

An Investigation on the Social Economic Environmental Dimensions of Sustainability Efforts Logistics Managers in Turkey

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Abstract: *Advances in these elements, which are the driving force of development, are indicators of the development of countries. Alone, economic power isn't sufficient for development. Sustainable development is affected by environmental, economic and social factors. The subject of this research is environmental, which will bring a contemporary vision to the goals of the logistics sector of sustainability, which is frequently encountered in business literature, awareness is a concept that will be a power factor in competitive competition. In this research, the reflection of the concept of corporate sustainability in the logistics sector in BIST Sustainability Index was investigated. The aim of the research is to measure the sustainability of logistics companies according to managers perception. Since the number of companies, which declared concordat after the corona virus epidemic, closed, and the number of companies increased, existence problems, beyond the existence problem in the face of competition, have been raised. In this study, the sensitivity of logistics companies to three dimensions of sustainability (economic, social, environmental) is discussed. In the survey prepared with qualitative research technique, the 5-point Likert scale was used. The surveys were distributed to managers working in logistics companies in Istanbul. 119 questions were asked in the questionnaire prepared for the research. In the study, it was seen that managers perceive the economic, social and environmental aspects of sustainability as moderate.*

Keywords: Logistics, Sustainability Economy, Trade War, Recession, Development

1. Introduction

With the re-development and quality movements that started after the Second World War, concepts such as consumer rights and environmental awareness have entered the subjects of management science. Since the success of the enterprises is evaluated with the fulfillment of external environmental demands, the demands of internal and external stakeholders were measured with surveys and strengths and weaknesses were determined with SWOT analysis. The companies that affect the society and have a conscious customer potential with their environmentally friendly images certify their work under the name of sustainability.

Since companies are an open system, they strengthen their sustainability by meeting external environmental demands. It has been seen that companies affecting each other in the sector, that the society and other businesses affect their social responsibility behaviors, and radical changes have occurred in management. The modern management approach, which sees businesses as an open system, brought the concept of Corporate Social Responsibility to the management literature.

Internal stakeholder brought new approaches to corporate social responsibility management approach in response to external stakeholder demands. All sectors document their successful performance and announce them to the public on their web pages. In the sustainability report, which we frequently encounter in scientific research today, social responsibility studies and quality improvement studies are among the administrative studies of almost every sector.

In this research, the sustainability concept, index and literature on corporate sustainability concepts are included. The study included the sustainability studies of the managers working in the logistics sector and the research was limited to the sustainability studies in the logistics sector.

Continuity and Sustainability Concept

The word continuity means continuous, uninterrupted, uninterrupted continuity in the Dictionary of the Turkish Language Association. In Turkish, the word continuous is used instead of continuity. In Ottoman Turkish, the word "mutad" in the legal language is used instead of the Turkish word continuity (TDK, 2020). Sustainability means the ability to continue. According to the World Bank Report published by Soubbotina in 2014, sustainability means having similar conditions to meet the rights of everyone and to ensure equality between today's generations to protect future generations. Sustainability is a participatory process carried out to create and adopt a vision of a society that uses all its resources in a respectful and measured manner "It is a development that meets the needs of today without compromising the ability to meet the needs of future generations" (WCED, 1987). In the report of United Nations World Environment and Development Commission titled Our Common Future in 1987 (Paun, 2018, p.2). The concept of sustainability to meet the needs of today without compromising the ability of future generations to meet their own needs. has been defined as (United Nations 1987, 16). (Paun, 2018. p.16).

In 2012, the issue of sustainability was discussed in the content of the Green Economy, which was voiced by the UN at the RIO + 20 Sustainable Development Conference. The green economy includes energy saving in all areas, food consumption, disasters and cleaning the seas. As a result of this study, it was requested to measure the sustainability in

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the economy and to publish it with an index. Sustainability is a series of long-term activities that bring vision and prestige to the organization.

It's main components are economic, social and environmental factors. Continuous improvement of economic, environmental and social factors and continuous improvement of these issues in all management processes ensure the continuity of the institution.

The most important element of a business activity is continuity. Since an institution whose continuity is in danger, doesn't have prestige inside and outside the institution,

Institutional sustainability is considered as the management of enterprises providing the initiatives they need in case of difficulties that may or may arise in the progress of enterprises towards their sustainability goals (Schaltegger S. C., 2002., p.2).

Sustainability mainly focuses on the environment, society and economy and is in their common denominator (Akar, 2014). In Istanbul Stock Exchange (BIST), with the idea of providing guidance to those companies, environmental, economic and social, which was published in the BIST Index corporate governance. Content analysis of sustainability reports allows for in-depth analysis of the issues and patterns used by companies while communicating their sustainability initiatives to their stakeholders and to reveal the underlying meaning of the issue ((Hsieh, 2005, p.1277) (Albayrak, 2019, p.7).

For sustainability global trends are

- 1) Climate Mitigation
- 2) Changed Climate
- 3) Circular Solutions
- 4) Plastics
- 5) Sustainable Consumption
- 6) Supply Chain
- 7) Protecting Biodiversity
- 8) Tech for the SDGs
- 9) Human Capital
- 10) Global Finance.

Global asset managers in the US, Europe, Japan and Australia are paying attention to growing client appetite for investment products that benefit society and the environment. Simultaneously, both banks and institutional investors are facing increasing public criticism for continuing to support carbon intensive fossil fuel companies (<https://trends.sustainability.com/#global-trends>, 2020) .

