



## **An Exploration of Sustainable Supply Chain Perspective: Comparative Analysis**

Salinee Santiteerakul, Aicha Seklouli-Sekhri, Yacine Ouzrout, Abdelaziz  
Bouras

### **► To cite this version:**

Salinee Santiteerakul, Aicha Seklouli-Sekhri, Yacine Ouzrout, Abdelaziz Bouras. An Exploration of Sustainable Supply Chain Perspective: Comparative Analysis. International Conference on Logistics and Transportation (ICLT), Dec 2010, Christchurch, New Zealand. hal-04169949

**HAL Id: hal-04169949**

**<https://hal.science/hal-04169949>**

Submitted on 24 Jul 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/259717277>

# An Exploration of Sustainable Supply Chain Perspective: Comparative Analysis

Conference Paper · December 2010

CITATIONS

3

READS

184

4 authors:



**Salinee Santiteerakul**  
Chiang Mai University

24 PUBLICATIONS 303 CITATIONS

[SEE PROFILE](#)



**Aicha Sekhari**  
University Lyon2

96 PUBLICATIONS 605 CITATIONS

[SEE PROFILE](#)



**Yacine Ouzrout**  
Université Lumière Lyon 2

228 PUBLICATIONS 1,346 CITATIONS

[SEE PROFILE](#)



**Abdelaziz Bouras**  
Qatar University

346 PUBLICATIONS 3,748 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Modeling/simulation of hospital supply chain: [View project](#)



SME 4.0: Industry 4.0 for SMEs - Smart Manufacturing and Logistics for SMEs in an X-to-order and Mass Customization Environment (H2020-MSCA-RISE-2016) [View project](#)

# **An Exploration of Sustainable Supply Chain Perspective: Comparative Analysis.**

**<sup>1</sup>Salinee Santiteerakul, <sup>2</sup>Aïcha Sekhari, Yacine, <sup>1</sup>Apichat Sopadang <sup>2</sup>Ouzrout and <sup>2</sup>Abdelaziz Bouras**

<sup>1</sup>Department of Industrial Engineering, Chiang Mai University  
Chiang Mai University – 239 Huay Keaw Road Suthep, Chiang Mai Thailand 50200  
Tel: +66 5394 4125 – Fax: +66 5394 4185  
s.santiteerakul@gmail.com

<sup>2</sup>University Lumière Lyon 2 – LIESP  
IUT Lumière – 160 Bd de l'Université – 69676 BRON Cedex France  
Tel: +33.478.774.408 – Fax: +33.478.006.328  
{aicha.sekhari}{syed-hossain.akhter} @univ-lyon2.fr

In the last two decades, sustainable supply chain management (sSCM) has received growing consideration and becomes an increasingly popular in both academic and corporate point of view. This can be seen by the number of papers published and in particular by journal special issues and also a vast number of laws, standards and regulations which force corporate to implement sSCM. As such, sustainability development recognizes the interdependence of economic, environmental and social issues. Several approaches were proposed for the framework and implementation of sSCM but in this research field still in embryonic state. The implementing of sSCM activities are still focused on environmental issues. Social and ethical issues were seen as less tangible and more difficult to address. As the separation of three pillars of sustainability, connections between each other were distracted. This paper provides a background to understand current trends in this multidisciplinary field and offers a comparative analysis - both of academic research and corporate practicable point of view - comprising three parts: (1) conceptual framework (2) implementation and (3) sSCM performance measurement. Using the current literature and the result of an empirical study, the results of comparative study enhance the important role of considering the integration among core 3 dimensions (economic, environment and social) and others support issues related on sSCM are necessary to achieve the sSCM performance.

*Keywords: sustainable supply chain management, conceptual model, implementation method, performance measurement, indicators*

## **1. Introduction**

In this 21st century, as the rapid innovation and industrial age of civilization evolved with the enormous growth of markets through globalization, the relationships with suppliers and customers are becoming more important and growing expectations. According to this and demands of efficiency supply chain management (SCM) has grown to play an important role in companies management since the 1990's (Wallerius, et al., 2010; Gunasekaran et al., 2001; Webster, 2002). Supply chains comprise all activities associated with the flow and transformation of goods from the raw material stage through to the end user (Handfield and Nichols, 1999). The results from adopting SCM are impressive and show great improvements of efficiency and cost saving at numerous companies (Wallerius, et al., 2010). As the traditional supply chain management concept focusing on economic issue, but the only economic dimension is not sufficient condition for the overall sustainability of a corporation. A single-minded focus on economic sustainability can succeed in the short run. But in the long run sustainability also requires environment and social view (Elkington et al., 1998).

