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Green Logistics, Essential for Sustainability in the Supply Chain and the Urgent Need for Its Implementation by Organizations or Companies — International Context

Rosalina Báez Martínez
(Faculty of Economics and Business, Anahuac University, Mexico)

Abstract: The objective of this research is to understand the essentials of green logistics, as a key to the conservation of human life, through the most environmentally friendly processes, such as transport, storage, inventory, distribution, material handling, among other logistics activities; reducing the carbon and water footprint, which will have a great impact on the diversity of ecological systems, a responsibility that organizations have from their administration. Green logistics, sustainable or eco-logistics, as it is also known, is the evolution to the stages that business logistics has gone through and is perhaps the greatest challenge to achieve, along with the sustainable supply chain, green logistics, must be seen as a necessity, which helps prevent pollution in each of its phases and at the same time, increase the competitiveness indices in the long and medium term, as an appropriate formula for all companies in the world, regardless of their size, that from the direction of the same, redirect their management around sustainability, this must be based on reverse logistics.

Key words: green logistics, climate change, sustainability, supply chain
JEL codes: Q51, Q50, Q56

1. Method

the focus of this research is qualitative, since an analysis of the environmental environment is made, to later break down what are the different stages of logistics, until arriving at green logistics and the purpose of this type of logistics, in the conservation of the planet through all its processes that make it up; this research was carried out through a search in articles, books, web pages, journals, everything related to the subject, about organizations and/or companies that are carrying out in some process of logistics, a sustainable practice; for the care of the planet.

2. Introduction

Edgar Morín, reminds us that: “we now need to learn to be, to live, to share, to commune also as humans of the planet Earth. Not only to be of a culture but also to be inhabitants of the Earth. We must dedicate ourselves not

Rosalina Báez Martínez, Ph.D., Professor, Faculty of Economics and Business, Anahuac University; research areas: logistic, international commerce, sustainability, climate change, green energies, energetic efficient, all around international relations. E-mail: rosybaezmartinez@yahoo.com.mx.

only to mastering but to conditioning, improving, understanding, that there is ecological consciousness, that is, the consciousness of inhabiting with all mortal beings the same living sphere (biosphere); recognizing our consubstantial bond with the biosphere leads us to abandon the Promethean dream of the domain of the universe to feed the aspiration to coexistence on Earth" (Morín Edgar, 2001, p. 71).

Since the early 1970s, it has become apparent worldwide that climate change was a reality; so it was necessary for the world to take joint actions thereafter in order to reduce the effects that until today we suffer as humanity.

Over time, not only international organizations, non-governmental organizations and entrepreneurs were integrated to seek together to mitigate the negative effects on the environment, by anthropogenic practices; this is how green logistics was born; as a need for response, to the aspects of "management inherent in how those responsible for purchasing, supply, logistics in all its versions and transport, manage or take measures to not affect or be able to monitor the environmental impact of the business work" (Gallitelli Atilio, 2002, p. 52).

Green logistics, sustainable or eco-logistics, as it is also known, is the evolution to the stages that business logistics has gone through and is perhaps the biggest challenge to achieve, along with the sustainable supply chain, since both go hand in hand. Among its primary objectives are the reduction of the carbon footprint and water; in each of its phases it must use the best sustainable practices, in order not to continue polluting the planet with its processes.

As far as international legal regulation is concerned, there are ISO standards, family 14000 on environmental management, ISO 50000 on energy efficiency and ISO 26000 on social responsibility, ; there are also agreements, treaties and conventions that emphasize care for the environment and that are the framework for the establishment of green logistics, together with international organizations, such as THE UN (United Nations Organization) with all its participation bodies, among some include the following: EEA (European Environment Agency), EPA (United States Environmental Protection Agency), WTO (World Trade Organization), TEN-T (Trans-European Transport Network), IEA (International Energy Agency), IDB (Inter-American Development Bank), CCC (Climate Change Council), IATA (International Air Transport Association), IMO (International Maritime Organization), CSCMP (Council of Supply Chain Management Professionals), OMA (World Customs Organization), etc.; among many more and finally the cases in which companies in Mexico, Europe and the United States, green logistics has positively impacted, in some of its processes, in an economic and environmental way.