The concept of development associated with the concept of sustainability includes not only the production of goods and services, but also the performance in more social indicators such as equality, freedom, income distribution, justice and health. From this perspective, sustainability is perceived as an egalitarian social goal. In addition to all these, businesses and people aim to survive by adapting to changing environmental conditions (Duran, 2018, p.9).

2. Review the Literature

According to the research conducted by Burritt et al. in 2011. it was seen that they made significant strides in supply chain management activities, which form the basis of their corporate activities especially for manufacturing companies, thanks to the sustainable development practices at the corporate level.

Farneti ve Guthriea (2009) to date research has been primarily focused on what organisations report, and why organisations undertake SR. Interviewing a number of preparers for each public sector organisation, imposed practical limits on the number of organisations and interview in Australia. 25 of transcribed interviews were analysed. In conclusion, corporate SE reporting is an established practice and have attached a comprehensive literature. Practitioners have also begun to realize the importance of acting and reporting in a sustainable way, however, this has been slow in public sector organisations (Uzun Kocamis, 2016).

Yıldırım et al. (2018) examined the impact of financial performance on sustainability reporting on businesses included in the BIST 100 index. In the study, the hypothesis that financial performance increases the probability of businesses reporting sustainability has been tested with various statistical methods. Sustainable Supply Chain Management Model Turkey has been applied in the natural gas sector (2019). In the research conducted by Zeynep Aslan and Raif Serkan Albayrak in 2015, the corporate sustainability report of the Arçelik company was studied and the variables consisting of 51 elements based on the vision, culture and image model were determined. In the BIST Sustainability Index, 54 sustainability elements were identified. In Turkey, Semih Büyükepekç made by the Sustainability Reporting: The research is published between the years 2008-2017 sustainability report have been examined.

According to the results of this research, the number of companies publishing logistics reports in sustainability reports published between 2008 and 2017 are given in Table 1. It is seen that 1 company published a sustainability report in the logistics sector in 2010-2015. In 2014, two companies published sustainability reports (Abdurrahman, 2019).

Table 1 Sustainability Reports Published 2015.

Sectors	2015 March	%
Total Exports	12.569.747	100,0
Agriculture and forestry	490.01	3,9
Fishing	26.725	0,2
Mining and quarrying	187.141	1,5
Manufacturing	11.813.286	94,0
Other	52.586	0,4

Source TUIK , 2015.

2.1. Turkey's Transportation Sustainability Report

Transportation sector is an important element of the economy with highways, railways, airways, maritime lines and communication network and influencing the society.

Turkey is determined to create a sustainable transportation system which provides safe, accessible, comfortable, fast and environmentally sensitive services and contributes to the increase of competitiveness and quality of life. Within this framework, it is targeted to:

- Increase the share of railways up to 15 percent in cargo transportation and 10 percent in passenger transportation as of 2023;
- Decrease the share of highways below 60 percent in cargo transportation and to 72 percent in passenger transportation as of 2023;
- Control the emissions caused by the use of private vehicles in urban transportation.

Public transportation was prioritized by improving railway infrastructure. In this respect, intercity high speed train and electrified tracks were extended, vehicles were renewed and signalization systems were improved in order to increase the quality of railway services.

Optimization of flight routes and modernization of air traffic system contributed to the increase in the energy efficiency and minimization of environmental effects in Turkey (https://wedocs.unep.org/bitstream/handle/20.500.11822/9641/-Turkeys_Sustainable_Development_Report-2012Turkey_SustainableDevelReport_2012.pdf.pdf?sequence=3&isAllowed=1).

Table 2: Number of Companies Closed in Transportation and Storage Area

		Company Types				Grand Total
		Anonym Collective	Cooperative	Limited	Cooperative	
	Number	6.289		40.873	646	47.819
	Capital (TL)	4.701.823.615	1.640.000	12.382.249.525		17.085.713.140
Capital increased	Number	5.253	49	12.300	4	17.606
	Old Capital(TL)	168.775.420.669	8.937.655	21.064.057.003	14.100	189.848.429.426
	New Capital (T)	471.581.295.652	38.062.531	63.944.184.381	197.700	535.563.740.264
Capital decreasing	Number	-	-	-	-	263
	Old Capital (TL)	-	-	-	-	19.837.396.321
	New Capital (TL)	-	-	-	-	12.943.858.856
	Number	1.387	27	2	5.216	509
						7.141

Source: Turkey Trade Registry Gazette

The number of companies closed in the field of transportation and storage is 152, and the number of Anonymous Transportation companies is 40.

Table 3: Number of Companies Closed in Transportation and Storage Area

- TRANSPORTATION AND STORAGE						
Total	322	135.819.200	152	4.874.512.353	8.348.127.675	62
Incorporated company	48	39.009.000	40	4.690.179.253	7.629.903.275	9
Collective Company	0	0	0	0	0	0
Commandite Company	0	0	0	0	0	0
Limited Company	266	96.810.200	110	184.319.000	718.182.500	42
Cooperative	8	0	2	14.100	41.900	11

Source: Turkey Trade Registry Gazette

While the number of transportation companies established by natural persons was 117, the number of warehouse and transportation companies closed was 134, while the number

of transportation companies established was 314 and 51 were closed.

Table 4: The Number of Companies Closing and established in Turkey in 2019

Economic Activities (NACE Rev. 2)	Turkey and Types of Companies					
	Company		Real Person		Cooperative	
	Established	Closed	Established	Closed	Established	Closed
Transport and Storage	3314	551	1117	1134	8	11

Source www.ticaret.gov.tr

Sustainability reports advocate transparent management approach in business management. According to the Istanbul Stock Exchange (ISE) (ISE., 2011), it is stated that sustainability improves the dialogue between the internal and external stakeholders of the enterprise and the management. It also shows the relationship between financial and non-financial performances.