Seuring and al. point out that the triggers for sustainable supply chain management are external pressure and incentives from government, customer and stakeholders (Seuring, et al., 2008). The focal company is pressured by legal demands/regulation, responses to the stakeholders, the competitive advantage, the customer demands, the reputation loss, and the environmental and social pressure groups. The legal demands are the most frequently mentioned, closely followed by customer demands and response to stakeholders. When the focal company is pressured, it usually passes this pressure on to supplier. Here, one distinctive feature of sustainable supply chain management emerges.

While sustainable supply chain management can be considered a hot topic in both of academic research and corporate practicable side but the limited implementation and

integration between sustainable and supply chain management can be observed (Carter, et al., 2008; Seuring, et al., 2008; Teuteberg, et al., 2010). One possible reason for this is that sustainability is an immaterial value which eludes a precise mathematical definition or economic monitoring. Therefore, central research questions are: how can sustainability be measured? How companies might use supply chain integrated with sustainability concept to reach a sustainable performance? Is there a relationship between the integration of the concepts of sustainability and SCM, and long-term economic success?

To develop the framework of future research for sSCM perspective, this paper provides a background to understand current trends in this multidisciplinary field and offers a comparative analysis - both of academic research and corporate practicable point of view - comprising three parts: (1) conceptual framework (2) implementation and (3) indicators for sSCM performance measurement.

## **2. Research Methodology**

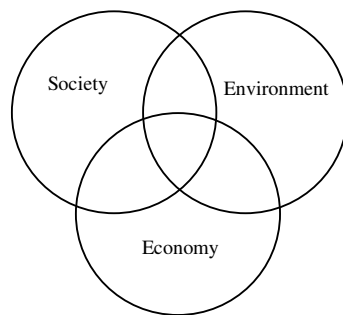
Fink provides point of view in literature review methodology (Fink, 1998), literature reviews can be comprehended as content analysis, where quantitative and qualitative aspects are mixed to assess structural as well as content criteria. This paper consists of 3 parts of comparative analysis i.e. conceptual framework, corporate implementation and performance measurement. The conceptual framework analysis stage has compared the principle based outlook in the context of sustainable development and sustainability supply chain. The corporate implementation stage has compared the company common use standards and guidelines which related to sustainability and supply chain context. The performance measurement stage has compared the indicator category in the standards and guidelines which related to sSCM context. So we conduct our process in five steps (Teuteberg, et al., 2010).

- *Define of Review Scope:* The articles were differentiated into three categories in relation to sSCM as conceptual frame work, corporation implementation related in sSCM and sSCM performance measurement.
- *Conceptualization of Research Topic:* The concept of Sustainable Supply Chain Management (sSCM) has been explained in section 1
- *Literature Search and Selection:* The search for related publications was mainly conducted as a structured keyword search. Major databases were used to search for related articles, such as those provided by major publishers, Elsevier, Emerald or library service. The following key words were used in order to achieve comprehensive search results: Sustainable Supply Chain Management, Sustainable Management, Sustainability Implementation, and Sustainability Performance Measurement. The inclusion of many synonyms and/or semantically very similar expressions led to more exhaustive search results. Moreover, to achieve the implementation of sustainability concept, a selection of standards and guidelines for sSCM were analyzed.
- *Literature Analysis and Synthesis:* During this phase the main focuses, problem fields, conceptual frameworks, practical implementation and sustainability indicators in sSCM were analyzed in term of three components of sustainable development (economic, environment and society) both of separately and intersection between each components and also the integration with SCM concept. The content of papers was further assessed by means of a descriptive analysis: (1) which dimensions of sustainability are addressed? (2) what is the sSCM frameworks or models which suitable for the industrial sectors (3) how can the corporations manage the sustainability in their supply chain. And (4) what is the indicators to evaluate sustainability performance in supply chain.