3. Logistics and Supply Chain Concepts

To better understand the concept of logistics, we first need to understand what the supply chain is.

We will start by defining that "the supply chain is formed by all those parties directly or indirectly involved in the satisfaction of a customer's request. The supply chain includes not only the manufacturer and the supplier, but also the carriers, warehousemen, retailers (or retailers) even the customers themselves. Within each organization, such as the manufacturer's, it encompasses all functions involved in receiving and fulfilling a customer request. These functions include, but are not limited to, new product development, marketing, operations, distribution, finance and customer service" (Chopra Sunil & Meindl Peter, 2008, p. 3).

Having understood the above, we will say that "logistics is the part of the supply chain process that plans, carries out and controls the efficient and effective flow and storage of goods and services, as well as related

information, from the point of origin to the point of consumption, in order to meet the requirements of customers" (Ballou Ronald H., p. 5).

Continuing with the concept, "the etymology of logistics is related to the Greek word logos, which means idea or word, and refers to the science of calculus and numbers, according to which reality can be the object of logical, coherent calculation" (Soler David, 2013, p. 13).

For others, "logistics is the set of knowledge and attitudes that support the most convenient development of business activity; especially those aimed at reducing unnecessary costs or activities without added value" (Soret los Santos Ignacio, 1994).

Also "logistics covers all those activities related to the transfer and storage of products between their destination points" (Muñoz Machado, Andrés, 2005, p. 2).

For the Council of Logistics Management, logistics is "the part of the supply chain management process responsible for planning, implementing and controlling efficiently and effectively the storage and direct and reverse flow of goods, services and all information related to them, between the point of origin and the point of consumption in order to meet consumer expectations" (Urzelai Inza Aitor, 2006, p. 3).

Therefore, it is important to mention that logistics is a key element, for a correct management of the supply chain, since both go hand in hand from the beginning of it to the end.

The primary objective of logistics, in addition to providing a quality service, of correct quantity, in the right place, at the right time and time; it is the complete satisfaction of the customer; so the organization or company that does this; increases its competitive advantages, redesigning business models that provide innovation and rapid response to new product lines; before other organizations or companies, which do not do so. Therefore, this logistics process must translate into economic benefits for the company, such as generating more profits and attracting more customers.

This will be achieved, if the logistics are efficient and effective, maximizing the response time and minimizing the cost; achieving an interaction between the factors that make it up such as: demand studies, supply of raw materials, inventory control, correct handling of information, response times, physical distribution, use of adequate transport and customer service until after-sales.

4. Conceptual Evolution of Logistics

Logistics has gone through a conceptual evolution, in significant stages, in this research only the most relevant ones will be mentioned. An assertion of ancient logistics tells us that logistics is "the branch of Military Science that deals with the acquisition, supply and maintenance of equipment, as well as the movement of personnel, support services and the rest of the activities related to them" (Muñoz Machado, Andrés, 2005, p. 2).

It is known that the term was merely military and that its fullness took place in the First and Second World Wars; later, once the Second World War was over, the concept was inserted into organizations, becoming the business logistics that we know today and that we will see how its historical evolution was.

By "1960, business focus on manufacturing processes and independent logistics functional applications; in 1970, organizations assume the concept of materials management, use of MRP (Material Requirements Planning) applications, via computerized systems and customer service supported by high inventories and many distribution centers; 1980, the role of physical distribution management becomes fashionable, implementation of ERP (Enterprise Resource Planning), logistics decisions based on financial evaluations, but isolated and tendency to

MPRII (Material Requirements Planning II) philosophy; 1990, the use of the word logistics became more and more common, outsourcing (outsourcing some functions in the logistics process) took off, for logistics service companies, developments of modules in dynamic systems for inventories and warehouses VMS (Warehouse Management System); 2000, value generation in product and service through the supply chain, uses of integrated SCM (Supply Chain Management) systems; development of 4PL (Fourth-Party Logistics) service provision, fourth-tier logistics providers and integrators" (Frías Arturo, 2007, p. 20). By 2020, it should have started with green logistics and by 2030, it would have to talk about environmental conservation; all this, due to the urgent need to curb as much as possible climate change and go towards sustainability.