2017 enterprises in Turkey has issued 42 100 sustainability report. The situation was determined with content analysis

and it was seen that the strategy and profile explanations were detailed (Çankaya, 2018).

International Federation of Accountants (IFAC) Certified by the American Institute of Public Accountants (AICPA) In Turkey, the Public Oversight Accounting and Auditing Standards Agency (2015) perform their assurance audits of financial institutions. In the Sustainability Report, it determines the economic, social and environmental effects of the organization on economic conditions and economic systems at local, national and global levels. Since the

Sustainability report determined by the Global Reporting Initiative (GRI) standard is updated for the fourth time, it is named as G4 (Sultan khanova, p.50; Gulnur, 2019).

According to Turkey’s Trade Ministers sources Turkey Exports by Countries are Egypt, Morocco, Austria, Sweden Qatar

Table 5 Turkey Exports by Country	Last	Previous
<u>Egypt</u>	206889.5	173106.56
<u>Morocco</u>	154018.01	87363.12
<u>Austria</u>	103356.29	72318.7
<u>Syria</u>	103146.51	71745.3
<u>Sweden</u>	96870.69	66003.46
<u>Yemen</u>	84324.7	47656.87
<u>Qatar</u>	82319.18	48993.17
<u>Hungary</u>	81881.35	66188.78
<u>Kazakhstan</u>	75830.05	55452.59
<u>Switzerland</u>	70383.99	138518.76
<u>Portugal</u>	67729.22	48748
<u>Hong Kong</u>	64295.22	17654.79
<u>Brazil</u>	62504	29983
<u>Turkmenistan</u>	57545.63	57771.67
<u>Tunisia</u>	55104.55	40061.56
<u>India</u>	45754	27915
<u>Jordan</u>	42836.3	32014.22
<u>Lebanon</u>	40670.5	33908.02

<u>Ireland</u>	39440.39	32054.25
<u>Bosnia and Herzegovina</u>	36264.32	24151.75

Source: <https://tradingeconomics.com/turkey/exports.2020>

In 2017, Turkey's major exports were: machinery and transport equipment (31 percent of total exports), of which road vehicles (15 percent) and electrical machinery, apparatus and appliances (6 percent); manufactured goods (25 percent), of which textile yarn, fabrics, made-up articles (7 percent), iron and steel (6 percent) and manufactures of metals (4 percent); miscellaneous manufactured articles (18 percent), of which articles of apparel and clothing accessories (10 percent); food and live animals (9 percent), of which fruits and vegetables (4 percent); chemicals and related products (6 percent); and gold, non-monetary (4 percent). Turkey's main export partners were: Germany (10 percent of total exports); the UK, the UAE, Iraq and the US (6 percent each); Italy (5 percent); France and Spain (4 percent each) (<https://tradingeconomics.com/turkey/exports.2020>).

Exports in Turkey increased to 13.462.16 USD Million in June from 9956.30 USD Million in May of 2020.

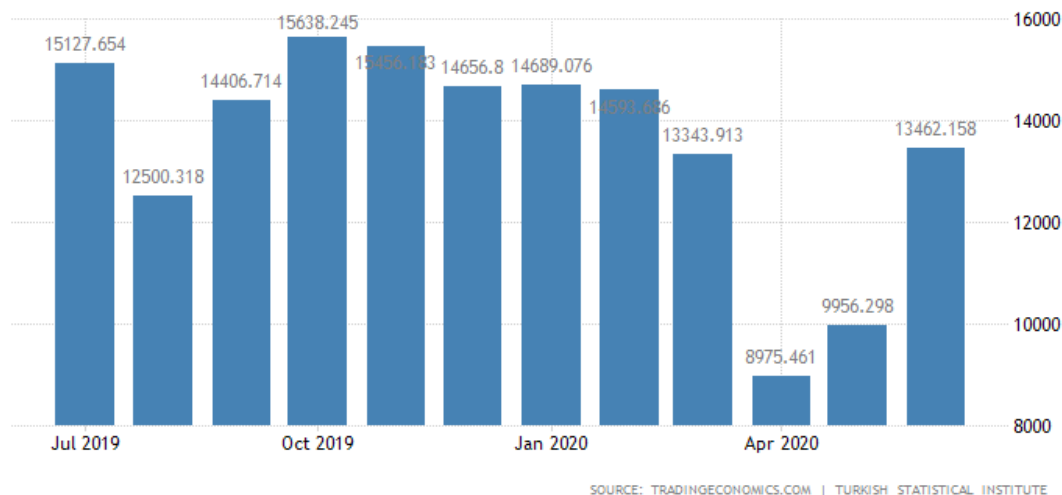


Figure 1: Turkey export 2020

Source: <https://tradingeconomics.com/turkey/exports>

Turkey, which has published sustainability report 2017. 42 businesses, 100 sustainability report has attempted to identify cases subjected to content analysis.

As a result of the study, it was determined that the strategy and profile explanations in the sustainability reports included in the analysis were more than the explanations of the management approach and performance indicators.

Özkan et al. (2018) examined how corporate and social responsibility affects business profits, and 35 businesses included in the BIST Sustainability Index were discussed.

