

CSR (corporate social responsibility); road transport; logistics companies

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## CSR IN TSL COMPANIES

**Summary.** TSL companies are characterized by high dynamics of an increase of incomes, and hence increased shipping. Owing to a rational policy in the area of the consolidation of production and distribution, they may boast of a better use of the means of transport. The purpose of this article is to present the activities in the area of the eco-friendly CSR aspect in the activities of TSL companies taking into consideration particularly logistic operators. The research methods used in the study include an analysis of secondary data, observations and comparative analyses. Road transport in the shipping structure comes first and it constitutes 84% of freights. In the year 2009, in Poland greenhouse gas emissions from road transport amounted to 42.5 million tons (4.84% of the EU member states) and CO emissions were 41.9 million tons (analogically, 4.83% of environment pollutions in the European Union). This causes an emission of fumes into the atmosphere. The policy of sustainable development pursued by logistic operators under corporate social responsibility is a response to the abovementioned data. They take decisions concerning social and environmental aspects. The activities of TSL companies under CSR need to provide an answer to customer expectations and needs, and they have to cause an increase of competitiveness on the market. The selected four largest logistic operators conduct the following eco-friendly activities on the highest level: fume emission reports and the control of these emissions, transport of hazardous goods (ADR), voluntary services in the scope of environmental protection and cooperation with eco-friendly organizations. There are those activities which call for improvement: a limitation of the emission of fumes, waste management and sewage treatment policy.

## CSR W PRZEDSIĘBIORSTWACH TSL

**Streszczenie.** Przedsiębiorstwa TSL charakteryzują się wysoką dynamiką wzrostu przychodów, a w związku z tym – wzrostem przewozów ładunków. Dzięki racjonalnej polityce konsolidacji produkcji i dystrybucji mogą pochwalić się lepszym wykorzystaniem środków transportu. Celem artykułu jest przedstawienie działań dotyczących ekologicznego aspektu CSR w działalności przedsiębiorstw TSL ze szczególnym uwzględnieniem operatorów logistycznych. Metody badawcze wykorzystane w opracowaniu to analiza danych wtórnych, obserwacja i analiza porównawcza. Transport drogowy w strukturze przewozów zajmuje pierwsze miejsce i stanowi 84% przewozów. Emisja w Polsce gazu cieplarnianego przez transport drogowy w 2009 r. wyniosła 42,5 mln ton (4,84% krajów UE), a CO – 41,9 mln ton (analogicznie 4,83% zanieczyszczenia środowiska Unii Europejskiej). Odpowiedzią na te dane jest polityka zrównoważonego rozwoju prowadzona przez operatorów logistycznych w ramach społecznej odpowiedzialności biznesu (podejmują decyzje dotyczące aspektów społecznych i środowiskowych). Działania przedsiębiorstw TSL w ramach CSR mają być odpowiedzią na oczekiwania

i potrzeby klientów oraz powodować wzrost konkurencyjności na rynku. Wybrani czterech największych operatorzy logistyczni prowadzi następujące działania proekologiczne na najwyższym poziomie: raport emisji spalin i ich kontrola, przewóz przesyłek niebezpiecznych dla środowiska (ADR), wolontariat w ramach ochrony środowiska oraz współpraca z organizacjami ekologicznymi.

## 1. INTRODUCTION

In the dynamically developing economy, the number of shipments is continuously increasing, and in Poland, the share of motor transport is over 80 percent. More and more TSL branch companies observe the necessity of activities connected with environmental protection apart from the objective of profit generation. This is the result of the fact that transport is defined as a branch which degrades the environment through the pollution of the atmosphere. TSL companies on the European market compete between one another for customers through the realization of objectives connected with corporate social responsibility (CSR). In their business activities, they take into consideration eco-friendly aspects and introduce eco-friendly innovations such as fume emission reports.

The purpose of this article is to present the activities in the area of the eco-friendly aspect of the CSR in the activities of TSL companies with a special consideration of logistic operators. The research methods used in this study include an analysis of secondary data, observations and comparative analyses.

