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Green logistic should be a useful solution for transportation?

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Abstract
Logistics is the integrated management of all the activities required to move products through the supply chain. For a typical product this supply chain extends from a raw material source through the production and distribution system to the point of consumption and the associated reverse logistics. The logistical activities comprise freight transport, storage, inventory management, materials handling and all the related information processing. The main objective of logistics is to co-ordinate these activities in a way that meets customer requirements at minimum cost. In the past this cost has been defined in purely monetary terms. As concern for the environment rises, companies must take more account of the external costs of logistics associated mainly with climate change, air pollution, noise, vibration and accidents. This research project is examining ways of reducing these externalities and achieving a more sustainable balance between economic, environmental and social objectives.

Keywords: green logistic, marine environment, solutions

Introduction
From product design to production process development and logistics management, the supply chain has a major impact on the environment. And, simply trying to minimize the environmental footprint is not enough for your company to pursue the "Green Supply Chain" strategy. To be accepted and successful, that strategy must bring great value throughout the company. While the broad goal is: reduce CO2. For any company, real benefits are usually measured by: Optimizing company assets, producing less waste, faster time-to-market access. Market), always innovating products and increasing profits. The key to the success of pursuing "Green Supply Chain" is: Changing the way we work with customers and suppliers. Using new modes of operation "Intelligent Supply Chain Management" and "B2B e-commerce" that enables the creation of a global trading community at a low cost and the use of automation systems to increase business operations while achieving great environmental results. For the aviation industry, as of November 30, 2010, ICAO has accelerated international efforts to establish a global CO2 emissions market for the aviation industry. ICAO promotes many options for reducing ICAO 190-member civil aviation emissions reductions by early 2012, seeking deals by the end of 2012 to approve the establishment of a new emissions market in September 2013. . These agreements also include increasing use of biofuels, the most effective way of reducing fuel use for planes and air routes. In the coming time, the aviation industry will have to face new laws. As of January 1, 2012, all airlines with flights to and from the EU will be required to participate in the airline's Joint Aviation Trading Program, in Europe. This means that firms that do not participate in the program or do not meet emissions requirements may be barred from flying into the EU. Two Airbus and Boeing aircraft makers are competing in recycling old aircraft and producing eco-friendly aircraft. In April 2006, the old Aircraft Recycling Association (AFRA) came into existence, including 23 companies capable of recycling 150 old aircraft a year. And for the first time, the first full-size Boeing 787 Dreamliner with a shell was made entirely of lightweight material, not steel or aluminum, to save money and consume less fuel than other aircraft. The eco-friendly train system at 300 km/h in Taiwan is a template that limits the amount of greenhouse gases that cause warming and enhances the standard of living for the majority of

people. Be sustainable for the environment, using elevated rails instead of diesel engines will produce only one-quarter the amount of CO2. Train passengers spend only half the energy and release a quarter of CO2 compared to bus riders. In recent years, projects of enterprises and environmental action programs have been launched, even though they have just started, but they are good signs for the Vietnamese logistics industry.

Green Logistics describes activities to calculate and minimize the ecological impact of logistics operations. This includes all front and back transactions of products, information and services between productions start points and points of sale. It is the purpose to create a sustainable corporate value based on the balance between economic efficiency and environmental protection. The concept of green logistics has its roots in the mid-1980s and is a concept that describes logistics systems and methods using advanced technology and equipment to minimize environmental damage during operation. Global production is increasingly concentrated in China, India, Russia and Brazil. The center of the world economy is also shifting to Asia. The development of production and consumption increases the volume of goods and transportation distances, raising the demand for global supply chain management and control. Many countries have developed programs and strategies to develop a green logistics system that meets the requirements of economic development, enhances the competitive position and protects national interests. Vietnam's logistics industry is in its early stages of development. The competitiveness of industries and enterprises is still low compared to other countries. If Vietnam's logistics industry is expected to integrate and develop in the near future, in addition to the active efforts of the business itself, the government, industry and localities cannot stand by. They need more attention and support to implement urgent mid- and long-term solutions to develop the green logistics system in Vietnam, firstly planning to establish logistics centers. At international ports, the highway connects the main means of transportation in the distribution and circulation of goods. Reviewing packaging, waste disposal, fuel consumption and related factors at different steps of commodity production and transition processes will be the key to the success of these efforts.

