

Available online at www.sciencedirect.com

SciVerse ScienceDirect



Procedia - Social and Behavioral Sciences 41 (2012) 456 - 460

International Conference on Leadership, Technology and Innovation Management

Green business for sustainable development and competitiveness: an overview of Turkish logistics industry

Ali Özgür Karagülle^{a*}

^aIstanbul University, İstanbul, 34320, Turkey

Abstract

Competitiveness is a key issue for private companies. Logistics companies also operate under the pressure of competition. In order to deal with the challenging business atmosphere, private companies seek for new ways to provide a sustainable development strategy. Environmental concerns have an important place in the sustainable development strategies. They can be evaluated within the corporate social responsibility concept which may have an impact on the competitiveness ability of private companies. Especially for logistics companies, environmental issues are highly important. Therefore green policies have became strategic for them. Competitiveness levels of private companies may be affected by green policies as a result of regulations regarding environmental concerns.

Keywords: Green business, logistics, sustainable development, competitiveness

© 2012 Published by Elsevier Ltd. Selection and/or peer review under responsibility of The First International Conference on Leadership, Technology and Innovation Management Open access under CC BY-NC-ND license.

1.Introduction

Sustainable development is one of the pillars of strategic management. Companies aim to survive and earn above the average as they compete with their rivals. Besides an ongoing cut-throat competition, companies start to give more importance to the future. Especially, economical and equitable use of resources has been one of the most fashionable approaches. Companies started to give more attention to environmental concerns as they aim to secure future existence of their resources and business. The

*Corresponding Author. Tel: +90-212-473 70 70 / 19200 Fax:+90-212-473 72 48

E-mail address: ozgurk@istanbul.edu.tr

^{1877-0428 © 2012} Published by Elsevier Ltd. Selection and/or peer review under responsibility of The First International Conference on Leadership, Technology and Innovation Management Open access under CC BY-NC-ND license. doi:10.1016/j.sbspro.2012.04.055

increasing awareness and consciousness of managers about the 'future' of the World, force them to imagine and implement environmentalist managerial applications in order to protect natural resources.

Logistics is a key function which affects the success of a company.With its important role, logistical decisions become critical to gain competitive advantage. Furthermore, resources can be used economically and company can create value for its customers. Logistics activities can be observed at all stages of production and they consume resources such as fuel. The green logistics applications can increase competitiveness and help companies to contribute to the sustainable development of environment.

2. Green Business in Logistics

2.1.What is "Green" Business?

Green business can be defined as business practices which are evaluated to be environmentally friendly. These practices might include the use of organic and natural products to build its facilities, tighter protections against emissions, environmentally responsible sourcing of supplies and designing organizations and processes in order to efficient and economical use of resources. Green business is to adopt principles, policies and practices that improve the quality of life for customers and protect resources.[1] Using renewable energy resources, enhancing material recyclability, reducing toxic dispersion are all eco-efficient practices while doing green business[2].

Managing a green business can be considered as a cost unit or as an opportunity for saving money. It can be integrated to daily operations at a different level of environmental consciousness. Furthermore, the organization can develop approaches on the leading edge of current environmental practice and thinking as a pioneer [3]. Most of the managers suppose they have to make a choice between planet and profit, but with proper understanding of environmental issues, this dilemma can be considered as a win-win situation[4].

2.2. Green Logistics

Green practices in logistics industry can be examined under several dimensions. Firstly, fuel consumption and emissions are related with green logistics. Logistics companies especially transporters are tend to use less fuel consuming vehicles. As a function of green logistics, green transportation can be defined as transportation service that has a lesser or reduced negative impact on human health and the natural environment when compared with competing transportation services that serve the same purpose [5]. There are so many regulations which target to minimize emissions. Efficient use of transport resources which aimed at the selection of vehicle types, consolidation of freight flows and selection of type of fuel

can help to minimize negative effects on the environment such as pollution, noise and congestion [6]. Secondly, accurate planning and scheduling can save the resources. Choosing the appropriate vehicle or route has important effects on consumption. Thirdly, designing logistics networks with the perspective of environmentally friendliness, companies will be able to protect nature. Global enterprises have increasingly undertaken measures, including the integration of corresponding suppliers, distributors and reclamation facilities in order to green their supply chains [7]. Moreover, materials used in packaging and warehousing can affect the environment.

Reverse logistics is a new business area which can be considered within the scope of green logistics. Waste management, especially nuclear wastes, may become one of the niche markets for logistics companies according to the increasing figures of nuclear energy usage. [8] Several industrial countries in Europe have enforced environmental legislation charging manufactures with the responsibility for reverse logistics flows including used products and manufacturing-induced wastes.

Environmental concerns can affect the value chain of a company. Therefore companies seek for different strategies for managing environmental issues. Not only the increasing importance of environmentally friendly implications, but also state regulations encourage private companies to take incentives about environmental impacts of their production process. Both inbound and outbound logistics activities are affected by policies regarding environmental issues. Despite the fact that consumption of sources like fuel, other kind of activities such as supply chain management, distribution networks or mode and fleet decisions are subject to green logistics concept.

