

Companies' Contributions to the Transport Sector's Environmental Footprint

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Abstract: The negative consequences of the transportation sector are examined, as are the ways in which businesses contribute to these problems. Equally important to a company's bottom line is how seriously it addresses environmental protection at every stage of its operations. Toxic gasses like carbon monoxide, nitrous oxide, and other unpleasant compounds are often produced during the transportation process due to competition to satisfy customer demands. Companies responsible for pollution from vehicles are exposed to legal consequences in this study..

Keywords: Ecosystem, Environmental Duty, the Production Chain, and Companies

Introduction

The transportation sector is one of the most dynamic in the economy. The transportation industry is crucial to the functioning of the commercial sector because of its role in delivering necessities to consumer markets. Companies rely on the transport industry to ensure they always have access to the materials and supplies they need, whenever and wherever they may be needed. The company's success is due in large part to the value they provide to the transportation market. However, the transportation industry must be held responsible for the rising pollution levels. It's no secret that the production of many automobiles has a negative influence on the environment. The transportation industry consumes a disproportionate share of the world's petroleum and utilizes vast amounts of energy both in production and during use. In addition to facilitating the delivery and transfer of goods, transportation vehicles also produce carbon dioxide (CO₂) emissions, which many consumers do not consider while making their trip plans. The

environmental effect of the transportation industry has grown, and road transport is mostly to blame. One's usage of a car, both in terms of frequency and length, more than makes up for any reduction in the number of vehicles one owns. Companies in the auto industry have a duty to the planet to produce vehicles in a way that doesn't compromise the planet's ability to support life as we know it. This means employing environmentally friendly production techniques and keeping in mind that their products won't cause any harm to the planet's ability to support life. When it comes to the distribution of company-related products and services, the part played by corporations in the mobility of commodities and services via road, rail, and water transport is crucial.

Review of Literature

The publication "Impact of transportation system on environment in developing countries -a review" by R.K. Sharma and Dr. Shiv Kumar identifies three categories of

hazards to the environment caused by transportation: direct threats, indirect threats, and cumulative threats. There are three types of environmental dangers associated with transportation: direct, indirect, and cumulative. Direct dangers are the immediate and obvious impacts on the environment generated by transportation, whereas indirect dangers are the results of that influence. Climate change, water quality, soil quality, and pollution are only a few of the environmental impacts of the transportation sector that have been examined in this article. The study's author draws the conclusion that improved modes of transportation, such as fuel-efficient automobiles, are needed to reduce the transportation sector's environmental effect.

There is a correlation between economic growth and environmental degradation, according to a study published in the article "Impact of Transportation on the Environment" by Katalin Tanczos and Adam Torok.

noise, exhaust, and smog from cars and trucks. The research looked at the impact of Hungary's highly polluting modes of transportation on fuel consumption and climate change. In order to ensure that transportation has no negative effects on the environment, the research recommends that infrastructure and economic development be carried out in an eco-friendly manner.

Research Gap

Previous researches has been made on the transportation sector and analyzed in what way the mobility of transport system affects the ecosystem. The researchers have pointed out the disadvantages of transport sector from the point of view of ecology. Many researchers have not considered the fact that companies are a major cause for the pollution that is created by the transport

sector to the earth's well being. This paper studies the fact that companies are behind the environmental damage that are caused by the transport sector. Transport sector assists the companies in each stage of their business from raw materials procurement, storage of finished goods and distribution of the products to the end consumer. This research article assesses the role and responsibilities of companies in the negative environmental consequences which is caused by transportation industry.

Objectives of the study

- To study the environmental impact caused by the transport industry.
- To assess the role of companies in the ecological damage caused by transport sector
- To analyze solutions to overcome environmental pollution created by transport industry.

Statement of the problem

A recent study found that transportation accounts for a disproportionate share of global greenhouse gas emissions. In addition to raking in massive profits, companies operating in the transportation sector should prioritize corporate social responsibility. There are direct and indirect effects on the environment from the transportation industry. Carbon dioxide, carbon monoxide, and various nitrous gases released by cars all have direct effects on the environment. Indirect effects of vehicles on human health include communication difficulties, sleep disturbances, high blood pressure, aggressiveness, and other cardiovascular disorders, as reported by the World Health Organization. Companies who produce automobiles and trucks care little about the

damage their products do to the environment after they have been used. The use of transportation services has both immediate and long-term consequences on the environment. Outdoor air pollution is mostly attributable to the cars that are used to move goods and people from one location to another. Companies' lack of concern for protecting the environment has made them a major source of environmental degradation and social harm. The direct and indirect effects of the transportation industry on the environment are among the most pressing issues that must be addressed. There is a pressing need to figure out how to mitigate the negative impacts of the transportation industry on both rural and urban areas. This includes figuring out how to improve the manufacturing processes used to create engines and how much petroleum and diesel must be used in vehicle usage.

Role played by companies through transportation in the environmental impact

1. Impact of E-Commerce Delivery

The growth of a company's revenue and market share are two of its primary objectives. These businesses are unable to meet their objectives without negatively impacting the health of the people and the environment. While increased commerce and transportation may improve the quality of life for a company's workers and the population at large, there is a risk that these developments could have unintended negative consequences for human health. In the business world, companies are in fierce competition. E-commerce was adopted by businesses as a means of expanding their market and raising their profits. Companies are more generous with discounts and freebies in an effort to attract new clients. Free shipping, 2-day shipping, 3-day shipping, and other expedited shipping options are just a few of the enticements consumers may take advantage of while shopping online. Customers are attracted to

these deals since their orders will be at their front door within a matter of days, if not hours, following their purchase. Customers and businesses alike often fail to consider the environmental effect of delivery times.