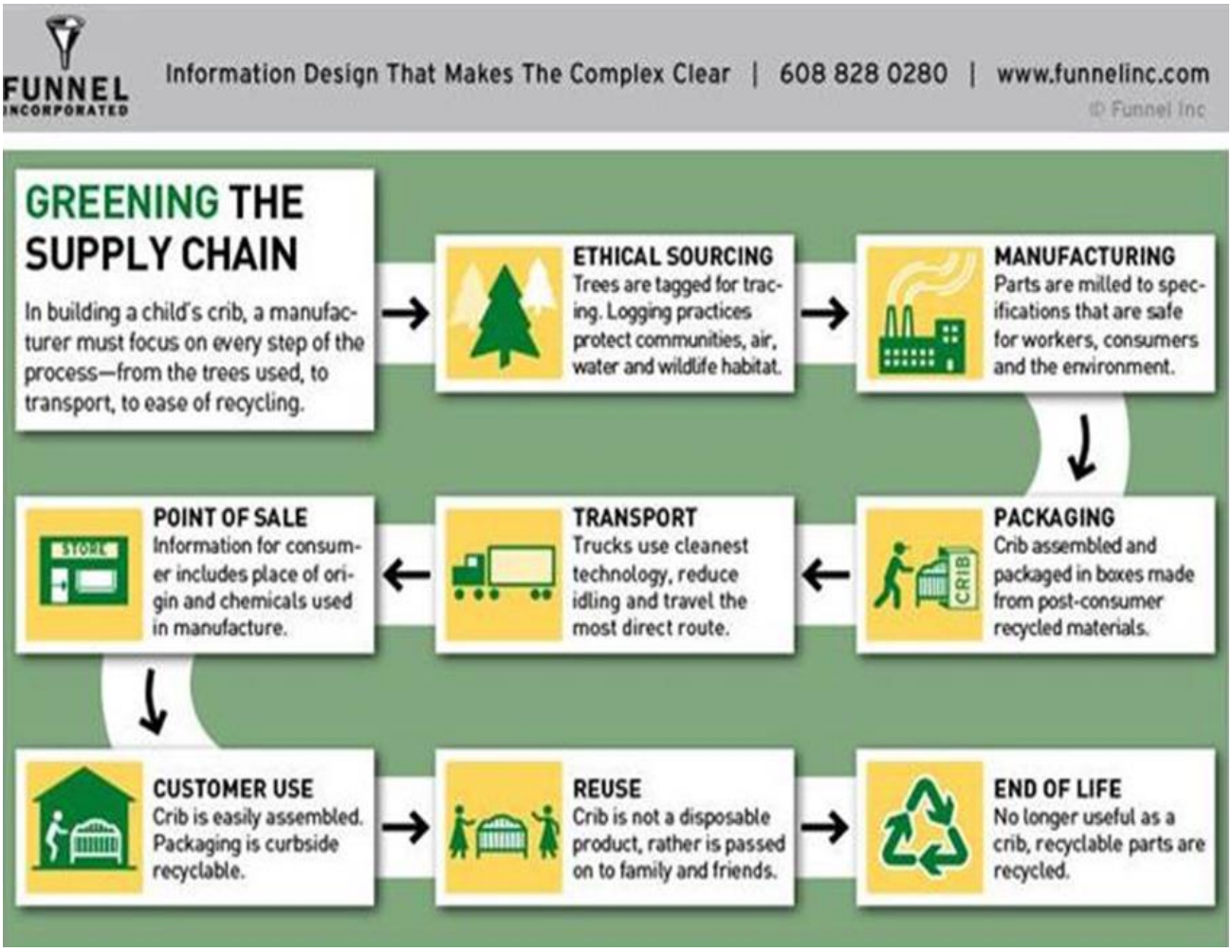

Fig .1: Concept of green logistics

Commercial logistics services in Vietnam began to develop in the 1990s on the basis of freight forwarding services, which are now in the early stages of development. According to the LPI in 2014, Vietnam ranked 48 out of 160 countries surveyed and ranked fourth in ASEAN countries (after Singapore, Malaysia and Thailand). By 2014, the logistics industry contributes about 3% of GDP, (Thailand is 3% in 2014, Singapore is 9.4% in 2014). The current outsourcing rate is about 30-35%, (China is 63.3%, 2010). The level of service provided by logistics companies in Vietnam is still limited, showing that the service price is not competitive and the quality of service is not high, thus the labor productivity and competitiveness are still limited. Cover. Statistical capacity of logistics needs to be

improved. Logistics costs are equivalent to about 21% of GDP (China is 17.8%, 2011), while developed countries like Singapore are about 9% - 14%. The average growth rate of logistics services in the past years is from 16-20% per year. The government's plan is to grow logistics services by about 24-25% a year by 2020 and by 2030 by 34-35% a year. It can be said that logistics services in Vietnam have a fast and stable development. The logistics service system in Vietnam now consists of four components: the institution, the development policy and the law governing logistics services; Infrastructure (including hard infrastructure and soft infrastructure); Logistics service providers; Consumers of logistics services. The marine environment is heavily polluted by industrial, agricultural and aquacultural waste, household waste, but the impact of oil pollution on shipping, shipbuilding and seaports. Need alerts to minimize the stronger. Oil and oil spills despite the 0.1mg/litter of oil content in water can also cause zooplankton mortality and greatly affect juveniles and larvae of marine organisms. However, the seawater of Hai Phong coastal zone has the oil concentration in the water regularly exceeding the permitted limit of 