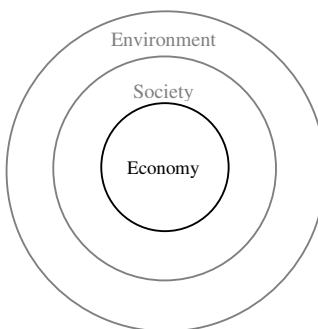
- *Research Agenda:* The results were interpreted and research trends were derived from them. Also, consequences for future research as well as element of a research agenda were outlined.

### 3. Sustainability Conceptual Framework

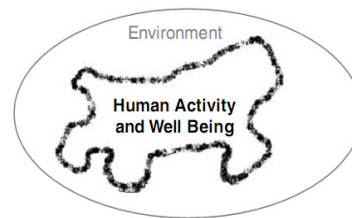
As sustainable development is like ‘motherhood and apple pie’, in that it sounds so good everyone can agree with it whatever their own interpretation (Pearce et al., 1989), this can be seen as strength. Others argue that the blandness of meaning makes the concept almost meaningless and it lacks any clear rigor of analysis or theoretical framework. (Gidding, et al., 2002).



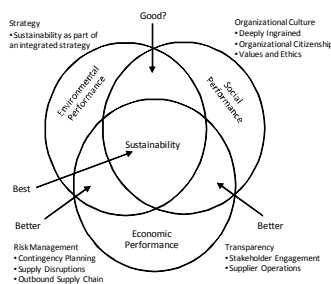
(a) Triple bottom line (TBL)



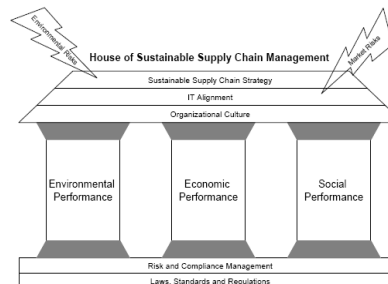
(b) Nested model



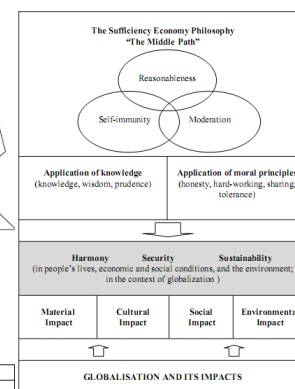
(c) breaking down boundaries



(d) TBL+4 facets



(e) House of sSCM



(f) Sufficiency economy

In this research we analyze the perspective of sustainability development and sSCM frameworks to determine the extent of the implementation in organization. The sustainable

conceptual frameworks are shown in Figure 1. The first three frameworks (Figure 1(a) to (c)) are related on three components (economic, environment, and social) with different relation perspectives among the components. The others three frameworks, include another support contribution for sSCM.

Table 1 summary the overview of 6 conceptual frameworks divided into 2 groups. In the first group present the relationship between 3 core dimensions in the different perspective. This first group reflects the effect and relation among economic, environment and social dimension. In the second group adds the others support issues which relate and enhance the sustainability of supply chain. Table 2 shows the conceptual framework analysis by comparing the dimensions of each framework and provides the point of view in term of sSCM context.

**Tab 1: Overview of sustainable conceptual frameworks**

	Conceptual framework	Overview
<b>Group 1: Related only 3 core dimensions (economic, environment and social)</b>		
1.1	Triple Bottom Line TBL (Elkington, 1998)	The TBL consist of three components: the natural environment, society, and economic performance. At the intersection of all three components, there are activities that organizations can engage in which not only positively affect the natural environment and society, but which also result in long-term economic benefits and competitive for the firm.
1.2	Nested Model (Gidding, et al., 2002)	This model presents The relationship between society, economy and environment. The nested model was formed based on the idea that all human activities occur in the environment. The economy or market activity is part of the society, and without it the economy cannot emerge. Placing the economy in the centre does not mean that it should be seen as the hub around which the other sectors and activities revolve. Rather it is a subset of the others and is dependent upon them. Human society depends on environment although in contrast the environment would continue without society (Lovelock, 1988). The 'Nested' model rather than the TBL model encourages a conceptual outlook sympathetic to integration.
1.3	Breaking Boundaries (Gidding, et al., 2002)	This model based on the idea that all activities occurring in the society and in the economy can actually be counted toward human activity and which contribute to people's well-being. Hence, the boundary between the society and the economy has been eliminated. These human activities have impacts on the environment.. Of course, human well-being significantly depends on these interactions. This close relationship between the environment and humans is represented by the fuzzy boundary between the two. To achieve sustainable development, we cannot separate the environment from human activities. What humans have taken from the environment and have done to the environment will reflect on human well-being.
<b>Group 2: Related to 3 core dimensions (economic, environment and social) and others issues of sSCM</b>		