Gümrah and Tanç (2018), who conducted research on sustainability reports, analyzed the content quality and analyzed the 2014 and 2015 reports of the enterprises included in the BIST Sustainability Index. The quality score

of each report is the need for the development of sustainability reports in Turkey have been calculated by determining whether completed. Research carried out to date in Turkey in the sustainability reporting isn't yet noted that it continued to complete the process (Valerie Ekergil, 2020).

3. Sustainability During Commercial Wars

The economist Sung Won Sohn has eliminated the trade wars, expectations of confidence in the market. As companies are negatively affected by the tension in the global trade war, investment expansion, employment sustainable strategies, targets enter a recession period and are delayed. Economic declines occur over time as trade is affected by unpredictable political behavior.

The second decline in the industry in Germany in the last three months is attributed to the decline of the Chinese economy. The slowdown in exports in China is a reason for economic decline in another country, such as the links of the chain, or progress for countries that are evaluating risks. The steel tension between the USA and China has affected the economy and brought recession and recession concerns in the global economy. With Donald Trump adding new customs duties to Chinese goods, China's retaliation and stopping to buy agricultural products from the US, the commercial war affected the global economy like the links of the chain. Since commercial wars put sustainability in the background, there is concern for the continuity of companies.

Japanese factories were affected by this war as they exported technology and electronic equipment to China. Following the peace talks between Trump and the Chinese leader, the knowledge that customs duty will be imposed on Chinese imported products since September has created instability in the world economy.

The main reason for China being accused by the USA is that the USA's support of Chinese companies with government subsidies is against the Competition Law and also does not respect cyber theft and intellectual property rights. For this reason, the USA imposes a customs duty on China's toy, clothing and smartphone manufacturers. Worldwide manufacturers slowing production, balancing stocks with customer demand, economic instability and unpredictability are related to the visions of world leaders. Every decision, both positive and negative, made by world leaders affects the links of the chain. For example, the tax that Trump will impose on China has caused the development of different dynamics in China, Japan and EU countries.

In fact, what seems to be negative is a new step for leaders who turn risks into opportunities so that other positive developments can occur.

Japan's announcement that it will increase consumer taxes as of October, British Prime Minister Boris Johnson's desire to leave the European Union without an agreement endangers the achievement of the economic, political and social goals of the agreements establishing the EU. All the developments that seem negative at first glance reveal the need for a new change in the world. The world needs innovations for continuous change.

The customer, who does not always want to buy the same product, is in search of a new market. World leaders also want to take a role in the search for new markets. According to a study conducted by Oxford Economics in 2019, in the month of July 12-August, companies risked an economic decline of 56 percent. The risk of regression, which was 32% in the previous months, was 56% in July and August, indicating that the regression increased. This decline is attributed to trade wars. As the money markets, exchange rate imbalances and economic life, which are affected by every move of the world leaders, turn crises into opportunities, they will profit from these dangers.

An increase in the issuance of both green and social impact bonds is likely as demand for investments that positively

affect society and the environment continues to grow. We may also see increased scrutiny regarding the burgeoning ESG product market, with industry experts more astutely assessing the actual impact of products using improved social and environmental measurement data. Meanwhile investors will become increasingly active in engaging companies on climate change risks and opportunities — both through direct conversations with executive leaderships as well as proxy voting and divestment (<https://trends.sustainability.com/2020/sustainable-finance/>, 2020)

Logistics companies, which have closely followed technological developments in recent years, they have included sustainable logistics studies in R&D activities.

Firms that have to act proactively against sudden risks have included the goal of sustainable development among their strategic goals. Sustainable development requires the continuity of good examples, benchmarking, continuous quality innovation and change, and economic dynamism that will increase customer satisfaction in a competitive environment. Since the long-term commercial relations are a result of political and political trust, countries take their political and political steps carefully while determining their strategies. Since trade wars steer trade relations, politicians must be in a positive atmosphere in foreign relations for long-term planning of investments, increasing foreign trade movement, establishing the balance of payments, closing the current account deficit, and continuity of commercial relations. One of the factors that ensure continuity in foreign trade is the harmony of legislation between countries. The codification of the legislator in domestic law in the settlement of commercial disputes is the element that ensures continuity. The main reason why sustainability is on the agenda in the global world is that companies want to stay on the pie share. As companies became active in international trade, they took on new responsibilities. The evaluation of quality in all processes from the production of the product to the receipt of the customer has made sustainable quality come to the fore in the supply chain. Since the success of companies is measured by social responsibility understanding, being sensitive to social problems, being environmentalist, being environmentally friendly, companies that aim to survive are sustainable it must transform development and change into behavior. In international trade, companies have realized that development, change and continuity are necessary with new management models, from the first link to the last link of the chain, in the subject that the supply chain is expert according to the comparative advantage theory. Over time, global sustainable management models that are effective, efficient, competitive, able to manage risks, care about environmental factors have been included in the logistics literature. With globalization, the number and quality of companies that companies will compete with has increased. They continue to work that provide awareness to be preferred among thousands of companies, to maintain the brand, quality, to adopt a transparent management model in commercial business and transactions, to be unique, to be original, and to be sensitive to the environment, climate change and human health among their missions. Sustainability is a series of management activities that will