3. Green Business as a Tool of Sustainable Development and Competitiveness

3.1.Sustainable Development

Sustainable development has been defined as a development progress which meets the needs of the present without jeopardizing the needs of future generations at the World Commission on Environment and Development (Brundtland Commission) of the United Nations [9]. Long term existence and sustainable development are the main objectives of companies. The environment they exist and interact with should not be considered apart from business life. Furthermore, protection and development of habitat in which the workers, managers, and their families live should be taken into account.

Companies have to secure flow of sources not only today but also in the future. They should build up long term relations that based on trust with their suppliers. This will increase the quality if supply process and better procurement with better input will support the development. Hence, having an effective role in creating the future, will contribute to secure long term existence and development.

3.2.Competitiveness

Employing green technologies in business can lead to competitive advantage. It is possible to reduce costs during procurement process with long term relations as mentioned above. State regulations can influence the competitiveness of a particular country. For instance, European Union provides important restrictions for private sector and degree of environmental friendly implications may affect the company's competitiveness. The green eco-efficiency perspective argues that pollution is a form of economic inefficiency, whereby pollution reduction is beneficial to productivity. Eco-efficient logistics management can reduce resource consumption and costs which will result in more competitiveness [10].

Besides cost advantage, taking care of environment and protecting the resources will support the company image and the marketing activities. Environmental friendly image helps companies to have better reputation relative to competitors. Since reputation is a source of competitive advantage, green practices should result in enhanced cash flow and business performance [11]. Offering green processes to customers means differentiation and creating value which means competitiveness.

4."Green" Companies in Turkish Logistics Industry

Turkish logistics industry improves as the importance of logistics increase globally. Not only the Turkish logistics companies start to operate at different regions of the World but also Turkey branches of global multinational logistics companies grow. International regulations (esp. European) about emissions are followed by Turkish transporters in order to operate internationally. Following the global 'green' trend, Turkish logistics companies focus on environmentally friendly operations. The vast majority of these companies are multinational and international companies but small and medium sized operators are becoming more conscious from one day to another. They focus on waste management and energy efficiency in order to reduce costs.

Turkish logistics companies which focus on green practices are the pioneers of the industry. They have Quality Management Systems that meet ISO Standards and especially ISO14001 Environmental Management Systems. These companies have an active role in national and international projects about environmental protection, waste management and energy efficiency or have their own 'green' projects. Turkish logistics companies which declare themselves as green have strategic management point of view and focus on long term, sustainable development. These companies revise their organisational structures periodically and update their environment related policies in order to keep up with the change and growth.

5.Conclusion

Companies nowadays have to integrate their supply chain with environmental management due to pressures from customers who have increasing environmental concerns. In addition, organizations can generate more business opportunities than their competitors if they can address environmental issues successfully[12]. Logistics with its key function in competition, offers a new opportunity for companies with reduced costs, creating value for customers and contributing to long term existence of limited resources of the World by doing green logistics activities.

Turkish logistics industry is increasing its awareness about environmental issues as it grows day by day. Especially pioneers of the industry and global companies are paying much more attention to sustainable development and the welfare of the country and the World. As they pay more attention to strategic goals, short term plans and practices are expected to be replaced by long-term projects and investments. The 'greener' industry can be created with uncompromising implication of regulations and sincere approach of managers.

References

- [1] http://www.greenamerica.org/greenbusiness/whatis.cfm, (02.09.2011)
- [2] DeSimone, L.D., Popoff, F.(2000) Eco-Efficiency: The Business Link to Sustainable Development, pp.56-57
- [3] Schroeder, D.M., Robinson, A.G. (2010) Green is Free: Creating sustainable competitive advantage through green excellence, Organizational Dynamics, 39, pp.349-350
- [4] Neto, J.Q.F.,Bloemhof-Ruwaard, J.M.,Van Nunen, J.A.E.E., Van Heck, E. (2008) Designing and evaluating sustainable logistics networks, International Journal of Production Economics, 111, p.196
- [5] Björklund, M. (2011) Influence from the business environment on environmental purchasing drivers and hinders of purchasing green transportation services, Journal of Purchasing & Supply Management, 17, p.12
- [6] Ubeda, S.,Arcelus, F.J.,Faulin,J. (2011) Green logistics at Eroski: a case study, International Journal of Production Economics, 131, p.44
- [7] Sheu, J.B., Chou, Y.H., Hu, C.C. (2005) An integrated logistics operational model for green supply-chain management, Transportation Research Part E, 41 p.288
- [8] Sheu, J.B. (2008), Green supply chain management, reverse logistics and nuclear power generation, Transportation Research Part E, 44, p.20
- [9] DeSimone, L.D., Popoff, F.(2000) Eco-Efficiency: The Business Link to Sustainable Development, pp.3-4
- [10] Lai, K.H., Wong, C.W.Y. (2011) Green logistics management and performance: some empirical evidence from Chinese manufacturer exporters, Omega, 40, p.270
- [11] Eidat, Y., Kelly, A., Roche, F., Eyadat, F. (2008) Green and Competitive? An empirical test of the mediating role of environmental innovation strategy, Journal of World Business, 43, 133
- [12] Chiou, T., Chan, H.K., Lettice, F., Chung, S.H. (2011) The influence of greening the suppliers and green innovation on environmental performance and competitive advantage in Taiwan, Transportation Research Part E, 47, p.823