



UTS
ePRESS

Construction
Economics and
Building

Vol. 17, No. 2
June 2017



© 2017 by the author(s). This is an Open Access article distributed under the terms of the Creative Commons Attribution 4.0 International (CC BY 4.0) License (<https://creativecommons.org/licenses/by/4.0/>), allowing third parties to copy and redistribute the material in any medium or format and to remix, transform, and build upon the material for any purpose, even commercially, provided the original work is properly cited and states its license.

Citation: Siew, R.Y.J. 2017. Critical Evaluation of Environmental, Social and Governance Disclosures of Malaysian Property and Construction Companies. *Construction Economics and Building*, 17:2, 81-91. <http://dx.doi.org/10.5130/AJCEB.v17i2.5328>

ISSN 2204-9029 | Published by
UTS ePRESS | ajceb.epress.lib.uts.edu.au

VIEWPOINT

Critical Evaluation of Environmental, Social and Governance Disclosures of Malaysian Property and Construction Companies

Renard Yung Jhien Siew

Centre for Energy and Environmental Markets, The University of New South Wales

Corresponding author: Renard Yung Jhien Siew, Centre for Energy and Environmental Markets, The University of New South Wales, UNSW Kensington Campus, NSW 2052, Sydney, Australia. rensiew10@gmail.com

DOI: <http://dx.doi.org/10.5130/AJCEB.v17i2.5328>

Article History: Received 28/12/2016; Revised 07/04/2017; Accepted 29/04/2017; Published 22/06/2017

Abstract

There is an increasing demand from stakeholders for higher transparency on environmental, social and governance (ESG) disclosures. Yet not much is known about the state of sustainability reporting in Malaysia especially in the property and construction industry. This paper aims to fill this gap accordingly. Content analysis of corporate websites, sustainability and annual reports was adopted as the main methodology in this study. Findings show that corporate governance indicators are most reported by Malaysian construction companies compared to other environmental or social indicators. It was also found that details on actual health and safety performance of these companies and the initiatives implemented were largely absent from their reporting. Given the increasing number of rating tools in the capital markets which serve to rank and file companies based on their sustainability disclosures and performance such as the Dow Jones Sustainability Index (DJSI) and FTSE4Good Index, it is questionable as to how reliable this can be done for the Malaysian property and construction market. The paper will be useful to construction management practitioners and ESG analysts with a focus on Asian markets.

Keywords

Sustainability, disclosures, health and safety, property, construction, comparative evaluation, Malaysia.

DECLARATION OF CONFLICTING INTEREST The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article. **FUNDING** The author(s) received no financial support for the research, authorship, and/or publication of this article.

Introduction

Since the aftermath of the Earth Summit in 1992, Agenda 21 (see UNDESA, 1992) was formulated as a blueprint for sustainable development. The ability to meet basic human needs in one way or another relates back to the creation of human settlement. Given that the construction industry has a significant role to play in terms of the sustainable development of human settlement, there was a call for an internationally agreed agenda on this issue which has led to the published report “Agenda 21 on Sustainable Construction” supported by the International Council for Research and Innovation in Building and Construction (CIB) (du Plessis, 2002). This report generated a plethora of debate among researchers on the meaning of sustainable construction and different ways to embed this concept within the construction industry. Perhaps the most commonly cited definition of sustainable construction is by Kibert (2016, p. 6): “creating and operating a healthy built environment based on resources efficiency and ecological principles” although this has been challenged by other scholars arguing that sustainability should not just be limited to ecological principles but also the broader aspects of sustainability including economic and social issues. Pearce (2006) outlines an economist’s approach to sustainability arguing that an asset-based approach can be applied to provide real insights into the function of the construction sector and its broader role in social and economic development.

The Malaysian government has outlined an economic road map to transform the country into a developed nation. Since independence, the Malaysian economy has observed plans with five-year strategic thrusts in line with the goal to become a high-income nation by 2020. Specifically, this would require an average growth of 6.0% in GDP per annum during the Tenth Plan Period (Olanrewaju and Abdul-Aziz, 2015). The Malaysian construction sector has been playing a significant role in terms of its contribution to revenue generation, capital formation and employment creation which ultimately support the drive towards growth in gross domestic product (GDP) and the socio-economic development of the country. Yet, the construction industry has been known to be behind the curve due to its fragmented nature (KPMG, 2016; Siew, 2015a). Several studies have shown that the construction industry is slow in terms of adoption of new processes and technology (see Ahuja, Yang and Shankar, 2009; Becerik, 2004; Gu and London, 2010; Love and Irani, 2004).

