the risk to food security and long-term supply of materials to the business.*** However, we do not track financial implications, risks and opportunities of climate change for the organisation, as this has

> not been identified as one of our three key focus areas. (Nestle, Nestle in the Society Report 2015, p. 45) [Authors' emphasis].

In these examples, the companies are mentioning that they are concerned about the climate change risks related to corporate activities. They are also highlighting their concern for society. In these statements, the companies used the 'emotive symbols' (Pellegrino & Lodhia, 2012, p. 75) in presentation. They highlighted that they are sponsoring different programs. In this way, they are highlighting them as 'feeling being' (Sandberg & Holmlund, 2015) and 'pro-social' (Aaken *et al*., 2012). In this way, the company can trigger the emotions of the readers (Higgins & Walker, 2012; Sandberg & Holmlund, 2015). Moreover, by using the phrase such as "Nestlé is doing its part to address problems caused by climate change and global warming", the company is highlighting its 'high morals' (Sandberg & Holmlund, 2015). Sandberg and Holmlund (2015) termed this kind of presentation strategy as 'praise'. This strategy of praise presents the company in a favorable manner. This may help in enhancing the legitimacy of their existence and operations in the society (Pellegrino & Lodhia, 2012).

7. Conclusion

In summary, it can be said that all of these award nominated reports contained at least one category/topic of governance related climate change issues as suggested by Haque and Deegan (2010). As mentioned earlier, climate change has become one of the most talked about issues these days and in many ways businesses are blamed for affecting the climate negatively. Companies, somehow, tried to address this issue in these sustainability award nominated reports. This can be seen as a legitimacy seeking behavior from the part of the companies. The companies used various strategies (rhetorical expressions, emotive symbols, self-laudatory positive style, performance comparisons, using visuals such as graphs, charts and other pictorial forms) to justify their consciousness towards climate change.

However, the companies were not consistent in reporting. Different companies reported the governance related issues in different manner. They did not prepare the report in the same format. As a result, the reports lack comparability. Because of lack of any mandatory disclosure format, companies are producing the reports in different ways. They are just responding to the public awareness of climate change. Because of this public awareness, the expectation of the society changes. It may result in 'legitimacy gap'. This gap can be minimized through reporting on climate change issues.

It was seen that most of these companies did not report on many governance related climate change issues as suggested by Haque and Deegan (2010). Though most of these companies were contesting for MaSRA award, the extent of disclosure was very low. It was seen that at this moment the companies are mostly focusing on expressing their awareness about climate change, the level of emission, energy-efficiency and the reporting format. As the sample companies in this study were the sustainability award nominated companies, it can be said that these reports represent some of the 'best practices' in Malaysian corporate sector. However, the disclosure level was low even in these best reports. Many of the issues (11 out of 25) suggested by Haque and Deegan (2010) were not reported at all by these award winning companies. The remaining 14 topics also were covered by few companies. This provokes us to "question the 'quality'" of the disclosure (Haque & Deegan, 2010, p. 330). Therefore, in this case, there is an opportunity for enhancing the quality of disclosure (Haque & Deegan, 2010).

However, it was found in previous studies that Malaysian companies are one of the major sources of GHG emission (Mustafa *et al*., 2012; Ahmad & Hossain, 2015) and corporate managers have the perception that climate change issues can become risky for the profit and operations of the companies (Begum & Pereira, 2011). For that reason it can be said that companies should include climate change related policies and procedures in their governance system (Haque & Deegan, 2010) and report these issues publicly so that society knows about their activities. Other than that it can be said that in reporting on governance related climate change issues, the companies tried to gain legitimacy by applying several impression management issues.

The study focused on both 'whether and/or what' is reported and 'how' these are reported. A combination of both qualitative and quantitative content analysis was applied to ensure this. The study first contributes to the scant literature on the corporate climate change disclosure of the developing countries (especially from the context of Malaysia). Moreover, the study puts special emphasis on governance related disclosures. These days, because of increased industrialization and economic growth the fossil fuel consumption is increasing in Malaysia. This can be treated as a threat to the environment. For that reason, the companies should take initiative to reduce their negative impacts on climate change. In order to ensure that they should include these in their governance mechanisms. Reporting on these issues will help the stakeholders to understand the impact of the company activities on climate change. It can also give an idea about companies' attitude towards climate change.

However, the study is not free from limitations. Firstly, the study was exploratory in nature and it focused on the practices of few companies. Secondly, the study was based on cross-sectional data. Thirdly, the study focuses on only one kind of report of these award nominated companies. Other reports and web sites of these companies were not examined.

Future researchers can conduct studies on larger scale by taking more companies and more types of reports. Longitudinal analysis of these disclosures can also be done. Moreover, future researchers can conduct studies on other developing countries that are more vulnerable to climate change.

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