100-300%. A recent report from the Hai Phong Department of Natural Resources and Environment showed that the area with high oil content is the water surface of Hai Phong port with an oil content of 0.3-0.6mg / l, exceeding the permitted level. The coastal area of Hai A district, Kien Thuy district, average oil content of about 0.6mg / l. Bach Dang estuary concentration of oil tends to increase, especially in the Department of Oil.

It is only marine pollution in a large seaport where most of the fishing boats, cruise ships, military vessels regularly wash ships, dispose of engine oil, ballast water, discharged waste water directly Oil into the sea. Most types of vessels have no oil and waste of water collection and treatment facilities, whereas under the MARPOL for Vessels entering and leaving ports, all ships must dispose of their wastewater into the port waters. Nationwide, approximately 4 million tons of petroleum fuel from more than 1,700 transporters and about 130,000 fishing vessels a year are responsible for pollution in coastal and coastal areas and in many places. Focus on marine ecosystems, destroying marine resources, endangering human health. Particularly in Binh Dinh province, there are nearly 7,000 vessels, of which 2,500 are fishing offshore. The implementation of Decree 67 of the Government will help fishermen in 28 coastal provinces gradually modernizing the fleet of offshore fishing, exploiting the strength of the ocean tuna fishing to enrich the sea. But the technology of shipbuilding, whether fishing or shipping, needs to be renewed with new green maritime standards, reduced engine emissions - ship engines, and incinerators, are rarely mentioned. The current technology of shipbuilding, petroleum fuel is used quite heavily, causing a considerable amount of waste oil in construction stages. All major pollutant emissions to coastal waters, oil pollution and sediment heavy metal contamination in shipyard and shipyard areas. They alter the physical and chemical nature of seawater, bad effects on marine fauna and flora, salt production, aquaculture and marine tourism.