## 2. COMPANIES ON THE TSL MARKET

Transformations in the transport, forwarding and logistic branch of services are characterized by high dynamics due to the changes to the needs of customers, who want to have comprehensive logistic services adapted to new conditions. The following have an influence on the process of changes in tendencies:

- globalization of the markets of production and sale (production has been moved to Asia, and sale markets area Europe and North America);
- changes to customer behaviours (fast time of deliveries, short life cycles of products),
- progress in information technologies (the omnipresent Internet, the development of e-commerce).

Changes in the organization of the logistic systems of companies, which pursues a rational policy in the scope of the production and distribution consolidation, are being observed in the present-day economy [7]. The growing expectations towards the promptness and flexibility of delivery chains made time a critical factor in logistic systems in relation to the course of deliveries and reactions to the changeable conditions of the business environment. Production and trading companies resign from their own warehouses and distribution channels to the benefit of specialized TSL companies, which possess their own distribution and logistics centres, offer a wide range of high quality services based on outsourcing.

Companies from the TSL branch that provide logistic outsourcing services are often defined as 3PL type companies (Third Party Logistics Companies), and the following companies of this type are to be distinguished [12]:

- a standard 3PL supplier: this is the basic form of the outsourcing of logistic services; a company of this type provides the services of the collection and packing of the commodity, its storing and distribution;
- a developed 3PL supplier: companies of this type provide an additional value to their customers in the process of the provision of the basic logistic service through the services of shipment tracking, complementary transshipment, specific packing, ensuring the protection of the shipment and customs services connected with clearance;

- a 3PL supplier adapting itself to the customer: companies of this type, at the customer's instructions, take over a total control and management of the customer's logistics, there occurs an integration of the logistics company with the customer's information system;

- a developing 3PL supplier: a supplier of logistic services is integrated with the customer by taking over logistic functions. This is frequently done based on consulting services and an implementation of new joint projects. Those companies that offer logistic services are not the owners of transport means, as transport services are realized by small and medium sized transport companies that cooperate with a logistic operator which is responsible for support on the part of information systems and human resources with knowledge and experience in the area of TSL. The achievements of highly effective global logistics means cooperation with logistic companies in relation to the geographical location. This also leads to the formation of new type 4PL companies, which will manage and coordinate logistics outsourcing companies (3PL) at the customer's instructions, and will integrate their chains of deliveries [13]. Owing to the dynamic development of TSL companies, such companies provide services to an innumerable quantity of businesses, they manage simultaneously numerous realized processes of logistic services provided to businesses. Services are provided to businesses by TSL companies through project packages, which are provided by those companies to their customers solely with the option of social responsibility.

### 3. SOCIAL RESPONSIBILITY OF BUSINESS

Companies voluntarily take into consideration social and eco-friendly aspects in their business activities, and in this way they realize the concept of social responsibility [1]. Corporate social responsibility is an effective strategy of management on the national level, but first of all on the local level. It contributes to a company being distinguished on the market, to an increase of its competitiveness on the global level, while at the same time conditions are created for a sustainable social and economic development [3]. The social responsibility of businesses was defined as an obligation on the part of a company to pursue such a social policy and to take such decisions as are desirable with the objectives and values of society. According to the CSR idea, a company has not only economic and legal obligations but also certain duties in society which goes beyond the first two limits mentioned above [11]. CSR carries a message where an obligation is assumed to include social and environmental aspects in the decision making process that contribute to the realization of the sustainable development concept. The activities of companies under the corporate social responsibility concept in the context of competitiveness are important factors in the development of companies [5]:

- obtaining new environment friendly products,
- use of cleaner production technologies,
- indication of essential environmental issues (protection of waters, soils, air, landscape, waste management, waste processing techniques and technologies),
- including a business entity in the team of environment-friendly organizations,
- reduction of future environmental obligations,
- strengthening of management systems owing to comprehensive information on the economy - environment interaction,
- distinguishing of an environmental management system as a tool to support eco-friendly activities,
- increase of the investment attractiveness of an economic entity owing to the achieved level of the economy - environment interaction.