5. Brief Background on Sustainability and Climate Change

Sustainability has been an issue of concern since the 1970s, as demonstrated at the United Nations Conference on the Human Environment (Stockholm, 1972), where 103 states and more than 400 governmental organizations agreed that the planet was showing clear symptoms of an alarming environmental crisis and that climate change was already a reality. In 1978, the UN Commission on the Environment issued the document Our Common Future, also known as Brundtland, which "warned humankind that it must change its way of life and business interaction if it did not wish to enter an era of unacceptable levels of human suffering and ecological degradation" (Comisión Mundial del Medio Ambiente y el Desarrollo, 1987). One of the first definitions of sustainable development: "that which meets the needs of the present without compromising the ability of future generations to meet their own needs" (Comisión Mundial del Medio Ambiente y el Desarrollo, 1987).

"The concept of sustainability is based on the recognition of the limits and potentialities of nature, as well as on environmental complexity, inspiring a new understanding of the world to face the challenges of humanity in the third millennium. The concept of sustainability promotes a new nature-culture alliance, founding a new economy, reorienting the potentials of science and technology, and building a new political culture founded on the ethics of sustainability — in values, beliefs, feelings and knowledge — that renews existential senses, life worlds and ways of inhabiting planet Earth" (T. Tangencial, 2002). By 1992, and as a result of the document "Our Common Future", the UN organized the "Earth Summit Meeting", [Rio de Janeiro, Brazil] where 178 states from all over the world recognized the seriousness of the global ecological situation. The meeting resulted in commitments to rehabilitate and prevent damage to the ecological environment. However, many of the more developed countries, seeing their economic interests affected, subsequently declined to fulfill their commitments. For their part, the developing countries did not receive any help to alleviate this problem and the environment continued to deteriorate. It is worth mentioning that since this event, summit meetings of this nature have been held every one to two years in different countries, but with the same purpose.

However, to date, the levels of deterioration are worsening day by day and the reversibility of the situation is no longer a simple matter, given that it affects the entire planet and, in the opinion of experts, is dangerously close to econocide. It is well known that the problem of the environment is interrelated with all the activities of human coexistence and that its solution must be an immediate priority.

Unfortunately, there are still companies that continue with their traditional polluting and environmentally unfriendly practices in their production, manufacturing, storage, transportation and distribution processes, refusing to adopt green logistics, they do not understand that this transition will generate competitiveness and permanence in the long and medium term, because according to the "2030 agenda for sustainable development of the UN, in

its 17 goals and 169 targets, marks the route to follow towards sustainability or sustainability of the planet" (United Nations, 2014, pp. 16-41).

The adoption of this Agenda (2030) took place in "Paris, France, in September 2015, in the framework of the COP" where 193 world leaders agreed to search for common strategies to curb climate change and seek conservation, preservation and mitigation mechanisms to address it; reduce the impact on the environment and stop the deterioration that is taking place by leaps and bounds in every human activity carried out.

To understand climate change, there is what is called "climate science, derived from the earth sciences and more directly from the atmospheric sciences. It has to do with the study of the variations of the planetary climate, whether seen globally or in its regional expressions in different periods of time, short or long. The study of climate considers both the changes that take place in the interior of the planet and their relationship with solar activity, the interaction of both and the effects of human activity. In recent decades the study of planetary climate variability has emphasized the role played by the modern industrial period, especially for its intensive use of fossil fuels and the high concentrations of carbon that this has brought to the atmosphere" (José Luis Lezama, 2014, pp. 104-117).

In operational terms, it can be said that climate change is the modification of the climate with respect to the previous climate history on a global or regional scale, this change has affected the alteration of the planet's seasonal stages (spring, summer, autumn and winter), previously specifically determined, but now increasingly extreme.

There is a fear that if mitigation mechanisms are not implemented to stop this phenomenon, the consequences will be fatal, some of them are already a reality, since there are already extinct species of animals and plants, cyclones, hurricanes and torrential rains are becoming more and more constant; The implications for human health are enormous, as illnesses and deaths are increasing every year, according to "Margaret Chan, Director General of the World Health Organization, a United Nations agency, who indicated that in 2012 alone, atmospheric pollution, related to climate change, caused 7 million deaths, which represents one out of every 8 deaths worldwide"[1].

