

Carbon footprint in logistics of manufacturing company

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Abstract

The climate changes in the context of greenhouse gases is solved agreements and conventions to reduce the production of greenhouse gases. Chart of company activities that contribute to increasing greenhouse gases and it is important to determine carbon footprint. CO2 emissions and carbon footprints are mentioned in connection with the environment, which is affected by production and our own products. Carbon footprint affects by environment. Linkages between size of a carbon footprint and amount of savings that result from its reduction are important for businesses. A positive approach to this issue companies may lead to an increase in competitiveness and customer supply chains and customers.

Keywords

logistics, carbon footprint, emission, greenhouse gas

1. Introduction

Around year 1990 is started more speaking about greenhouse gasses and emissons which make up climate changes. Ekology situation on the Earth is very important for every people. Company people is trying this situation solve. Company involved in the projecting of modern supply chain networks have almost focused on the efficiency of the logistics process and creation for customers. Government addresses this situation by concluding agreements on reducing greenhouse gas emissions. The first who should solve this problems are company. Company products a lot of emissions and greenhouse gasses. This not health gasses in air are completely called Carbon Footprint. Their logistics is productions greenhouse gasses much more then people. It will be good if company have information or charting which logistics and how much making part of greenhouse gasses in the atmosphere. Really how much is Carbon footprint after activities.

Tema Carbon footprint is important for environment. When is Carbon footprint reduction is it good for company sphere. The Coherence between the volume of savings arising with their reduction and size of Carbon footprint. Active approach of company in this area could bring competitive advantage to customers and customer supply chains.

2. Comparison procedure

Emissions and greenhouse gasses are in the global endeavor to reduction in the international commitments. Companies integrate environmental into their systems. Goal is entire their production.

Terminology which prominence in recent times is the Carbon footprint (CFP), quantifies emissions and greenhouse gas (GHG) in life-cycle perspective.

The most prominent starting a proper Life Cycle Assessment (LCA). In LCA the inventory analysis quantifies the "elementary flows" of the product system in the form of inputs from the environment without prior human transformations and outputs to the environment without further human transformations. In the Life Cycle Impact Assessment (LCIA), this information is translated with characterization step and aggregated to environmental impact indicator results related to human health. The Impact category results are expressed in different metric and can hence don't be compared across impact categories. There is a normalization is performed by calculating. The results relative to some reference information. The normalization reference applied in this study is the annual contribution of an average person to each impact, and the resulting common unit for all impact categories is the Person Equivalent (PE). The CFP typically considers the six GHGs identified in the Kyoto Protocol, i.e. CO₂, CH₄, N₂O, SF₆, HFCs and PFCs. The normalization reference for the CFP was calculated based on the global per capita emission data for these GHGs in 2004 applying the latest set of global warming potential (GWP) factors, released by the IPCC as characterization factors.

3. Carbon footprint

The climate changes are very interesting tema to solve and which is causing an increasing amount of greenhouse gases in the atmosphere. The main are from burning fossil fuels. Oil, gas and coal in themselves contain carbon millions of years old. Carbon dioxide, which is generated them burning, they use photosynthesis plants and "fossil carbon" thus transforming into their biomass. This isn't enough so fast and it is questionable whether the planet is enough space for so many forests and green areas that emissions from fossil fuels have built into their bodies.

Nearly every human activity from transport to food releases directly or indirectly greenhouse gases and thus disrupts the balance of gases in the atmosphere. Carbon footprint is the amount of carbon dioxide and other greenhouse gases released during the life cycle of a product or service our life or one way etc. It is a tool to measure the impact of human activities on the environment expressed

dioxide equivalent. Its amount is expressed in units of mass: grams, kilograms or tonnes.

Carbon footprint consists of two parts:

- 1) the direct / primary
- 2) of the indirect / secondary tracks

4. Greenhouse gas

An important concept that is related to the carbon footprint of the greenhouse effect. It is a process in which the atmosphere enters sunlight. Part of the radiation is reflected back into space and part reaches the earth's surface and warms by the Earth. Consequence this process then produces heat radiation, which has a longer wavelength. Some of these gases in the atmosphere absorb radiation and thus prevents its radiation back into space. In the atmosphere there rise a temperature.

The greenhouse effect is shown and described in figure 1.