Because the mode of transportation is often chosen for its ability to make deliveries quickly, and because such modes' engines are inherently inefficient and wasteful, rapid product turnover often comes at the expense of the environment. As a result, we will soon see the end of the nonrenewable resource. Fast-moving vehicle production needs massive amounts of nonrenewable resources and power, the latter of which may be obtained by chopping down forests. Once a consumer becomes a member of an online trading website, he is obligated to make purchases from that website, even if he does not want to pay for shipping. By becoming members of such e-tailing websites in order to save money, you are contributing to the depletion of Earth's resources. It's true that customers may rack up rewards points or save money on shipping fees in the short term, but in the long run they'll be sacrificing vital natural resources and will prevent future generations from enjoying a pristine planet.

2. Impact of Supply Chains

Home delivery services contribute far more to the city's air pollution than other industries do, making it harder for residents to breathe. Businesses that rely on trucks or other forms of road transport to move their products risk harming the environment since more polluting vehicles will be on the road at once. Many customers waste a lot of energy because they shop at many stores for different products rather than buying all they need at once. As a result, a great deal of traffic is generated as several cars make their way from the distributor to the final customer. Instead, if clients purchase their essentials bundled together at the same time, the delivery of the vehicles may be brought under control. Due to an increase in the number of individual orders submitted by

customers, there is now a high concentration of heavy and medium transportation vehicles on the roadways.

There are fewer cars on the road because consumers aren't driving to shops to make purchases. While this might have some positive environmental effects, the increased number of vehicles needed to fulfill consumers' immediate needs would have a negative impact on air quality. Purchasing raw materials is the first step in a company's supply chain, and the last step is delivering finished goods to customers. The manufacturing process begins with the conveyance of raw materials from one location to another, and ends with the delivery of completed products to a distributor or retail outlet. Companies sometimes maintain their own storage facilities, thus commodities are transported by cargo trucks from the manufacturing facility to the warehouse, and then from the warehouse to the retail outlet. Heavy or medium-sized trucks are used in this procedure to get there. If the trucks hauling the cargo are themselves highly polluting vehicles, and if the goods they're transporting are harmful to the environment, then the ecosystem will deteriorate.

3. Impact of Economic Development

There is a conflict between economic growth and environmental degradation. The growth of a nation's economy is, on the one hand, a result of progress in fields such as transportation, trade and commerce, technology, and investment capital. However, the impacts of these techniques for economic expansion are devastating to the natural environment. Both the food industry and the entertainment industry have benefited from the increased demand from consumers. Companies are producing more of these goods than consumers desire by employing energy-intensive manufacturing equipment. Producing and using them consumes a lot of energy due to the equipment involved.

The rising use of transportation in India has had devastating effects on the country's

environment in recent years. The environmental catastrophe is a direct outcome of the expanding human population and the challenges posed by meeting everyone's basic requirements. A lot of energy and pollutants go into producing and transporting high-end goods because of the high demand for them. Merchants that provide clients with essential commodities like food may see a short-term boost to their bottom line as a result of reduced manufacturing costs, but the long-term effects of the resulting emissions, animal raising, and food processing (including pasteurization) are disastrous for the environment. Greenhouse gas emissions from transporting non-Indian food products to India for resale in local supermarkets at reduced rates would be an issue for the environment. This includes trucking, shipping, rail, and automobile travel.

Suggestions

The situation may be alleviated in part by stricter enforcement of environmental laws in all countries, which can be achieved by tightening existing environmental restrictions. Companies should be punished financially or criminally for the ecological disaster they are causing by their actions, deliberate or not. Each company's environmental performance should be evaluated annually against established environmental standards, with the former receiving praise and the latter facing legal repercussions for any violations it may have committed during that time period. First and foremost, customers should stop buying things from other nations and start buying products created in their own country. The carbon footprint may be reduced by providing clients with food that is produced locally rather than importing food and other goods from other nations. If a business that normally takes a week to deliver its wares and services to a customer does so in a few days less than a week in order to appear more efficient, it may be doing so at the expense of the environment and the trust of its customers. Due to the increased danger of air pollution from a vehicle's hazardous chemical

emissions over a long distance and the increased requirement for tree cutting to accommodate the equipment required to produce these sorts of fast moving cars. In order to protect the environment, businesses should only use cars with low fuel consumption, such as those used for sustainable transportation.

Conclusion

To improve their public image, several businesses falsely label themselves "Green," even when they have a negative impact on the environment. The company's supply chain has a negative effect on the environment. Businesses should ship their wares in a way that doesn't wreak havoc on the environment. Companies should do all in their power to shorten the supply chain, but doing so should not cut into profits. A corporation that takes environmental responsibility thinks about the consequences of its actions. If a business gives a lot of enticing deals to the public in the hopes of attracting new customers and keeping the ones they already have, it should think about the environmental impact of such deals.

References

- Holtslag, A. A. M., et al., A high resolution air mass transformation model for short- range weather forecasting, *Mon. Weather Rev.*, 118, 1561 – 1575, 1990.
- Environmental Protection Agency (EPA), Energy, in *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 1997*, Rep. 236-R-99-003, pp. 2 – 36, Washington, D. C., 1999.
- Sharma, R., K., and Shiv Kumar, “Impact of transportation system on environment in developing

countries -a review”, *International Journal of Research Review in Engineering Science and Technology*, ISSN 2278- 6643, Volume-1 Issue-2, September 2012.

- Tanczos, Katalin and Torok, Adam, “Impact of transportation on the environment”, *Periodica Polytechnica*, 36/1-2, 2008.