Although the focus on green buildings has garnered some degree of attention in Malaysia especially with the introduction of the Green Building Index (GBI), overall standards of compliance among contractors towards basic safety and health is deemed to be disheartening (MESYM, 2013).

To address this, the Malaysian Construction Industry Development Board (CIDB) has taken steps to improve the awareness and knowledge of all developers by introducing the Construction Industry Master Plan (CIMP) outlining seven strategic thrusts in sustainability. Specifically, the thrust areas encompass environmental practices and new construction methods that will further enhance quality as well as safety and health practices. To gauge the success of the strategic thrusts, key performance indicators (KPIs) have been introduced (Ramli, Akasah and Mohd Masirin, 2013).

Abidin (2010) investigates the awareness and application of the sustainable construction concept by Malaysian developers. Findings from the study show that at present only large developers have taken heed towards sustainable implementation in their projects while a clear majority (small and medium sized enterprises) are still reluctant and uncertain concerning pursuit of sustainability in their projects. The study is largely based on perceptions and no

empirical study has been done to validate the truthfulness of the claims. This sets an impetus to explore further on how well publicly-listed Malaysian construction companies disclose their performance in terms of sustainability.

Background

There has been an increasing demand by stakeholders for higher transparency on environmental and social issues. To aid corporations in their disclosure effort, various reporting tools have emerged over the years (see Siew, 2015b) and can be divided into frameworks, standards as well as ratings and indices.

Frameworks are defined as a set of principles or guidelines provided to companies to assist them in their disclosure efforts. The Global Reporting Initiative (GRI) is perhaps one of the most prominent reporting frameworks available to corporations. According to the GRI guidelines, a typical report should consist of the following elements: vision and strategy; governance structure and management; GRI content index and performance criteria (economic, environmental, and social) (GRI, 2013). Such disclosures are usually based on 'materiality' which is defined by GRI as criteria that reflect the companies' significant economic, environmental and social impacts or that would substantively influence the assessments and decision of stakeholders.

Standards have similar function as frameworks but exist in the form of a more formal documentation that spell out the requirements and specifications that can be used to ensure sustainability efforts are consistently achieved. For example, standards on social criteria include OHSAS 18001, AS/NZS 4801 and SA8000 among others while standards that cover environmental criteria include ISO14001 and EMAS (see Siew, 2015b for details).

Ratings and indices are third party reporting of a company's sustainability performance. More commonly these are known as Environmental, Social and Governance (ESG) ratings among institutional investors. They measure how well a company has performed in terms of ESG; rank and file companies into an index based on their performance. Examples of these include FTSE4Good Index, DJSI Index, MSCI Index among others (Siew, Balatbat and Carmichael, 2016).

DEFINITIONS

Myriad definitions exist on what constitutes sustainability. One of the most commonly cited definitions comes from the Brundtland Report (WCED, 1987, p.40) which states that "Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs". In the case of sustainability disclosures, various terminology emerged over the years including:

- **Triple bottom line (TBL) reporting:** refers to an accounting framework which incorporates three dimensions namely social, environmental, and financial. Organizations adopt TBL reporting to evaluate their performance in a broader perspective to create greater business value (NBIS, 2008)
- **ESG reporting:** refers to disclosures on environmental, social and governance risks and how companies are managing them (FSC and ASCI, 2011)

Environmental criteria look at a company's energy use, waste, pollution, natural resource conservation among others. It also includes environmental risks such as disposal of hazardous

waste, management of toxic emissions and compliance to governmental regulations (Siew, 2015b). Social criteria cover areas such as working conditions, labour practices, health and safety, as well as engagement with the local communities. Governance criteria relate to how transparent a company's accounting methods are and cover areas such as: bribery and corruption; executive pay, board diversity and structure; donations. Collectively these issues are referred to ESG. The term ESG has been used widely especially by institutional investors as a tool for screening out investments with positive social and environmental outcomes (Blandin, 2015).

For this paper, the term ESG will be used to refer to sustainability disclosures.