	Conceptual framework	Overview
2.1	TBL+4 facets (Carter, et al., 2008)	Carter et al. (2008) defined the sSCM which based on the TBL and the four supporting facets of sustainability – risk management, transparency, strategy, and cultured. Interrelationship among the four supporting facets is not intended to be entirely mutually exclusive. They advocate that all four of these supporting facets are an integrated part of sSCM practices.
2.2	House of sSCM (Teuteberg, et al., 2010)	The three dimensions of sustainability are visualized here as pillars which are necessary to maintain balance. Risk and compliance management forms the building's foundation. In order to achieve long-term profits, all the potential risks must be identified and mitigated. Laws, guidelines and standards serve as a starting point for the implementation of sustainability principles and practices along the supply chain. In addition, sSCM requires the establishment of values and ethics throughout the organization, an efficient, and flexible and “green” IT environment as well as the alignment of corporate strategy to sustainable development. If these measures are taken, they effectively protect the network against environmental and social threats and risks. Most of these compliances bring supply chain to sustainability.
2.3	Sufficiency economy (Mongsawad, 2009)	The three rings represent the three principles, which are moderation, reasonableness and self-immunity. The knowledge and morality content are two necessary conditions to achieve the three main principles. The knowledge condition requires thorough study of all available information and experience in order to make prudent decisions. The morality condition stresses integrity, trustworthiness, honesty and the hard-work of individuals. By practicing Sufficiency Economy, people would live in harmony and with security in a sustainable society and environment; and they would be able to tolerate and cope with all kinds of malign impacts of globalization.

**Tab 2: Conceptual framework analysis**

	Conceptual framework	Consideration dimension					Point of view
		Economy	Environment	Society	Integration	SCM related	
Group 1: Related only 3 core dimensions (economic, environment and social)							
1.1	TBL	✓	✓	✓	✗	✗	This framework shows only the dimensions we should concern for sustainability issue. It's a macro view and the organization cannot implement sustainability concept easily.
1.2	Nested Model	✓	✓	✓	✗	✗	This framework points out the relation between all three components that the economic, environment and society have an interrelation among sectors. But it still has limitation. An improvement would be to remove the separation of the economy from other human activities.
1.3	Breaking Boundaries	✓	✓	✓	✓	✗	This framework provided a perspective of sustainable development base on an integrated view. Instead of having a priority on the economy the focus should be on human provisioning and satisfying needs.

	Conceptual framework	Economy	Environment	Society	Integration	SCM related	Point of view
Group 2: Related to 3 core dimensions (economic, environment and social) and others issues of sSCM							
2.1	TBL+4 facets	✓	✓	✓	✗	✓	This framework integrates the concept of sustainability and supply chain management and point out the supporting facets for TBL concept. This framework is a starting point for a common understanding of sSCM.
2.2	House of sSCM	✓	✓	✓	✗	✓	This framework illustrates the problem area and the scope of sSCM. To achieve the sustainability, supply chain should consider the others perspective in sSCM area. Moreover, the balancing of three dimensions is necessary for performing the sustainable supply chain strategy. However, all the three dimensions are considered separately.
2.3	Sufficiency economy	✓	✓	✓	✓	✗	The aspect of this framework is improving human well-being as an integration of economic, environment and social dimensions as a goal. Moreover, this framework provides the human development in two aspects. One is the sufficiency economy process (the three principles) and the other is the mental and spiritual development.

According to the comparative of frameworks as shown in Table 2, the first group points out the relation the economic, environment and social dimensions have an interrelation among sectors. Moreover, we cannot separate the impacts of human actions into distinct compartment. Thus, sustainable development will be an integrated of the core 3 dimensions with a relation among components. As the second group, sustainability in the supply chain management perspective does not focus only the 3 core dimensions but also others support components i.e. risk management, the sustainability pressure in term of laws and regulations, the supporting network collaboration and the more focus on the morality condition e.g. transparency, integrity, trustworthiness, honesty.