Therefore, green logistics plays an important role in sustainable development, being an integral part of the supply chain of a company, today has the opportunity in this new phase, to make their processes can represent an option in their good practices and manage to reduce the carbon footprint, greenhouse gases (GHG) and water footprint; this new trend of green logistics, sustainable, sustainable or eco-logistics, as it is known, can be the solution to mitigate climate change of anthropogenic origin.

6. What Is Green, Sustainable, Sustainable Logistics or Eco-logistics?

Several authors refer to green logistics as sustainable, sustainable or eco-logistics. For the Inter-American Development Bank, "sustainable logistics seeks to reduce the ecological impact of logistics activities. In the past, the cost of logistics was defined exclusively in monetary terms. However, as concern for the environment grew, companies began to take into account the negative externalities of the activity, including climate change, air pollution, noise, vibration and accidents. Sustainable logistics explores how to reduce these externalities to achieve a balance between economic growth, environmental care and social welfare".[2]

[1] Available online at: http://www.20minutos.es/noticia/2223792/0/cambio-climatico/riesgo-salud/oms/#xtor=AD-15&xts=467263.
[2] Available online at: http://logisticsportal.iadb.org/node/2023.

Another concept, "eco-logistics", is the activities related to choosing the best possible means, modes of loading and transport routes and reducing the environmental impact of the entire supply chain. Some of the areas clearly concerned are product packaging, means of transport and product development, among others (Serra de la Figuera Daniel, 2005, p. 33).

Another definition, Green Logistics, is "the comprehensive transformation of logistics strategies, structures, processes and systems for companies, business networks serving to create environmentally sound logistics processes and efficient use of resources" (Montaño Alexander, Domínguez Lesly, Luo Carolina, Abrego Paola, 2015, p. 3).

Also, "green logistics is the process of measuring and minimizing the ecological impact of traditional logistics activities" (L. O. Vega de la Cruz, C. E. Marrero Fornaris, & M. C. Pérez Pravia, 2016, pp. 154-169).

Inherent to green logistics, we have reverse logistics, which is defined as; reverse logistics is defined as "the process of planning, implementing and controlling the efficient and cost-effective flow of raw materials, in-process inventories, finished goods and related information from the point of consumption to the point of origin, for the purpose of recovering value or disposing of them properly. More specifically, reverse logistics consists of the process of moving goods and merchandise from the final point of destination to capture value or dispose of them properly" (Serra de la Figuera Daniel, 2005, p. 117).

Returns to suppliers, necessary repairs of products, reuse and/or recycling of materials, restoration of damaged or defective products, remanufacturing or reprocessing of products, recycling of product components, remanufacturing, disposal of non-hazardous materials, sale of second-hand products, recovery of containers, packaging and hazardous waste for proper disposal, etc.; not forgetting that one of the main goals is the recovery of value, as much as possible of the goods that are returned.

It can be said then, that green logistics tries to minimize the ecological impact or if possible eliminate it from the beginning of the supply chain; its primary objective is to achieve a balance between economic growth, environmental care and social welfare.

7. Green Logistics Activities

The reduction of the carbon footprint and the water footprint are the main factors that must be reduced in all green logistics activities; the first is understood as the carbon footprint, the measurement of the amount of carbon dioxide emissions generated directly or indirectly by a company's supply chain, by one or more activities during the life cycle of a product; the second is the water footprint, which is the total volume of fresh water used by a company in all its activities.

In general terms, logistics comprises "the activities of freight transportation, warehousing, inventory management, material handling and all related information processing. The supply chain of a typical product starts at the source where the raw material originates and continues through the production and final distribution phases. Green logistics comprises a set of common practices aimed at reducing the environmental footprint and adverse social impacts of the freight forwarding industry and its related logistics services. In the wake of concerns stemming from climate change, freight forwarding companies have ventured into the field of green logistics through the internalization of externalities produced by air, noise and pollution arising from production processes" [3].

[3] Con base en Logística verde y sostenibilidad: Retos y oportunidades, Nota basada en varias iniciativas de investigación financiadas

Green logistics should also offer energy efficiency models (monitoring of energy savings), monitoring of CO_2 and GHG emissions, water savings and duly grounded in mandatory environmental regulations.