CONSTRUCTION COMPANIES' ADOPTION OF SUSTAINABILITY

Siew, Balatbat and Carmichael (2013) examine the disclosure of non-financial data among Australian publicly-listed construction companies and find that while a majority have low levels of reporting, those that issued sustainability reports outperformed their other peers. Myers (2005) investigates the attitude of construction companies towards sustainability and finds that very few positively embrace this concept. This is largely attributed to the fragmented and diverse nature of the industry. Jones, Shan and Goodrum (2010) argue that construction companies' approaches in the three areas (economic, social, and environmental) are not evenly distributed based on a sample study of 300 US companies consisting of 150 owner companies, 75 contractor companies and 75 design firms. In a separate study, Zuo et al. (2012) investigate the sustainability policy practices in the construction industry. The findings show that sustainability policy development varies from case to case in construction companies, however, there is a trend of increasing levels of disclosure on energy efficiency, greenhouse gas reduction and integration of renewable energy resources into projects. In a comparative study of the contents of corporate social sustainability reports of UK companies, Idowu and Towler (2006) note that there are two distinct approaches adopted, that is companies either issue separate sustainability reports for their activities or devote a section in the annual report to provide information on such activities.

VALUE OF ADOPTING SUSTAINABILITY

The value of adopting sustainability has been widely debated in the literature. In general, three schools of thought exist (Siew, Balatbat and Carmichael, 2016):

- (i) The first school believes that the adoption of sustainability leads to underperformance. Poelloe (2010) found social responsibility to be negatively correlated with financial performance. Evans and Peiris (2010) also found that a company's involvement in more general social issues contributed negatively to both operating performance and stock return. Manescu (2011), based on US data from July 1992 till June 2008, suggests that the only positive effect found between one ESG criterion (community relations) on risk-adjusted stock returns could have most likely been attributed to mispricing rather than a compensation for risk, further arguing against the existence of any positive correlation between sustainability practices and market performance.
- (ii) The second school of thought argues that adopting sustainability positively impacts the bottom line of organisations. Evidence for this is derived from scholarly studies by Abramson and Chung (2000) who find that sustainable equities that are more stringently selected do lead to market out performance. Based on a meta-analysis of 52 different studies, Orlitzky, Schmidt and Rynes (2003) conclude that there is a positive association between corporate social practices and financial performance.

- (iii) The third school of thought argues that the adoption of sustainability has no effect on the performance of an organisation. For example Hoepner, Rezac and Siegl (2011) did not find any evidence that aggregating or disaggregating environmental ratings into pension funds has any effect on their performance. Kreander et al. (2005) find that returns from socially responsible investment have on average similar performance to regular funds.

There is a general perception that the Malaysian property and construction industries are slow adopters of sustainability (Kamar and Hamid, 2011) given various challenges such as the lack of local expertise on the subject matter of sustainability, misconceptions that sustainability is expensive, lack of leadership and recognition to push the sustainability agenda, among many others. There is clearly a lack of empirical studies in the literature which analyse the state of sustainability reporting of Malaysian property and construction companies. Accordingly, this paper aims to fill this gap.

Data and Methods

Holsti (1969) broadly defines content analysis as any technique for making inferences by objectively and systematically identifying specific characteristics of messages. Stemler (2001) claims that this method is useful for examining trends and patterns in documents as well as monitoring shifts in public opinions. This would serve to meet the purpose of the research which is to explore how well publicly-listed Malaysian construction companies disclose their performance in terms of sustainability.

Kulatanga, Amaratunga and Haigh (2007) posit there are four types of content analysis: (i) word count also known as textual analysis which involves counting the frequency of words in the text. The underlying assumption behind such an approach is that the words mentioned most often indicate important concerns; (ii) conceptual analysis also known as thematic analysis involves scrutinizing the text to check the existence of a certain concept/ theme; (iii) relational analysis involves examining the relationships between concepts; and (iv) referential analysis involves deciphering the meaning of languages considering background and foreground information. Conceptual content analysis is the primary method used in this study.

Content analysis has been used extensively in construction management research. Yu, Shen and Hunter (2006) investigated the critical success factors in construction project briefing by way of content analysis. This yielded five major categories including project related factors, human-related factors, process-related factors, input-related factors, and output-related factors. Chan, Scott and Chan (2004) use content analysis to identify critical success factors across seven major journals. They have identified five variables namely project-related factors, project procedures, project management actions, human-related factors, and the external environment, as crucial to project success.