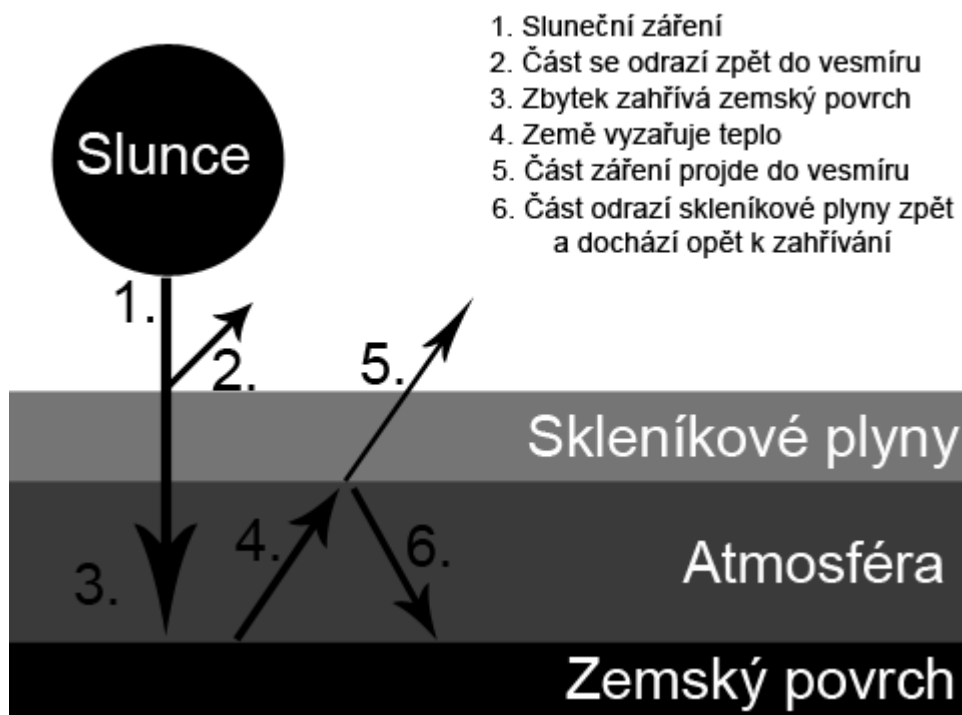


Figure 1: The Greenhouse effect

It can be seen by analogy with the process in the greenhouse. From there came the name of the greenhouse effect. The greenhouse effect in the atmosphere created naturally and without human intervention. The atmosphere contains 99%

nitrogen and oxygen which do not absorb or do not emit radiation. In contrast, water vapor, carbon dioxide and some other gases act as a thermal radiation absorbent. Thanks to this relationship arose on our planet suitable conditions for life. The described phenomenon is called the natural greenhouse effect.

Gases that in this phenomenon figure are known as greenhouse gases. The proportion of greenhouse gases in the atmosphere is increasing. It is caused by rough handling of people to nature it self or for example emissions of greenhouse gases into the atmosphere produced by industrial entities. What extent these human interventions cause phenomenon called global warming is the subject of longstanding discussions only among experts.

Based on discussions and conferences on environmental protection, global warming and the greenhouse effect was conceived carbon footprint.

5. Direct and indirect emissions

The concept of direct and indirect CO₂ emissions are important concepts in ecology. Direct emissions is an activity that is directly released into the atmosphere CO₂. Above this emission one has direct control. This includes driving a car to work, the burning of fossil fuels, etc.

Indirect emissions associated with the products and services you purchase. In their manufacture and disposal leads to energy consumption and greenhouse gas production. This issue is customers resulting product is perceived as its indirect emissions.

Dividing emission direct and indirect brings with it one complication. It depends on who your carbon footprint analyzes. What is the consumer indirect carbon footprint (production of the product), is also the manufacturer's direct carbon footprint. Emissions are generated directly as a result of the business. This introduces some of the methodologies to determine exactly who can be counted for each item. This prevents multiple counting of the same value or conversely its omission.

6. Conclusion

Important is objective need to think about the environmental aspects of production, transport and households. All of these factors produce for their activities carbon footprint. It is necessary releasing emissions into the atmosphere reduced. The necessity to address the situation solve firms and individuals.

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