Use of green transportation, inbound with raw materials and outbound for product distribution, using alternative and/or clean energies (biodiesel, bioethanol, hydrogen or electricity, etc.) instead of fossil energy, in conjunction with route optimization.

If possible, use sustainable construction materials for the green warehouse, maximize the energy used, use of solar panels for lighting, the raw material to be stored should be the least exploited in its extraction and make the most of it, avoiding waste, minimum use of water (water footprint), use of maneuvering machinery that guarantees a minimum of energy.

Regarding the materials used for packaging, packing, palletizing and green labeling[4], they must be biodegradable and efficient.

To achieve a correct green logistics, a plan must be established with the company, suppliers and customers, in such a way that synergies are formed for a joint work and with positive results for all in favor of the environment and taking care of the carbon[5] and water footprints.

Finally, the supply chain must be green, as it goes hand in hand with green logistics; the United Nations Global Compact, called on all companies worldwide to voluntarily align their operations and strategies with ten universally accepted principles in the areas of human rights, labor, environment and anti-corruption, and to adopt measures in support of the UN's goals and themes. Endorsed by CEOs, the UN Global Compact is a leadership platform for the development, implementation and dissemination of responsible corporate policies and practices. Launched in 2000, it is the largest corporate sustainability initiative in the world — with more than 12,000 signatories from businesses and key stakeholders in 150 countries (United Nations, 2015).

8. International Legal Regulation for Green Logistics.

There are rules, laws, agreements, treaties, etc., in order to regulate and carry out the establishment of green logistics, some of these regulations are mentioned below.

1) Within the family of ISO 14000 Standards, referring to environmental management, there are: 14001, 14004, 14010, 14011, 14012, 14013, 14014, 14015, 14020, 14021, 14022, 14023, 14024, 14031, 14032, 14040, 14041, 14042, 14043, 14044, 14050, 14060, 14064 and the others that will evolve.

2) Within the family of ISO 50000 Standards, referring to energy efficiency are: 50001, 50002, 50003, with their projections to 50004, 50006 and 50015 and those that continue to be updated.

3) Within the family of Standards referring to the Social Responsibility of organizations in terms of social, environmental, legal, cultural and political diversity, there is ISO 26000.

4) ISO 28000, globally recognized to evaluate the best practices in safety and risk management of the supply chain for any type and size of organization, is supported by ISO 14000.

5) Agreement on Environmental Cooperation, in the framework of the T-MEC (Mexico, USA and Canada), Kyoto Protocol, Montreal Protocol, International Convention for the Prevention of Pollution from Ships

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por el Banco Interamericano de Desarrollo entre 2010 y 2012, pp. 1, 8.

[4] Green labeling: is the seal that numerically represents the amount of carbon dioxide emissions in the manufacture of a given product.

[5] Carbon footprint is a count of the carbon dioxide (CO_2) emissions that are released into the atmosphere due to our daily activities or the commercialization of a product.

(MARPOL), Vienna Convention, Framework Convention on Biological Biodiversity, Ramsar Convention, Basel Convention, Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, Stockholm Convention, Aarhus Convention, International Treaty on Plant Genetic Resources for Food and Agriculture, etc., among many others.

There are also a great variety of conventions on the subject of environmental care, in all its different areas of application in human life.

One that is worth mentioning for its current relevance is the COP 21 (Framework Convention on Climate Change), under the UN, held in Paris, France in December 2015, where the first universal agreement to combat climate change was carried out, where the following was formulated:

"It aims to keep the global average temperature well below 2 degrees Celsius above pre-industrial levels, although countries commit to make every effort to keep it below 1.5 degrees Celsius to avoid catastrophic impacts. The adopted text was ratified as of April 22, 2016, International Mother Earth Day, and to be effective it will require the signature of at least 55 countries. It is also noted that the agreement will be deposited at the United Nations headquarters in New York"[6].