Responsibility also needs to be combined with the suffering of consequences. This assumption can be related to eco-friendly behaviours and an attitude to environmental protection [2]. Ecology related problems are more and more widely being discussed because of negative processes, where the TSL branch is considered as one which contributes to the degradation of the environment: carbon dioxide concentrations in the atmosphere, a conversion of green areas into urbanized areas and increased noise levels as a consequence of an increase of transport co-modality [14]. An opinion has been becoming popular for the past several years that no company, all the more a corporation, will succeed in business

if it is not going to assume social responsibility. CSR is equated with efforts to remain on the market and to realize a long-term strategy of development. It seems essential to determine the directions of the development of the CSR concept, which has an influence on business practices not only in the TSL branch. Ernst & Young conducted investigations in cooperation with GreenBiz Group in the year 2012, and six key tendencies in CSR were identified [15]:

- the significance is growing of reporting issues related to sustainable development;
- there is an intensifying involvement of financial personnel in initiatives connected with sustainable development;
- employees are becoming a key group of stakeholders in the context of programmes of sustainable development and business reporting;
- reporting on carbon dioxide emissions and consumption of water by companies and the related opportunities and threats;
- leaders on a given market are aware of activities that are undertaken concerning the depletion of natural resources;
- ranking concerning CSR: the index of socially responsible business: the Dow Jones Sustainability Index.

Sustainable development constitutes a condition for further social development. It is based on the following rules: activities to the benefit of environment, welfare benefits to society, development of capital and technologies. The development of knowledge on environmental protection is dynamic and it covers the whole of human life cycle [4].

#### 4. ROAD TRANSPORT IN POLAND

Motor transport in the structure of cargo carriage occupies the first place and constitutes 84% of freights. The number of trucks at the end of the year 2012 was over 2.9 million items, and the number of tractor units was 257.2 thousand items, and it was higher by 7.8% than one year before. 1,548.1 million tons of cargo were transported by motor transport in the year 2012, and the transport work in ton-kilometres performed was greater by 6.6%. The share of paid transport in the total transport was 52.2%, while the share of economic transport was 47.8%. In shipping, the share of paid transport achieved the level of 83.1%, while that of economic transport was 16.9%. 808.3 million tons (by 3.7% less than one year before) were transported by paid transport and shipping was greater by 8.7%. Income from motor transport constituted 44.8% and amounted to PLN 5945.4 million [16]. The environmental aspects of the operation of transport means are directly connected with the operation stage of transport and the phasing out stage [8]. The investment expenditures in relation to transport means in Poland rose from PLN 1,904.4 million in the year 2010 up to PLN 3,429.6 million in the year 2011. This is a proof of investment in the protection of natural environment. In an analysis of the life cycle of transport means, the stage of maintenance is directly connected with the emission of pollutions into the atmosphere and the production of noise [9]. In the year 2009, the emissions of greenhouse gases in Poland from road transport were 42.5 million tons (4.84% in the EU member states) and CO<sub>2</sub> emissions were 41.9 million tons (by analogy, 4.83% of the environment pollution in the European Union). In Poland, trucks consume over 4,000 thousand tons of diesel oil annually. This causes fume emissions (cf. Table 1) [16].

In spite of the increased transport of freights, the emission of pollution is subject to a reduction or it is stable. Small and medium sized companies that realize transport as subcontractors for logistic operators pay attention to the lack of innovative activities in the area of environmental protection. They perceive the following reasons:

- economic factors: shortage of one's own means to run an innovative business;
- legal factors: no concessions for the introduction of innovations;
- factors connected with the specificity of the branch: no information, no qualified personnel.

Small and medium sized companies are characterized by a greater flexibility and a possibility take decisions fast. Large companies as logistic operators possess their own research and development

facilities and have greater possibilities to finance investments, and they undertake activities in the area of environmental protection.