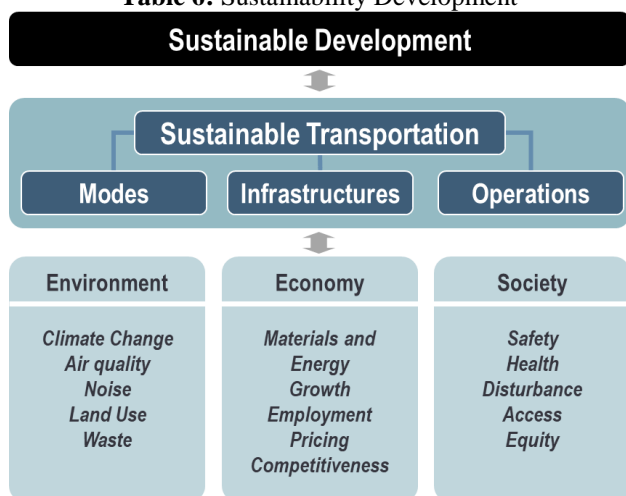
realize this mission in economic, environmental and sociological dimensions. One of the features of a business enterprise is continuity. In terms of income tax, continuity is accepted as the determinant of commercial earnings and incidental earnings (Neslihan Coşkun & Karadağ, 2018)

3.1 Sustainability and Logistics

Every day transportation between countries threatens the environment and human health due to CO2 emissions. Choosing an environmentally friendly mode of transport is about the choice of the most economical transportation in the shortest time, the sensitivity of logistics company managers who are environmentally responsible.

In Table 6 the Sustainability Development has elements of modes, infrastructures and operations in economic, environmental and sociological dimensions.

Table 6: Sustainability Development



Source https://transportgeography.org/?page_id=5725, 2020.

Storing the transported goods, preventing waste in stowage in warehouses, estimating demands, reasonable stocking, ensuring supply reliability, using intermodal transportation, giving importance to environmental sensitivity in storage

and stocking, taking measures against waste, heating and lighting buildings are sustainability studies. It provides information about modern labeling, RFID technology, barcoding, product identity in stock management.

It provides convenience in storage and transportation of the product thanks to valuable information for storage, determination of its location in the warehouse, communication. Having reliable information registered in 3PL prevents time and energy loss. The firm gains prestige thanks to effective information flow and reliable packaging.

Packaging is the dress of the brand that represents the quality of the product. Environmentally friendly packaging provides dignity and difference in society. As the logistics companies attach importance to environmentally friendly activities in their work, their acceptance rate in the society increases. This situation affects the economy. Choosing wood and paper instead of plastic goods, environmentally friendly packaging materials that can be mixed with the soil, wooden pallets, and social awareness for sustainability bring prestige in the society. Logistics companies, where recycling and wastes are evaluated, should be restructured and sustainability studies should be carried out in every process. In reverse logistics, measures should be taken to save time and energy.

It is seen that logistics companies certify their sustainability and quality as in other sectors. Below are some standards regarding the sustainability of logistics companies.

- 1) With ISO 14001-2004 Environmental Management System and Logistics Sustainability
- 2) ISO 14025 Environmental Product Declarations: EPD (Environmental Product Declaration),
- 3) ISO 14064 Greenhouse Gas Emission Measurement and Inspection Standards
- 4) ISO 14067 Carbon Footprint Standard
- 5) Euro Emission Standards Logistics companies that certify these standards develop their customer portfolio by stating that they have sustainability studies.

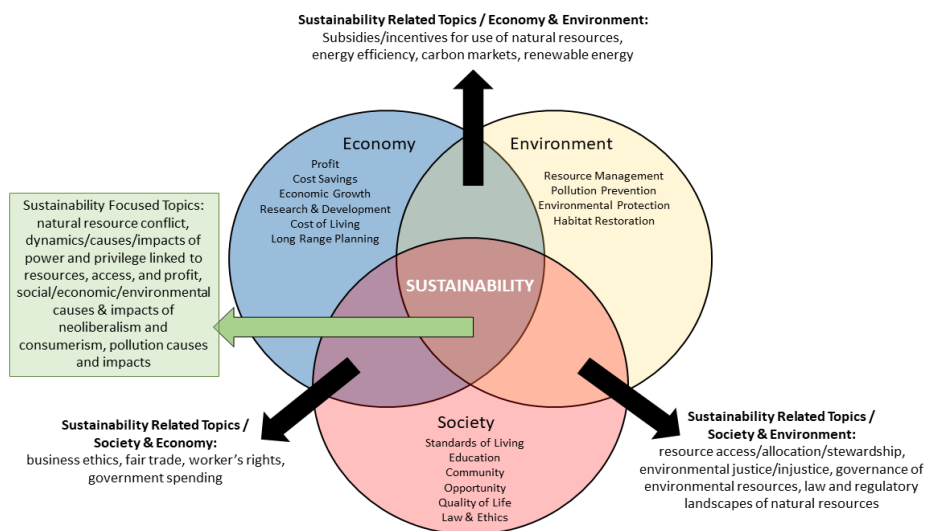


Figure 2 Sustainability Dimensions

Source <https://facilitymgmt.humboldt.edu/making-sustainability-designations>, Erişim Tarihi 12.07.2020.

Popular representations of sustainability underscore the concept's three dimensions. Sustainability experts often use a three-legged stool as a symbol for sustainability. The social, economic, and environmental components each represent one of the stool's legs. If one of the legs is missing, the sustainability stool can't balance or function. A common illustration of sustainability is the diagram depicting three overlapping circles representing environmental needs, economic needs, and social needs. The area where the circles overlap and all three needs are met is the area of sustainability (<https://facilitymgmt.humboldt.edu/making-sustainability-designations, tarih yok>).