Discussion

A total of 120 publicly-listed Malaysian companies (42 construction; 78 property) were selected as a sample for this study. Companies listed under the category 'construction' are those that are involved in heavy physical construction activities whereas those listed under 'property' are involved primarily in asset management activities. Out of these 120 companies, only 3.33% issued sustainability reports (all from the property category).

Based on the non-financial reporting guidelines published by the Financial Services Council (FSC) and Australian Council of Superannuation Investors (ACSI) (2011), nine core issues deemed to be most important to institutional investors such as climate change, environmental management, environmental efficiency, other environmental matters, health and safety, corporate conduct, stakeholder engagement, remuneration and risk management as well as board diversity is cross checked against disclosures done by companies. For further definition on these criteria kindly refer to FSC and ACSI (2011). A majority of the analysis was based on what was published on corporate websites and annual reports. The breakdown of the analysis in terms of issues reported is depicted in Table 1.

From Table 1, it is observed that publicly-listed Malaysian construction companies still have poor ESG disclosures. Less than 5% report on environmental issues that matter to institutional investors with only 0.83% reporting on the adoption of environmental management system such as ISO 14001. Reporting on workplace health and safety statistics was also poor with only 2.5% of companies discussing their initiatives in this area. This is alarming as health and safety is deemed to be a 'material' issue to the property and construction industry (GRI, 2013). According to the GRI (2013) material issues are those that reflect the organization's significant economic, environmental, and social impacts; or that substantively influence the assessments and decisions of stakeholders.

Corporate governance matters on the other hand was well-reported with all companies disclosing their corporate code of conduct and structure for remuneration and risk management. More than half (53.33%) of companies had women representation on their boards. By comparing the average Return on Equity (ROE), it was found that construction companies with board diversity outperformed the group with non-diverse board by a large margin of (8.43%). In contrast, the average ROE for property companies with non-diverse

Table 1 Analysis of issues reported by Malaysian publicly-listed companies (property and construction)

Issues covered	Percentage of companies reported (%)
Environmental	
Climate change	2.50
Environmental management systems	0.83
Environmental efficiency-waste, water, energy	3.33
Environment- other issues	2.50
Social	
Workplace health and safety	2.50
Governance	
Corporate conduct	100
Stakeholder engagement	70.8
Remuneration and risk management	100
Board diversity	53.33

Table 2 Comparison between the average ROE of property and construction companies (for diverse and non-diverse group)

Categories	Diverse board	Non- diverse board
Construction companies	17.23%	8.8%
Property companies	6.2%	6.38%

board were quite similar to property companies with a diverse board, a marginal difference of only (0.18%). These results are as depicted in Table 2.

Very few of the companies analysed (only 2) were found to have participated or engaged with mainstream sustainability reporting tools (SRTs) such as the Global Reporting Initiative (GRI) or the Carbon Disclosure Project (CDP). Those that were already engaged in CDP, chose not to disclose their carbon performance to the public.

Conclusion

A few implications are drawn from this study. Firstly, it is found that Malaysian property and construction companies have poor ESG disclosures. Results from the content analysis clearly depict that apart from governance issues, there is still a lack of transparency when it comes to environmental and social disclosures. As well, the adoption of mainstream SRTs such as GRI is severely lacking among publicly-listed Malaysian property and construction companies. This is a cause for concern as third party rating providers such as the Dow Jones Sustainability Index (DJSI) or FTSE4Good Index would rely on such disclosures to rate the sustainability performance of companies and eventually rank them accordingly. The lack of disclosures from these companies would make comparability of sustainability performance difficult. To address the state of poor ESG disclosures, the capital markets, and other regulators such as Bursa Malaysia could consider implementing a mandatory disclosures framework. At the very least, disclosures on 'material' issues for the industry should be made compulsory.