#### 4. sSCM implementation

After the Brundtland Commission, companies are beginning to rapidly adopt the term sustainability. About 68 percent of the Global 250 firms generated a separate annual

sustainability report in 2004 which considered environmental, social, and economic issues, in contrast to the primary emphasis on environmental reporting in 1999. Moreover, 80 percent of these reports discuss supply chain-related issues [KPMG, 2005; Carter and Rogers, 2008].

The supply chain networks decide to implement sSCM because of it can help for a long-term increase in customer satisfaction and customer royalty and the reduction of production costs (Teunter, 2001, Kroon et al, 1995). In addition, a vast number of articles draw out the fact that laws, standards and regulations force companies to implement sSCM (Teuteberg, et al., 2010). Thus, companies use the regulations and standards as a guide line to manage sustainability in their supply chain. Table3 shows a selection of standards and guidelines for sSCM and other related dimensions as in the conceptual frameworks.

**Tab 3: Standard and guidelines related to sSCM implementation**

Standards/Guidelines		Dimensions						Point of view
		Economic	Environment	Social	Integration	SCM	Risk management	
Standards	ISO 9001	✓	✗	✗	✗	✗	✗	<ul style="list-style-type: none"> <li>ISO 9000 is the structural framework of a business system that specifies, in very broad terms, the necessary components of a quality management system.</li> </ul>
	ISO 14001	✓	✓	✗	✗	✗	✗	<ul style="list-style-type: none"> <li>ISO 14001 is the guideline for environmental management systems with its main aim to assist companies in continually improving their environmental performance.</li> <li>Focusing only an environmental view.</li> </ul>
	ISO 28000	✓	✗	✗	✗	✓	✓	<ul style="list-style-type: none"> <li>ISO 28000 is the specification for security management systems for the supply chain.</li> <li>The PDCA management systems structure was adopted in this standard.</li> <li>Integrate the paradigm of risk, security and supply chain management.</li> </ul>
	ISO 31000	✓	✗	✗	✗	✗	✓	<ul style="list-style-type: none"> <li>ISO 31000 is the risk management: principles and guidelines.</li> <li>It suggests risk management frameworks, processes and activities that should be followed to help organizations better meet their goals and objectives.</li> <li>It is non-certifiable but does provide guidance on best practices.</li> </ul>
	ISO26000	✓	✓	✓	✓	✗	✗	<ul style="list-style-type: none"> <li>ISO 26000 is the guidance on social responsibility.</li> </ul>

Standards/Guidelines		Dimensions						Point of view
		Economic	Environment	Social	Integration	SCM	Risk management	
								<ul style="list-style-type: none"> <li>This standard offers guidance on socially responsible behavior and possible actions; it does not contain requirements and is not certifiable.</li> </ul>
Guidelines	SCOR9.0	✓	✓	✗	✓	✓	✓	<ul style="list-style-type: none"> <li>SCOR is a supply chain process reference model containing over 200 process elements, 550 metrics, and 500 best practices which including risk and environmental management in the last version.</li> <li>It can be regarded as a closely related concept for sSCM. However, it is not more consider in social dimension.</li> </ul>
	GRI	✓	✓	✓	✗	✓	✗	<ul style="list-style-type: none"> <li>GRI is a global reporting initiative as sustainability reporting guidelines on economic, environmental and social performance</li> <li>The GRI guidelines go well beyond any previous ones in their inclusion of financial and social criteria. It is the addition of these criteria that distinguish 'sustainability' reporting from straight environmental reporting.</li> </ul>

According to Table 3, there are no standards nor guidelines covers all implementation dimensions for sSCM aspect. There are separated dimension considering in each standards from the International Standard Organization (ISO) except an economic dimension because there is an impact from both environment and social to economic view. Only the ISO26000 is considered a social dimension, moreover this offers only the guidance for social responsible behavior does not contain requirements. Only supply chain management aspect is considered in ISO 28000. While a guideline both of SCOR9.0 and GRI cover more than 2 core dimensions and others e.g. an integrated between core 3 dimensions, a SCM aspect and a risk management.