Renewal of shipbuilding technology requires the installation of advanced equipment, especially pollution prevention equipment on board, to minimize the pollution caused by maritime and shipbuilding activities. Reducing toxic emissions to the sea to limit ocean acidification impacts is a global current issue. According to recent scientific reports, global warming is causing serious damage such as heat, heavy rain, ocean acidification and sea level rise. Ocean acidification is the phenomenon of continuous decrease of pH in the Earth's oceans due to the absorption of carbon dioxide by human action into the atmosphere. The means of shipping - especially old, backward ships emit more toxic gases due to low fuel burning efficiency and no exhaust gas treatment system, is a very polluting source. In the marine environment field, Vietnam should have policies, normative documents, regulations and standards for reducing emissions, especially greenhouse gas emissions, for fishing vessels and transport ships, which can be controlled and good emissions from ships in marine operations. Emission control areas need to be researched, built and established in seaports close to sea areas of special ecological value, such as Quang Ninh - Hai Phong, Vung Tau - Ho Chi Minh City. . There are large sized vessels with emissions in excess of the permissible limits that will not be docked or under special pilot regimes. The policy to levy tolls on ships should also be enacted. It is necessary to blame the waste generator, to license operation to the certification of ecological ships, seaports, ecological enterprises.

Green logistics in Vietnam

Logistics is one of many types of large-scale commercial infrastructure, which in the process of operation always has certain effects on the environment. Therefore, the direction of environmental protection in the development of logistics system should ensure the conditions. The development of logistics centers should be carried out on the basis of the implementation of the master plan for trade development in the country, the planning of other infrastructure systems, especially the planning of transport sector, urban planning, residential planning.

Development of logistics centers must be associated with the requirements to improve the responsibility of the environmental management of the competent agencies in terms of planning management, investment licensing and environmental management. According to the provisions of Decree No. 80/2006 / ND-CP, Decree No. 21/2008/ND-CP; Circular 08/2006/TT-BTNMT, the project owners are responsible for making environmental impact assessment report, environmental protection commitment, environmental protection project. However, due to various reasons, many investors have not fully implemented these regulations. Development of logistics centers must be associated with raising the social responsibility and environmental protection of enterprises of all economic sectors involved in investment. The capital for the construction of logistics centers is actively mobilized from all resources of society, on the basis of ensuring reasonable benefits to attract investment of enterprises, including FDI enterprises. Improving the social responsibility of the environment for investment in the logistics system is not only to prevent negative impacts on the environment, but also to promote the positive aspects of enterprises in improving the environment. . For example, in the space of building a logistics center, if the company promotes social responsibility for the environment, then the enterprise will choose the investment plan in harmony with surrounding landscape and architecture.

Fig. 2: Structure of green logistic

The process of industrialization, rapid urbanization is causing a lot of pressure on environmental pollution. In addition, the formation and development of large-scale logistics centers will increase the pressure on environmental pollution and the response to environmental incidents. Therefore, the planning implementation must be accompanied with the plan to strengthen the inspection and assessment of environmental impacts during the operation of the logistics center. The investment licensing of large-scale logistics centers in areas that are close to the inner city need to be limited. But it needs to encourage the development of urban periphery to minimize the flow of traffic, people and goods concentrated in the medium at the same time improve the ability to solve environmental problems on the basis of reasonable allocation of green areas and water surface in the project area. According to the trend of development in general and development of logistics system in particular in our country until 2020, orientation to 2030, the areas to be considered are the South East, Red River Delta, South Central Coast. The increase in large-scale logistics centers increases the risk of environmental impact. It is necessary to determine the location of works that meet the environmental criteria, in places that can minimize the impact of nature, avoid areas prone to floods, landslides, Areas where polluted underground water is located, etc. The construction sites must ensure the fire and explosion prevention and fighting, convenient for firefighting, prevention of forest fire and water source pollution; Not close to schools, hospitals, defense facilities and other buildings that need noise isolation. In addition, the design should also minimize the environmental impact such as the increase of green areas, lakes, increase the area of roads in the project area, build the area of collection and treatment, waste on site, parking. They must be built and installed solidly and fully and synchronously according to current standards and norms for works such as sanitation and fire-fighting systems, water supply and drainage systems, Waste and solid waste (solid waste) and liquid waste (wastewater) systems are combined with appropriate waste collection and treatment processes, regimes and technologies. Particular attention should be paid to the system of collecting and treating wastes from food processing and food service areas, storage areas for chemicals, etc. For works in relatively isolated positions there is a need for on-site waste treatment systems, which will require the strengthening of solid waste management capacity, especially the sorting of solid waste from the source. Pay attention to building plans and investment capacity to rescue environmental incidents. Full installation, synchronization of equipment, means, tools fire. Design of emergency exit and escape routes, doors and roads in case of disasters according to current standards and regulations. With regard to state management agencies, to further study to institutionalizing regulations on environmental protection for production and business activities of commercial establishments, especially large scale establishments. Like TT logistics, training and fostering to improve the capacity to assess and appraise reports on environmental impacts and environmental protection solutions of investment projects for the construction of logistics centers before the competent authorities and investment certification. Organize and direct the activities of the specialized agency in charge of State management of environmental protection, with a focus on environmental impact assessment, implementation of environmental protection measures and operation of the environment. Environmental protection of logistics system TT, strengthening the role of the system of environmental protection organizations at the grassroots level, promulgating and enforcing environmental protection regulations for industrial parks and economic zones in order to enhance the effectiveness of environmental management and protection are carried out. For service business enterprises, the management of logistics centers, it is necessary to assign leaders in charge, set up the team specializing in environmental protection activities of the logistics center. At the same time develop annual plans for environmental protection activities; and regularly monitor and supervise environmental protection activities. For social organizations and associations, the rights and obligations of state agencies, socio-political organizations, communities and individuals in the protection of the