Second, a comparative analysis showed that the average ROE was higher for construction companies with diversified boards than non-diversified boards. This finding potentially suggests that there is value in having a more diversified board for companies that deal with higher risks (i.e. more dynamic heavy construction activities). Phillips (2014) explains that decades of organizational research has shown that socially diverse groups are more innovative than homogenous groups and are better at solving complex, non-routine problems. People with different backgrounds bring new information and forces the group members to prepare better and anticipate viewpoints. This implies that construction companies should strive to enhance the diversity of its board to ensure better and informative decision making. Even though traditionally, the property and construction sector has been perceived a largely male-dominated industry, companies may wish to consider developing a gender policy which guarantees representation from women on their board. This would help ensure that there is always serious effort in proactively sourcing, as well as assessing, qualified candidates that would provide different and valuable viewpoints.

There are a few limitations in this study. For example, a longitudinal analysis was not carried out because it was found that a majority of publicly-listed Malaysian property and construction companies did not have consistency in the production of sustainability reports. A majority only addressed such issues superficially on websites or annual reports. Those that

did produce sustainability reports did not do so consistently, meaning there are scenarios where companies will produce a report in 2013 but choose not to do so three years later. For the analysis, we have included the most recent publication from these companies. When the state of reporting improves, future research could consider conducting a longitudinal analysis. Also, this study has only used sustainability reporting guidelines suggested by ASC and FSCI (2011), however, there are numerous frameworks that have proposed criteria that are equally important to investors. Perhaps, there needs to be more rigorous research regarding other sustainability reporting guidelines and how well Malaysian property and construction companies are reporting against them. The scope of the research is limited to a Malaysian context, however future research could also explore how other property and construction companies in other countries are doing on the reporting end.

References

- Abidin, N.Z., 2010. Investigating the Awareness and Application of Sustainable Construction Concept by Malaysian Developers. *Habitat International*, 34(4), pp. 421-26. <https://doi.org/10.1016/j.habitatint.2009.11.011>
- Abramson, L. and Chung, D., 2000. Socially Responsible Investing: Viable for Value Investors? *Journal of Investing*, 9(3), pp. 1-19. <https://doi.org/10.3905/joi.2000.319381>
- Ahuja, V., Yang, J. and Shankar, R., 2009. Study of ICT Adoption for Building Project Management in the Indian Construction Industry. *Automation in Construction*, 18(4), pp. 415-23. <https://doi.org/10.1016/j.autcon.2008.10.009>
- Becerik, B., 2004. A Review on Past, Present and Future of Web Based Project Management & Collaboration Tools and Their Adoption by the US AEC Industry. *International Journal of IT in Architecture, Engineering and Construction*, 2(3), pp. 233-48.
- Blandin, M., 2015. What does a Sustainable Pension Fund Look Like? *The Prince's Responsible Business Network*, [blog] Available at: <http://www.bitc.org.uk/blog/post/what-does-sustainable-pension-fund-look> [Accessed 5 April 2017].
- Chan, A.P.C., Scott, D. and Chan, A.P.L., 2004. Factors Affecting the Success of a Construction Project. *Journal of Construction Engineering and Management*, 130(1), pp. 153-55. [https://doi.org/10.1061/\(ASCE\)0733-9364\(2004\)130:1\(153\)](https://doi.org/10.1061/(ASCE)0733-9364(2004)130:1(153))
- du Plessis, C., 2002. *Agenda 21 for Sustainable Construction in Developing Countries*. [pdf] Pretoria, SA: Capture Press. Available at: <http://www.unep.or.jp/ietc/Focus/Agenda%2021%20BOOK.pdf> [Accessed 5 October 2016].
- Evans, J.R. and Peiris, D., 2010. *The relationship between environmental social governance factors and stock returns*. UNSW Australian School of Business Research Paper No.2010ACTL02. Available at: SSRN: <https://ssrn.com/abstract=1586146> or <http://dx.doi.org/10.2139/ssrn.1586146>
- Financial Services Council (FSC) and Australian Council of Super Investors (ACSI), 2011. *ESG reporting guide for Australian companies*. [pdf] Available at: http://ifsa.com.au/downloads/file/policyresearch/FSC0024ReportGuide_InterFA1Rlores.pdf [Accessed 17 July 2012].
- Global Reporting Initiative (GRI), 2013. *G4-Online Glossary*. [online] Available at: <https://g4.globalreporting.org/introduction/glossary/Pages/default.aspx#Material-Aspects> [Accessed 28 December 2016].