4. Methodology of the Research

4.1. Purpose and Scope of the Research

The aim of this study is; to determine the sustainability level of logistics companies and to reveal their sustainable behavior. For this purpose, a 5-point Likert scale survey was applied to 54 managers of logistics companies working in Istanbul. The managers were asked about the sociological, economical and environmental dimensions of sustainability within 119 questions. Reliability test of the questionnaire was determined as Cronbach's Alpha test as 0.915.

Table 7: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
,915	,986	138

Everyday transportation between countries threatens the environment and human health due to CO2 emissions. Choosing an environmentally friendly mode of transport is about the choice of the most economical transportation in the shortest time, the sensitivity of logistics company managers who are environmentally responsible.

Storing the transported goods, preventing waste in stowage in warehouses, estimating demands, reasonable stocking, ensuring supply reliability, using intermodal transportation, giving importance to environmental sensitivity in storage and stocking, taking measures against waste, heating and lighting buildings are sustainability studies. It provides information about modern labeling, RFID technology, barcoding, product identity in stock management.

It provides convenience in storage and transportation of the product thanks to valuable information for storage, determination of its location in the warehouse, communication.

With ISO 14001-2004 Environmental Management System and Logistics Sustainability
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Euro Emission Standards Logistics companies that certify these standards develop their customer portfolio by stating that they have sustainability studies.

Having reliable information registered in 3PL prevents time and energy loss. The firm gains prestige thanks to effective information flow and reliable packaging.

Companies attach importance to environmentally friendly activities in their work, their acceptance rate in the society increases.

Social awareness for sustainability bring prestige in the society. Logistics companies, where recycling and wastes are evaluated, should be restructured .

Sustainability studies should be carried out in every process. In reverse logistics, measures should be taken to save time and energy .It is seen that logistics companies certify their. Packaging is the dress of the brand that represents the quality of the product. Environmentally friendly packaging provides dignity and difference in society.

Choosing wood and paper instead of plastic goods, environmentally friendly packaging materials that can be mixed with the soil, wooden pallets,

4.2. Preparation of the survey

The questionnaire, consisting of a total of 119 concepts about sustainability and 8 questions, was developed by the Association of Builders. Turkey applied to the task manager logistics company employees after the permission of the Association poll from 54 to 70 is fully filled questionnaires were evaluated. 6 of the managers participating in the research are women and 48 of them are men.

Table 8: Age of Logistics Companies

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1-5 year	5	8,9	9,3	9,3
	6-10 year	6	10,7	11,1	20,4
	11-15 year	18	32,1	33,3	53,7
	16-20 year	16	28,6	29,6	83,3
	25 year-	9	16,1	16,7	100,0
	Total	54	96,4	100,0	
Missing	System	2	3,6		
Total		56	100,0		

2 of the participants work in public institutions, 50 of them work in the private sector. The codes of the questions in the questionnaire are BIST codes.

Table 9: Sustainability Codes

Accountability,
Transparency,
Business ethics
Customer satisfaction
Worker health and work safety
Product safety
Employee and employee training
Corruption Waste
and resource management
Human rights
Innovation

Supply chain
Energy efficiency –
Eco-efficiency
Discrimination
Water use and management
Local people and relations
Climate change and Emissions
Relations with civil society
Bio - Diversity
Ecosystem

8.9% of the logistics companies participating in the research are 1-5 years; 10.7% 6-10 years; 32% 11-15 years; 28.6% of them are the companies that serve 16-20.

28.6% of them are multinational companies. 80.4% of them are the owners of the company. 14.3 of the companies belong to the public. 66.1% is completely independent and 26.8% is subsidiary. 83.9% of them stated that they did not work on social responsibility. 14.5% of them stated that they have social responsibility activities. When we look at whether there is a relationship between Social Responsibility studies and the age of the company, no significant relationship was found.

Table 10: Sustainability Perceptions of Logistics Company Managers

	Accountability,	Emphasis on Education Procurement	Supply chain	Customer happiness	Human rights	Public Relations	Transparency	Corruption
Arithmetic mean	4,2766	4,4038	4,4340	5	4,28	4,28	4,15	4,44
Frequency	47		53	53	52	52	53	50

According to the definition of sustainable development, which is defined as providing the daily needs of future generations without damaging their own needs, the arithmetic average of the answers given by the respondents to the question of how important sustainability issues are for your company was determined as 4.38285.

To the question that companies have social responsibilities, 57% of the managers answered as I completely agree with 4.

According to the study conducted by Rogers and Tibben-Lembke (2001) on the US economy, it was found that companies' recycling and reverse logistics costs are approximately 4 percent of their total costs and half of the US GNP. This study shows that recycling and reverse logistics activities and their statistical records have an important role in the economy and their importance will increase further (Tüzün, 2017, p. 19).

Sustainability has become important for companies. "31.5% of the executives completely agree, 42.6% of the managers, 24.1% of them said "I agree" or "disagree". In addition to the responsibilities of companies such as disclosing their accounting information to the public, they also have the responsibility to disclose their sustainability data and documents. This responsibility is on a voluntary basis. The society's need for assurance has spawned trust control. Understanding and managing sustainability by companies 40.7% agree, 38.9% completely agree, 20.4% "neither agree nor I also disagree".

In terms of sustainability, what states should do is to prepare legislation in accordance with international trade,

competition and consumer law in a global competitive environment. Stronger sanctions, effective supervision, mentorship and incentives should be provided for those who offer products and services for sustainability to be transparent, produce and distribute in accordance with consumer law, and compete in accordance with competition law.