9. Some of the Entities Involved in Achieving Green Logistics Worldwide

UN (United Nations) with all its participating bodies, EEA (European Environment Agency), EPA (United States Environmental Protection Agency), WTO (World Trade Organization), TEN-T (Trans-European Transport Network), IEA (International Energy Agency), IDB (Inter-American Development Bank), CCC (Climate Change Council), IATA (International Air Transport Association), IMO (International Maritime Organization), CSCMP (Council of Supply Chain Management Professionals), WCO (World Customs Organization), CDP (Carbon Disclosure Project), IATA (International Air Transport Association), IATA (International Air Transport Association), CCC (Climate Change Council), CSCMP (Council of Supply Chain Management Professionals), IMO (International Maritime Organization), CSCMP (Council of Supply Chain Management Professionals), WCO (World Customs Organization), CDP (Carbon Disclosure Project), a non-profit organization that has the largest primary database of business information on climate change in the world, CEMDS (World Business Council for Sustainable Development), among many others.

10. Results of the Implementation of Green Logistics, Cases Europe and the United States.

There are two cases where green logistics has had positive impacts, Europe and the United States, as shown in Table 1.

Table 1 Positive Impacts of Green Logistics Implementation, Cases: United States and Europe

United States	Europe
• Reductions of up to 28% in CO_2 emissions to the atmosphere thanks to improvements in transportation processes and moreover, • A 4% reduction in expenses for the benefit of the companies that implemented these improvements.	• 64% of companies in Europe plan to include environmental issues in their strategies, • Sixty percent already measure their emissions and many have active programs to manage their environmental impact and increase energy efficiency.

Source: Green Initiatives in Logistics, http://blogdelogistica.es/iniciativas-verdes-en-logistica/, February 14, 2018.

[6] Available online at: http://www.ecointeligencia.com/2015/12/conclusiones-paris-cop21.

"Green logistics in Europe has been driven by three important reasons, which in turn are the reasons for companies to take an interest in their processes: green logistics improves customer relations, improves public relations with the community and reduces fuel costs. In addition, a greater awareness of the environmental aspect and the negative impact of each logistics task is beginning to develop. For example, in some countries, 85% of the total carbon emitted is produced by freight transportation. This other fact is also shocking: four liters of oil used by an engine produce 11 kilograms of carbon that pollute the atmosphere. It is therefore a great responsibility for logistics companies to take action to respect the environment; progress is being made very quickly on these issues, in fact they are already thinking of implementing product labels with information on the carbon footprint they generate. Sixty-four percent of European companies plan to include environmental issues in their strategies, 60% already measure their emissions and many have active programs to manage their environmental impact and increase energy efficiency. The concern for green logistics is also present in the United States, where a recent study showed reductions of up to 28% in CO_2 emissions into the atmosphere thanks to improvements in transportation processes and also a 4% reduction in costs for the benefit of companies that implemented such improvements. Some of them, for example, may be the use of less polluting and more economical cargo vehicles that use less fuel per transport unit, the use of hybrid or electric type vehicles or vehicles such as those promoted by the Electro-mobility project that combines combustion engines with electric ones, etc.; in addition, in the area of loading and unloading, the human factor and the training of work personnel is another key point of improvement. Globally, according to the World Economic Forum, the logistics industry is responsible for 6% of greenhouse gas emissions and therefore contributes heavily to toxicity around the world; reason enough to pay more attention to these issues"[7].

As can be seen, green logistics in both cases is an opportunity to improve logistics processes and thus try to reduce the percentage of emissions caused by traditional logistics processes.

11. Some International Companies That Are Successfully Implementing Green Logistics

In different forums these companies have made known their strategies regarding the green logistics they are implementing in their processes.

Table 2 International Companies With Green Logistics Implementation

Company	Green logistics strategy
Bimbo	An example of sustainability, it uses renewable energies and is an environmentally responsible company, but it did not stop there; in its distribution, it builds and designs electric vehicles for its logistics.
The Home Depot	Reverse logistics to its credit, this retailer with more than 120 stores in Mexico, recycles up to 15 million tons of wooden pallets per year and, in 2019, recycled more than 6.8 million kilos of plastic waste. To achieve this, it involves its points of sale, distribution and reverse logistics centers, manufacturers and even its customers. Once the material has been collected, it is consolidated in its reverse logistics centers instead of being sent to landfills, to be transformed into other products or reused. In September 2020, the Council of Supply Chain Management Professionals (CSCMP) awarded the 2020 Supply Chain Sustainability Award.
DHL	Electric mobility to reduce CO_2, since 2008, the company decided to increase carbon efficiency by 30%; under this premise, it has developed electric mobility projects, contributing to CO_2 reductions and boosting its logistics operations. In addition, the company will fully reduce logistics-related carbon emissions in order to achieve zero emissions by 2050. And it plans to expand its green offerings to help its customers with their own climate protection goals.
Schneider Electric	A zero-emissions factory is possible, in October last year presented its first zero-carbon plant in Mexico, a success story and a benchmark of sustainability, in addition, the company achieved first place in the ranking of the 100 most