- Gu, N. and London, K., 2010. Understanding and Facilitating BIM Adoption in the AEC Industry. *Automation in Construction*, 19(8), pp. 988-99. <https://doi.org/10.1016/j.autcon.2010.09.002>
- Hoepner, A.G.F., Rezac, M. and Siegl, K.S., 2011. *Does Pension Funds Fiduciary Duty Prohibit the Integration of Environmental Responsibility Criteria in Investment Processes? A Realistic Prudent Investment Test*. [online September 19, 2011]. Available at SSRN: <https://ssrn.com/abstract=1930189> or <http://dx.doi.org/10.2139/ssrn.1930189> [Accessed 19 November 2016].
- Holsti, O.R., 1969. *Content Analysis for the Social Sciences and Humanities*. Reading, MA: Addison Wesley.
- Idowu, S.O. and Towler, B.A., 2006. A Comparative Study of the Contents of Corporate Social Responsibility Reports of UK Companies. *Management of Environmental Quality: An International Journal*, 15(4), pp. 420-37. <https://doi.org/10.1108/14777830410540153>
- Jones, T., Shan, Y. and Goodrum, P.M., 2010. An Investigation of Corporate Approaches to Sustainability in the US Engineering and Construction Industry. *Construction Management & Economics*, 29(9), pp. 971-83. <https://doi.org/10.1080/01446191003789465>
- Kamar, K.A.M. and Hamid, Z.A., 2011. Sustainable Construction and Green Building: The Case of Malaysia. *WIT Transactions on Ecology and the Environment*, 167, pp. 15-22. Available at: <http://www.witpress.com/Secure/elibrary/papers/ST11/ST11002FU1.pdf> [Accessed 28 December 2016].
- Kibert, C.J., 2016. *Sustainable Construction Green Building Design and Delivery*. 4th ed. New Jersey: John Wiley & Sons.
- KPMG, 2016. *Building a Technology Advantage, Global Construction Survey 2016*. [online] Available at: <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2016/09/global-construction-survey-2016.pdf> [Accessed 15 October 2016].
- Kreander, N., Gray, R.H., Power, D.M. and Sinclair, C.D., 2005. Evaluating the Performance of Ethical and Non-Ethical Funds: A Matched Pair Analysis. *Journal of Business Finance and Accounting*, 32(7), pp. 1465-93. <https://doi.org/10.1111/j.0306-686X.2005.00636.x>
- Kulatunga, U., Amaratunga, D. and Haigh, R., 2007. *Structuring the Unstructured Data: The Use of Content Analysis*. [pdf] Available at: http://usir.salford.ac.uk/9857/1/158_Kulatunga_U_et_al_STRUCTUREING_THE_UNSTRUCTURED_DATA_THE_USE_OF_CONTENT_ANALYSIS_IPRC_2007.pdf [Accessed 28 December 2016].
- Love, P.E.D. and Irani, Z., 2004. An Exploratory Study of Information Technology Evaluation and Benefits Management Practices of SMEs in the Construction Industry. *Information and Management*, 42(1), pp. 227-42. <https://doi.org/10.1016/j.im.2003.12.011>
- Manescu, C., 2011. *Economic implications of corporate social responsibility and responsible investments*. Masters Thesis. University of Gothenburg.
- MESYM, 2013. *Malaysia's Current State of Building and Construction Practices Towards Green Building Industry*. [online] Available at: <https://www.mesym.com/en/posts/malaysias-current-state-of-building-and-construction-industry-practices-towards-green-building-industry/> [Accessed 5 April 2017].
- Myers, D., 2005. A Review of Construction Companies' Attitudes to Sustainability. *Construction Management & Economics*, 23(8), pp. 781-85. <https://doi.org/10.1080/01446190500184360>
- NBIS, 2008. *Triple Bottom Line Reporting*. [pdf] Available at: http://nbis.org/nbisresources/reporting_csr/triple_bottom_line_reporting_%20l_musikanski.pdf [Accessed 28 December 2016].