The information given by the participants regarding the sustainability strategy is as follows: The weighted average of the sentence "Our company has a consistent, comprehensive and living sustainability strategy" is 3.68. 18% of those who participated in the survey stated that I totally agree, 18% agree, 19% neither agree nor disagree. 19% of them completely agree, 20% agree, 28.6% neither agree nor disagree with the statement that our company's sustainability strategy and mission coincide. While 15% of the statement "I agree completely" with the statement of our company's sustainability strategy and vision match, 21% of them answered as "I agree". It is seen that 15% of them responded as neither agree nor disagree. 36% of logistics company executives stated that their company's sustainability strategy coincided with their vision. Since this value is a low value, swot analysis should be done and the visions should be updated again in order for the sustainability strategy to match with their visions. Since a sustainability strategy that does not coincide with the vision may lead to failure, the vision of the institution on this issue should be evaluated in a working group that includes all employees.

Table 11: Sustainability Perceptions of Logistics Company Managers

	Discrimination Wastewater Bio	Occupational Health and Safety	Innovation	Product	Climate	Emission	waste water	Bio
Arithmetic Mean	4,19	4,46	4,35	4,46	3,86	4,38	3,75	3,71
Frequency	51	52	53	52	1	2	48	53

While 35.7% said I agree with the statement that our company's sustainability strategy and values coincide, 18% said I agree. He answered the question that our company's sustainability strategy overlaps with the general strategy: I agree 15% completely and 23% agree. The sustainability

strategy of our company has been understood by all employees, saying that 14% agree completely and 15% agree. Since the number of managers who say I agree is low, it is seen that the employees do not adopt the sustainability of the strategy.

14% of the participants said “I agree” and 18% “totally agree” with the statement that the differences between the targeted and realized figures regarding sustainability within the performance system are taken into consideration in the evaluation of employees in your company. When we look at the arithmetic average of the answers given by the participants to the second question, it was seen that it was 3.98. According to the results of the research, the rate of participation in the statements about the sustainability strategy is moderate.

The arithmetic average of the answer given by the participants to the question “Investments made in the field of sustainability positively affect the financial performance of our company in the medium and long term is 4.11% of those who agree, 21% of those who agree completely, customers do not only look at performance and price first.

Today, sustainability is not only used as a tool to differentiate products with similar performance and price.

At the same time, the percentage of those who say they totally agree with the question “It plays a critical role in the purchasing process in general” is 17%, the percentage of those saying “I agree” is 33.9%,

The percentage of those who say they neither agree nor disagree is 28.6.

We asked the question that the financial performance will be positively affected by the decrease in the energy consumption of our company in dollars and euros.

The percentage of those who say they totally agree is 23.2, the percentage of those who say they agree is 33.9%, and the percentage of those who say neither agree nor disagree is 28.8. The fact that the percentage of those who say they agree is 56.1 and the arithmetic average is 3.71 shows that logistics company managers are moderately sensitive to sustainability.

Low energy consumption positively affects financial performance. Since the heavy energy load is a compelling expense for the financial power of the company, the energy consumed should be evaluated as an output. Perceiving this assessment at a medium level will affect sustainability at a medium level.

Trade restriction fines for environmentally damaging goods, etc. Public Concentration in the country, the percentage of those who say I completely agree with the question of positive effects on the financial performance of their company in the medium and long term, 35.8% of those who agree, 24.5%,

Percentage of those who say they neither agree nor disagree is 30.2. The fact that the arithmetic mean is 3.8 shows that they are also moderately sensitive to the environment. The arithmetic average of the degree of participation in the concepts related to the economic dimension of sustainability is 3.3088. Managers agreed or disagree with the questions in the economic dimension of medium level sustainability.

The arithmetic average of the question of “How important are the issues related to the social dimension of the concept of sustainability for your company” is 2.85. Issues related to the social dimension of the concept of sustainability are important for the question of how important it is for your company, at the level of 3.79 at the level of moderate to high agree level, relatively significant according to the arithmetic average of the participants. The number of employed people cannot be increased due to economic problems. In the event that the insurance fee cannot be covered by the state in increasing the number of interns, the number of interns is limited due to the financial burden to be covered by the logistics companies.

The percentage of those who totally agree with the question of increasing the number of employed employees is 30.4%, and the percentage of those who say “I do not agree or disagree is 35.7%. They could not participate much in increasing the number of employees, because employment increased material expenses.

Increasing the number of employed interns, the percentage of those who say they totally agree is 19.6%, the percentage of those who say neither agree nor disagree is 37.5, those who say they agree is 23.2%.

The reason why they don't want to increase the interns is because the insurance fee is paid, the interns do not work as much as full-time employees, their performance is low compared to full-time employees. Percentage of those who say I fully agree with the increase of the number of training days throughout the year, 33.9%, Percentage of those who do not agree or disagree, 14.3% of those who say “I agree”, 32.1%, Percentage of those who say they totally agree to increase social rights for employees such as retirement fund health services preventive medical checks fitness health life insurance, 39.3%, of those who say “neither agree nor disagree” the percentage of those who said “agree, 16.1,” is 21.4%.

The percentage of those who say “I totally agree” to increase the rate of women in the board of directors is 30.4%, the percentage of those who say “neither agree or disagree” is 30.4, those who say “I agree” is 23.2%, It is seen that they look positively at the level.

Percentage of full-time employees who say they totally agree with increasing the proportion of part-time employees, 25%, percentage of those who say “neither agree nor disagree, 33.9, those who agree, 14.3%, It can be thought that the low percentage of those who say I agree is undesirable because the part-time worker is economically costly.