## 5. sSCM performance measurement

We have provided an overview of different sustainability performance evaluation systems, which implemented in enterprises, with identification of their strengths and weaknesses. We have reviewed the major reporting/ indicator initiatives (we consider the evaluation systems which there are indicators included in the context) from the GRI, the International Standard

Organization (ISO), the World Business Council for Sustainable Development (WBCSD), and the SCOR9.0. The analysis result is shown in Table4.

Tab 4: The overview of performance management measurement

Name	Application					Overview
	Economic	Environment	Social	Integration	SCM	
GRI	✓	✓	✓	✗	✗	<ul style="list-style-type: none"> <li>The GRI guidelines consist of principles and recommendations and of a standard reporting format.</li> <li>The indicators are divided into the following groups: economic, environmental, human rights, employee and workplace related, product related and social indicators.</li> <li>Strength: it is possibility to use benchmarking because a standard format is used for reporting and it covers all three dimensions of sustainability.</li> <li>Weakness: It takes a large number of indicators (total 70 indicators) and there are practically no indicators relating to the performances in terms of quality, product quality.</li> </ul>
ISO 14301	✗	✓	✗	✗	✗	<ul style="list-style-type: none"> <li>ISO14301 gives recommendations to enterprise how to develop indicators for improvement of environmental performance and how to use them in practice. Indicators divided into three categories: environment (process) indicators, management performance indicators, and environmental conditions indicators.</li> <li>Strength: ISO14301 presents clear methodology and allow enterprises flexibility in indicator selection.</li> <li>Weakness: for the sustainability point of view, ISO14301 concerns only environment aspect.</li> </ul>
WBCSD	✓	✓	✗	✗	✗	<ul style="list-style-type: none"> <li>The WBCSD divides indicators into general indicators and activity-specific indicators. A key feature of this methodology is integration of two sustainability dimensions: environmental and economic. social aspects are not covered by this methodology.</li> <li>Strength: Eco-efficiency information collected by the enterprise helps to identify the key problems and promotes application of preventive measures.</li> <li>Weakness: Only the process indicators are used. And the social aspects are not covered.</li> </ul>
SCOR9.0	✓	✓	✗	✓	✓	<ul style="list-style-type: none"> <li>The SCOR Model is a framework for modeling and managing supply chain processes (Plan, Make Source, Deliver, and Return), practices and performance. The newest version of SCOR (Green SCOR) provides a framework for structuring and communicating environmental supply chain management programs and also includes risk management processes, practices, and performance indicators.</li> <li>Strength: It is easier for the companies in SC to identify relevant measures because of the standard description of management processes.</li> <li>Weakness: SCOR mainly focuses on processes and efficiency and needs a lot of information to evaluate processes performance. Moreover, in sustainability view, SCOR does not focus on social perspective.</li> </ul>

According to the evaluation performance measurement of sSCM, the SCOR model which “The Supply Chain Council” included in the newest version (9.0) of the SCOR model can be regarded as a closely related concept that new specific reference models could be based on in the future. However, the SCOR 9.0 also does not focus on social perspective. Even though, the evaluation systems which include all three dimensions (economic, environment, and social) is GRI.

## **6. Conclusion**

The sSCM perspective in term of conceptual framework shows that the starting point for developing sSCM based on the triple bottom line (TBL). But only TBL cannot achieve sustainability goal. Organizations must explicitly link economic, environmental and social goal with in a broader strategic perspective to ensure that all three components are balanced. Moreover, the others point of view such as risk management, sustainability motivation, organization cultural should consider in term of collaboration with in supply chain. After developing and refining the sSCM framework, a logical next step would be to develop scales to measure the core three and the relationships among dimensions.

Organizations use standards and guidelines as a tool to implement sSCM in their supply chain. However the existing standards/guidelines are not integrated the economic, environment and social dimensions except GRI which cover all of three dimensions.

The existing performance evaluation systems preferably should be only used as reference materials. To develop an operational system that brings value to the organizations, it is necessary to develop and implement a well-structured performance evaluation methodology. At this time, no reference model for sSCM has been published to date. Because of it is difficult to set standardization of sustainability indicators. Therefore to evaluate the sSCM performance, organizations should have to develop their own sustainability performance systems. For the standardize model, SCOR9.0 and GRI are closely related concept of sSCM.