- Olanrewaju, A.L. and Abdul-Aziz, A.R. eds., 2015. An Overview of the Construction Industry. In: *Building Maintenance Processes and Practices. The Case of a Fast Developing Country*. [e-book] Ch.2. pp. 9-32. Available through: Springer website <https://link.springer.com/book/10.1007%2F978-981-287-263-0>
- Orlitzky, M., Schmidt, F.L. and Rynes, S.L., 2003. Corporate Social and Financial Performance: A Meta-Analysis. *Organization Studies*, 24(3), pp. 403-41. <https://doi.org/10.1177/0170840603024003910>
- Pearce, D., 2006. Is the Construction Sector Sustainable? Definitions and Reflections. *Building Research and Information*, 34(3), pp. 201-07. <https://doi.org/10.1080/09613210600589910>
- Phillips, K.W., 2014. How Diversity Works. *Scientific American*, 311, pp. 42-47. <https://doi.org/10.1038/scientificamerican1014-42> and <https://doi.org/10.1038/scientificamericanmind0714-42>
- Poeloe, A., 2010. *Is there a trade-off between social responsibility and financial performance*. Masters Thesis. Erasmus University Rotterdam.
- Ramli, A., Akasah, Z.A. and Mohd Masirin, M.I., 2013. Safety and Health Factors Influencing Performance of Malaysian Low-Cost Housing: Structural Equation Modeling (SEM) Approach. In: *Procedia Social and Behavioural Sciences, International Conference on Innovation, Management and Technology Research*. Malaysia, 22-23 September 2013. [pdf] http://eprints.uthm.edu.my/4406/1/Safety_and_Health_Factors_Influencing_Performance.pdf [Accessed 5 October 2016].
- Responsible Investment Association in Australasia (RIAA), 2010. *Benchmark report*. [online] Available at: www.responsibleinvestment.org/files/7168C4KALC/RIAA-BenchmarkReport-2010.pdf [Accessed 1 September 2011].
- Siew, R.Y.J., 2015a. Briefing: Integrated Reporting - Challenges in the Construction Industry. In: *Proceedings of the Institution of Civil Engineers-Engineering Sustainability*, 168(1), pp. 3-6. <https://doi.org/10.1680/ensu.14.00039>
- Siew, R.Y.J., 2015b. A Review of Corporate Sustainability Reporting Tools (SRTs). *Journal of Environmental Management*, 164, pp. 180-95. <https://doi.org/10.1016/j.jenvman.2015.09.010>
- Siew, R.Y.J., Balatbat, M.C.A. and Carmichael, D.G., 2016. The Impact of ESG Disclosures and Institutional Ownership on Market Information Asymmetry. *Asia Pacific Journal of Accounting & Economics*, 23(4), pp. 432-48. <https://doi.org/10.1080/16081625.2016.1170100>
- Siew, R.Y.J., Balatbat, M.C.A. and Carmichael, D.G., 2013. The Relationship between Sustainability Practices and Financial Performance of Construction Companies. *Smart and Sustainable Built Environment*, 2(1), pp. 6-27. <https://doi.org/10.1108/20466091311325827>
- Stemler, S., 2001. An Overview of Content Analysis. *Practical Assessment, Research and Evaluation*, 7(17). [online] Available at: https://www.researchgate.net/profile/Steven_Stemler/publication/269037805_An_overview_of_content_analysis/links/547e0aba0cf2de80e7cc402a.pdf [Accessed 15 October 2016].
- UNDESA, 1992. United Nations Sustainable Development: Agenda 21. *United Nations Conference on Environment & Development*, Rio de Janeiro, 3-14 June 1992. Available at: <https://sustainabledevelopment.un.org/content/documents/Agenda21.pdf> [Accessed 15 October 2016].
- World Commission on Environment and Development (WCED), 1987. Our Common Future. Available at: <https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf> [Accessed 2 June 2017].

Yu, A.T.W., Shen, Q. and Hunter, K., 2006. Investigation of Critical Success Factors in Construction Project Briefing by Way of Content Analysis. *Journal of Construction Engineering and Management*, 32(11), pp. 1178-86. [https://doi.org/10.1061/\(ASCE\)0733-9364\(2006\)132:11\(1178\)](https://doi.org/10.1061/(ASCE)0733-9364(2006)132:11(1178))

Zuo, J., Zilante, G., Wilson, L., Davidson, K. and Pullen, S., 2012. Sustainability Policy of Construction Contractors: A Review. *Renewable and Sustainable Energy Reviews*, 16(6), pp. 3910-16. <https://doi.org/10.1016/j.rser.2012.03.011>