Those who say “I agree with 46.4% completely agree to the leave of employees on holidays” are 19.6. It can be said that it is at a high level as it is already a legal obligation to allow employees on holidays.

The percentage of those who say they totally agree with the increase of charity works and the number of volunteer projects is 37.5% and those who say they agree are 21.4%. It

is seen that they participate in social responsibility and solidarity at a low level.

5. Result

The Sustainability Report is one of the studies announced to the public as the quality improvement studies of each sector. Ensuring sustainability in the logistics industry is seen as a global demand and trend. This volunteering-based work is considered valuable because it concerns improving the prestige, quality and society of the sector. In this research, 32% of logistics companies have 6-19 years of seniority. 80.4% of the companies own the company.

According to the results of the research, when we look at whether there is a relationship between responsibility studies and the age of the relevant firm, no significant relationship was found. As professional seniority increases, there is no significant relationship between sustainability responsibility.

According to the definition of sustainable development, the arithmetic average of those who say I agree with the question of sustainability issues are important for companies is high. (4.38285 ')

Managers perceive sustainability as important in sustainable development. The percentage of the answers they give in questions about social responsibility is 57.4%, arithmetic average of 3.79.

The arithmetic mean of the question "How important are the issues related to the social dimension of the concept of sustainability for your company? It can be interpreted as social responsibility studies are just beginning to be seen as a shared responsibility in logistics sectors.

However, since the survey group consists of managers, managers need to be willing in this regard, allocate money from their annual budgets, and see logistics as a professional profession. Turkey and awards are given to successful work in the logistics sector in the world.

Success awards are also given to social responsibility projects. DHL logistics company was also awarded the most successful employer of 2020. Social responsibilities are among the responsibilities of professional logistics professionals. Social responsibilities should be fulfilled by expert managers in every sector as in the logistics sector. But above all, there should be managers who believe that these studies are necessary.

The arithmetic average of the answers given to the questions on the economic dimension of sustainability is 3.3088.

It can be said that their perception of sustainability at a moderate level in the economic dimension may be related to the problems experienced in international trade, and they are worried about sustainability due to the uncertainty in the exchange rate and foreign trade barriers. Understanding and managing the issue of sustainability by companies Innovation, innovation, new product development and opening to new markets are a driving force in the question "I agree," is seen. Since they say I agree with the questions

about the sustainability strategy of their companies at a medium level (x: 3.68), they need sustainability strategies and targets. It is all the stakeholders of the institution that will determine these strategies. However, in order to implement these strategies, leader managers who believe in the importance of the strategy are needed. 36% of logistics company executives stated that their company's sustainability strategy coincided with their vision. Since this rate is quite low, it is necessary to express this strategy and vision updates in meetings attended by all internal and external stakeholders, and work should be done to ensure that the vision is adopted by the employees. Since a sustainability strategy that does not coincide with the vision may lead to failure, the vision of the institution on this issue should be evaluated in a working group that includes all employees. According to the results of the research, the rate of participation in the statements about the sustainability strategy is moderate.

The arithmetic average of the answer given by the participants to the question "Investments made in the field of sustainability positively affect the financial performance of our company in the medium and long term" is 4.11. It is seen that financial contributions are made for sustainability. The percentage of those who say "I agree" with the question "The energy consumption in our company affects the financial performance positively due to the decrease in dollar and euro ratio". The low energy consumption positively affects the financial performance. Since the heavy energy load is a compelling expense for the financial power of the company, the energy consumed should be evaluated as an output. Perceiving this assessment at a medium level will affect sustainability at a medium level. Commercial restriction fine for environmentally damaging goods, etc.

The fact that its concentration in the country affects the financial performance of the company positively in the medium and long term "The arithmetic average of the question" It shows that they are also moderately sensitive about the environment. The arithmetic average of the degree of participation in the concepts related to the economic dimension of sustainability is 3.3088. Managers are responsible for the economic dimension of medium level sustainability.

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Extended Abstract

Evaluation of Social Economic Dimension Environmental Sustainability of Logistics Company Executives in Turkey An Investigation on Perception

The aim of the research is to measure the sustainability of logistics companies according to managers perception. Since the number of companies, which declared concordat after the corona virus epidemic, closed, and the number of companies increased, existence problems, beyond the existence problem in the face of competition, have come up.

The aim of the research is to measure the sustainability of logistics companies according to the perception of managers. Since the number of companies, which declared concordat after the corona virus epidemic, closed, and the number of companies increased, the problems of the companies beyond the existence of existence in the face of competition have been raised. In this study, the sensitivity of logistics companies to three dimensions of sustainability (economic, social, environmental) is discussed. In the survey prepared with qualitative research technique, the 5-point Likert scale was used. Turkey applied to the task manager logistics company employees after the permission of the Association poll from 54 to 70 is fully filled questionnaires were evaluated. Six of the executives participating in the research are female and 48 are male. The surveys were distributed to managers working in logistics companies in İstanbul. 119 questions were asked in the questionnaire prepared for the research. In the study, it was seen that managers perceive the economic, social and environmental aspects of sustainability as moderate. According to the results of the research, it can be said that logistics companies have medium level awareness of sustainability in their economic and social environmental dimensions. This situation is also seen in the success ranking in the Logistics Performance Index. When the World Bank Logistics Performance indeen published by the Performance of logistics companies in Turkey assessed in 2016 at 34. While the meantime, It ranked 47th in 2018 by declining. The quality of logistics services has also declined, averaging 3.05.