[7] Available online at: http://blogdelogistica.es/iniciativas-verdes-en-logistica.

	sustainable global corporations by Clean Capitalism Corporate Knights magazine.
CHEP and Amazon	Green Logistics in the Last Mile, Australian company CHEP, a global manufacturer of pallets and which has remained true to its sustainable genetics, teamed up with Amazon for a pilot program in India that aims to reduce environmental impact that is generated in e-commerce. What is it about? It consists of the use of a small standard-size container that will be used in last-mile logistics to reduce the excessive consumption of plastic and cardboard in packaging, in order to minimize the impact on the environment.
FEMSA	Sustainable and strategic logistics, one of FEMSA's differentiators is its last mile model. In this process, damaged or out-of-date products are collected and transported from the points of consumption to the distribution centers; with this service, FEMSA achieves a reduction in the percentage of wastage and preserves the value of the product
Inditex	Sustainable round-trip transportation, optimizes the loading of its trucks to improve its logistics, maximizing the average occupancy of the trucks that serve its distribution centers. In addition, the company uses these same trucks as a means of transporting returns from its stores in an efficient manner, thereby significantly limiting its transport-related emissions.
IKEA	Optimized logistics, one of the main factors in the success of this company is to reduce as much as possible the number of movements of its raw materials and products. Several of the products in its cedis go from the manufacturing area to the store, without passing any logistical distribution points; in addition, IKEA considers the possibility of taking products that have been returned for recycling.
FedEx	Generating positive energy, as a leading global logistics company, is constantly striving to reduce carbon emissions. As an example, the Hoofddorp building in the Netherlands, which is carbon neutral by being "positive energy" and supplying heat to surrounding buildings.
UPS	Transportation with less impact, the company has adopted a global approach to reduce greenhouse gas emissions from its facilities and fleets. In addition, its network is optimized so that it consists of a single integrated system that handles all services; UPS looks for efficiencies to invest in vehicles with advanced technology and alternative fuels that cause less environmental impact.

12. Conclusions

Green logistics will contribute to formalize the keys to maintain favorable conditions for the development of human life at global, regional and local levels, so it is the direct responsibility of companies, to be implemented in the short and medium term; this should be from the beginning of the supply chain, to the final consumer, to avoid the destruction of the diversity of ecological systems that support life, relying on the responsibility that these organizations have from their management regarding their policies and good practices they want to adopt in the long, medium and short term.

The corporate image is undoubtedly the most relevant factor and represents perhaps the only hope of being able to change the catastrophic expectations that await us as humanity, if we do not change the bad actions we are doing to our planet. Consumers and companies are increasingly aware of the problem, so sustainability has become an essential aspect of Corporate Social Responsibility. As well as the cases in the United States and Europe, they are expected to be replicated around the world.

This paradigm shift, towards green logistics that companies must adopt, will have to be fast, effective and efficient, directed towards customers, suppliers, government, etc., adding value to their organization through this action that will make them different from the rest of their competitors, generating competitive advantages. As Michael Porter says in his "theory of competitive advantages, a company must take advantage of these advantages, so that in this way it is reflected in its performance before its customers by changing the logistics it has always used for green logistics, and that through the whole process that companies change in their production chain by becoming sustainable, they develop differentiation potentials before their competitors".[8]

For now, the differentiation of this green logistics will represent high costs, however it is the best investment for the conservation of life on this planet; it will represent a balance between the three fundamental parts of

[8] Available online at: http://blogdelogistica.es/iniciativas-verdes-en-logistica.

sustainability (economic, environmental and social). The three must represent the same value in importance, as shown in scheme 2; and ethics can be added; which added to the other three factors, will become the greatest competitive advantage.

The result of green logistics will represent a better standard of living in economic terms, which will be reflected in society in general, with an environmental awareness based on clean production, from the beginning of the supply chain and in each logistics process.

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