DECLARATION

I declare that thesis work described in this research paper is my own work (unless otherwise acknowledged in the text) and that there is no previous work which has been previously submitted for any academic Master’s program. All sources quoted have been acknowledged by reference.

Signature : _____________________

Name : Suheil bin Che Sobry

Date :
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ABSTRACT

Green supply chain management (GSCM) has recently emerged to comply with regulations for environmental protection as a result of increasing environmental concerns over the past decades. Since manufacturing companies have often been charged for the environmental liabilities of their suppliers, there has been urgency for integration of environmental initiatives, not only within the walls of the company, but across the entire supply chain in order to ensure the company’s sustainable performance. Consequently, Green Supply Chain Integration (GSCI) was introduced to integrate the environmental management practices within manufacturing companies, with the suppliers and the customers. However, there is lack of discoveries in terms of GSCI conceptualization. Therefore, this study was conducted to identify the relationship between Green Supply Chain Integration and sustainable performance. Specifically, the objective of this study is to examine the relationship between supplier integration, customer integration, internal integration, logistic integration, technology integration, and dimensions of sustainable performance namely economic, environmental, and social. A survey was conducted on ISO14001 Environmental Management System (EMS) certified manufacturing firms in Malaysia. A total of 107 questionnaires was completed by the respondents and considered to be appropriate for data analysis. The data was analyzed using Pearson’s correlation analysis and multiple regression analysis. It was found that each variable in the GSCI is positively correlated with sustainable performance. Further investigation using multiple regression has shown that internal integration and technology integration to be the strongest predictors of sustainable performance. Apart from contribution to theoretical knowledge, the results would also be valuable in providing new insights to management in their environmental goals and sustaining successful performance within the pressures of stakeholders, customers, and environmental regulations.

Keywords: Green supply chain management, green supply chain integration, ISO 14001 Environmental Management System, supplier integration, customer integration, internal integration, logistic integration, technology integration, sustainable performance.
ABSTRAK


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<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>µ</td>
<td>Error term</td>
</tr>
<tr>
<td>B</td>
<td>Unstandardized beta coefficient</td>
</tr>
<tr>
<td>CI</td>
<td>Customer Integration</td>
</tr>
<tr>
<td>CO2</td>
<td>Carbon Dioxide</td>
</tr>
<tr>
<td>e.g.</td>
<td>that is</td>
</tr>
<tr>
<td>Eco</td>
<td>Economic</td>
</tr>
<tr>
<td>EMS</td>
<td>Environmental Management System</td>
</tr>
<tr>
<td>EnSP</td>
<td>Environmental Sustainable Performance</td>
</tr>
<tr>
<td>Env</td>
<td>Environmental</td>
</tr>
<tr>
<td>ESP</td>
<td>Economic Sustainable Performance</td>
</tr>
<tr>
<td>FMM</td>
<td>Federation of Malaysian Manufacturers</td>
</tr>
<tr>
<td>GEMI</td>
<td>Global Environmental Management Initiative</td>
</tr>
<tr>
<td>GLC</td>
<td>Government-Linked Company</td>
</tr>
<tr>
<td>GSCI</td>
<td>Green Supply Chain Integration</td>
</tr>
<tr>
<td>GSCM</td>
<td>Green Supply Chain Management</td>
</tr>
<tr>
<td>i</td>
<td>respondent 1 2 ...... 107</td>
</tr>
<tr>
<td>IEA</td>
<td>International Energy Annual Report</td>
</tr>
<tr>
<td>II</td>
<td>Internal Integration</td>
</tr>
<tr>
<td>ISO</td>
<td>International Organization for Standardization</td>
</tr>
<tr>
<td>JV</td>
<td>Joint Venture</td>
</tr>
<tr>
<td>KeTTHA</td>
<td>Ministry of Energy, Green Technology, and Water</td>
</tr>
<tr>
<td>KMO</td>
<td>Kaiser-Meyer-Olkin Measure of Sampling Adequacy</td>
</tr>
<tr>
<td>LI</td>
<td>Logistic Integration</td>
</tr>
<tr>
<td>MNC</td>
<td>Multinational Company</td>
</tr>
<tr>
<td>MS</td>
<td>Malaysian Standard</td>
</tr>
</tbody>
</table>
N = Population
OECD = Organisation for Economic Co-operation and Development
OHSAS = Occupational Health and Safety Advisory Services
PCA = Principal Component Analysis
SCM = Supply Chain Management
SI = Supplier Integration
SIRIM = Standards and Industrial Research Institute of Malaysia
SP = Sustainable Performance
SPSS = Statistical Package for Social Science
SSP = Social Sustainable Performance
TI = Technology Integration
α = Intercepts (constant value)
1. Research Background

Supply chain management (SCM) has received increasing attention from industrialists in light of strategic planning in design, maintenance, and operation of supply chain process. Despite the improvements that have been achieved successfully with the help of SCM, some organizations overlooked the environmental issues including global energy, global warming, reverse logistic, and ecological concerns in global competition. With the increasing environmental concerns over the past decades, green supply chain management (GSCM) has recently emerged to comply with regulations for environmental protection (Cheng and Sheu, 2012; Abdullah, Hassan, and Johari, 2014). In order to fulfill environmental obligations, organizations recognize that they cannot work in isolation. Since companies have often been charged for the environmental liabilities of their suppliers (Rao, 2008), there has been an urgency to integrate environmental initiatives, not only within the walls of the company, but across the entire supply chain in order to ensure the company’s sustainable performance (Cote, Lopez, Marche, Perron, and Wright, 2008).

Business sustainable performance happens when a company or firm creates ongoing value for its stakeholders and shareholders while keeping up with environmental requirement (Brent’ and Labuschagne’, 2004). Sustainability is a brilliant way of
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REFERENCES


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