## **7. Reference**

**Carter Craig R. and Rogers Dale S.** A framework of sustainable supply chain management: moving toward new theory [Journal] // Journal of Physiscal Distriubtion&Logistics Management. - [s.l.] : Emerald Group Publishing Limited, 2008. - 5 : Vol. 38. - pp. 360 - 387.

**Croom Simon, Romano Pietro and Giannakis Mihalīs** Supply Chain Management: An analytical framework for critical literature reviews [Journal] // European Journal of Purchasing & Supply Chain Management. - [s.l.] : 2000 Elsevier Science Ltd., 2000. - Vol. 6. - pp. 67 - 83.

**Dyllick Thomas and Hockerts Kai** Beyond The Business Case for Corporate Sustainability [Journal] // Business Strategy and the Environment. - 2002. - Vol. 11. - pp. 130 - 141.

**Elkington J** Cannibals with Forks: The Triple Bottom Line of the 21st Century [Book]. - Stoney Creek : New Society Publishers, 1998.

**Elkington J.** Enter the triple bottom line [Book Section] // The Triple Bottom Line: Does It All Add up? / book auth. Henriques Adrain and Richardson Jueli. - London : Earthscan, 2004.

**Fink A** Conducting reserach literature reviews: from paper to the internet [Book]. - Sage : Thousand Oaks, 1998.

**Gidding Bob, Hopwood Bill and O'Brien Geoff** Environment, Economy and Society: Fitting Them Together into Sustainable Development [Journal]. - [s.l.] : Wiley Inter-Science, 2002. - Vol. 10. - pp. 187 - 196.

**Hopwood Bill, Mellor Mary and O'Brien Geoff** Sustainable Development: Mapping Differnt Approaches [Journal] // Sustainable Development. - [s.l.] : John Wiley & Sons, 2005. - Vol. 13. - pp. 38 - 52.

**Kinderyte Loreta** Methodology of Sustainability Indicators Determination for Entreprise Assessment [Journal] // Environmental Research, Engineering and Management. - 2010. - 52 : Vol. 2. - pp. 25 - 31.

**Krajnc Damjan and Glavic Peter** Indicators of Sustainable Production [Journal] // Clean Technology Environment Policy. - [s.l.] : Springer - Verlag (2003), 2003. - Vol. 5. - pp. 279 - 288.

**Linton Jonathan D., Klassen Robert and Jayaraman Vaidyanathan** Sustainable supply chains: An introduction [Journal] // Journal of Operations Management. - 2007. - Vol. 25. - pp. 1075-1082.

**Mongsawad Prasopchoke** Sufficiency Economy: A Contribution to Economic Development [Journal] // International Journal of Social Sciences. - 2009. - 2 : Vol. 4. - pp. 144-151.

**Ranganathan Janet** Sustainability Rulers: Measuring Corporate Environment & Social Performance [Journal] // Sustainable Enterprise Initiative. - DC : The world resource institute, May 1998. - pp. 1 - 12.

**Seuring Stefan and Muller Martin** From a literature review to a conceptual framework for sustainable supply chain management [Journal] // Journal of Cleaner Production. - 2008. - Vol. 16. - pp. 1699 - 1710.

**Teuteberg Frank and Wittstruck David** A Systematic Review of Sustainable Supply Chain Management Research: What is there and what is missing? [Conference] // MKWI 2010. - 2010. - pp. 1001-1015.

**Theeranuphattana Adisak and Tang John C.S.** A conceptual model of performance measurement for supply chains: Alternative considerations [Journal] // Journal of Manufacturing Technology Management. - [s.l.] : Emerald Group Publishing Limited, 2008. - 1 : Vol. 19. - pp. 125-148.

**Wallerius J. and Zakrisson M.** Green Supply Chain Management in Thailand: An Investigation of the US in the Electrical and Electronics Industry [Report]. - [s.l.] : Linköping University, 2010.

**Warhurst Alyson** Sustainability Indicators and Sustainability Performance Managment [Report] / International Institute for Environment and Development (IIED). - [s.l.] : 2002 IIED and WBCSD, 2002. - This report is about the use of Sustainability Performance Indicators to communicate to the internal and external stakeholders of mining companies..