environment must be clearly defined. And to bridge the logistics business enterprises with competent state agencies. Disseminate and provide information on state policies and laws to enterprises, and reflect the aspirations and proposals of enterprises to state agencies. Strengthen the dissemination and dissemination of environmental protection laws to organizations and individuals to raise public awareness and sense of self-discipline in environmental law. Enterprises, management boards of logistic centers in participating in environmental protection activities, and at the same time reflect to the competent State agencies mistakes in the implementation of investment of enterprises.

Conclusion

Due to the growing complexity of coordinating the supplement of materials and shipment of products in global supply chain networks, logistics as a business concept was evolved in the 1950s. Logistics management is one of the supply chain disciplines that plans, organizes, implements, and controls the flow of resources (goods, services and related information) from the point of origin to the point of consumption in a way that meets customers' requirements efficiently and effectively. Logistics involves an integrated approach with the integration of information, transportation, inventory, warehousing, material handling, and packaging, and recently added security. Within these activities of logistics, transport considers as the major component of most logistics services. Nowadays, sustainable development as well as greening aspects appear as key issues facing logistics activities. To consider wider objectives and issues within supply chains, researches study both of sustainable supply chain management and green logistics which lead to new methods of doing the logistics activities. However, enterprises are facing new challenges while applying these methods. These methods require enterprises to respond quickly to the changes of customers' needs. Additionally, the entire supply chain has become more dynamic than ever before due to many challenges compering with their predecessors. These challenges include the shorter products life cycles as well as an increased both of the number of products variants and the dependence of supply chain functional units. Moreover, global enterprises require higher attention on the environmental effects of their logistics activities.

References

1. https://www.globaltrade.net/international-trade-import-exports/expert-service-provider-p/Green-Logistics-Vietnam.html
2. http://vnll.com.vn/vi/logistics-xanh/
3. http://www.tapchigiaothong.vn/can-nhieu-hon-nhung-du-an-logistics-xanh-d13793.html
4. http://www.vietnamshipper.com/?action=news_detail&atcid=28846&chnlid=14
5. http://www.mpi.gov.vn/Pages/tinbai.aspx?idTin=145400&idcm=227
6. http://www.vlr.vn/vn/news/img/trong-nuoc/395/can-lam-nhung-du-an-logistics-xanh.vlr
7. http://isocus.vn/logistics-xanh-logistics-xanh-la-gi.html
8. http://www.greenlogistics.org/
9. http://www.greenlogistics.vn/en