Table 1

Emissions of air pollutants by lorries with the total maximum weight over 3,500 kg in thousand tonnes on the basis of data from the Central Statistical Office "Transport: Business Results 2012"

Specification	2009	2010
CO <sub>2</sub>	13,501	12,709
CH <sub>4</sub>	1.11	1.04
N <sub>2</sub> O	0.55	0.52
CO	48.1	50.08
NMVOC	25.9	27
NO <sub>x</sub>	96.1	100.23
PM	8.57	8.92
SO <sub>2</sub>	0.38	0.4
Pb	0	0

## 5. CSR ANALYSIS OF LOGISTIC OPERATORS

Transport activities run in the TSL sector have always been the subject of regulations. This results from the need to ensure the required level of the cohesion of this sector with other systems and economic markets. This regulation is dictated by the requirements in the scope of security and the protection of natural environment [10]. Table 2 presents selected logistic operators that realize CSR in specified criteria. Four largest operators were selected in relation to incomes that operate on the Polish and European markets. Mark 5 denotes a very high level of realization, 4 – a high level of realization, 3 – an average level, 2 a low level and 1 – no realization of a given criterion.

Table 2

## Environmental evaluation criteria of selected logistic operators

Criterion	DP DHL	DB Schenker	TNT	Raben
Fume emission report	5	5	5	3
Waste management	3	4	4	3
Transport of hazardous goods (ADR)	5	5	5	5
Sewage treatment plants	3	4	3	3
Limitation of noise emissions	4	3	4	3
Cooperation with eco-friendly organizations	5	4	5	4
Voluntary organizations in the area of environmental protection	5	4	5	5
Policy of sustainable development	5	5	4	3
Average mark	4.375	4.25	4.375	3.625

All European logistic operators specify that they pursue the policy of sustainable development and that they pay attention to their activities related to environmental protection. They are most concerned about the transport of hazardous substances which may contaminate natural environment. Every company cooperates with eco-friendly organizations and it organizes voluntary services in the area of environmental protection in Poland and in Europe. Fume emission reports, which are available to everybody, are a standard in DHL, Schenker and TNT. Logistic operators obtained the lowest results in the area of waste management, a limitation of noise emissions, and they possess few sewage treatment plants. The selected logistic operators pursue the policy of sustainable development connected with the environmental protection on a very high level. Raben Group obtained the mark of 3.625 on the higher average level due to the fact it did not introduce a standard for the fume emission report, waste management and noise emissions.

In the year 2011, logistic operators invested in the following:

- protection through the modifications of the sources of noise/vibrations: PLN 1,158.00 thousand,
- construction of anti-noise and anti-vibration installations: PLN 41,717.1 thousand.

Protection through the modifications of the sources of noise still constitutes merely 5.26% of total expenditures, and in the case of anti-noise and anti-vibration installations, it constitutes 17.6%. Logistic operators aim at being perceived as those businesses that take care of environmental protection and that do not emit any pollutions; hence, the ISO 14001 environment management system

is being introduced, which means a continuous improvement, observance of the applicable eco-friendly legislation and a minimization of the pollution of environment. From the point of view of the management of the logistic chains of deliveries, ISO 14001 should focus chiefly on a systematic restoration of the transport infrastructure, also that of their subcontractors, and a more effective form of the coordination of the fixed assets flow in the chain of deliveries. This requires one to take into consideration not only the technological but also the eco-friendly quality in the process of the customer logistic service.

## 6. CONCLUSIONS

The TSL branch is one of the best developing branches on the market of services, while it is this very branch that has a negative impact on our natural environment. In spite of increased shipment of goods by motor transport, pollution emissions have decreased (carbon dioxide emissions), or they remain on the same level. Transport companies from the small and medium sized companies sector do not incur any investment expenditures in relation to ecology due to the shortage of funds, concessions or specialized personnel. The market made ecological operators undertake eco-friendly activities within the framework of social responsibility. Their activities are evaluated highly; this is particularly true of fume emission reports, transport of dangerous goods (ADR) and limitations of noise emissions, while waste management requires an improvement. These companies realize the policy of sustainable development in the scope of environmental protection because this was extorted by the needs and expectations on the part of their customers and the intention to compete on the market. On the grounds of the analysis of data and the research carried out, it can be stated that TSL companies demonstrate a sensitivity to activities connected with environmental protection, and they take responsibility for the effects of their negative impact. From the perspective of obtaining a competitive advantage, logistic operators are based on the creation of a positive image and an involvement not only as a company but also as its employees in social and eco-friendly activities. The introduction of ISO 14001 in corporations resulted in procedural changes and having those subcontractors that realize transport within the framework of the logistic chain replace the means of transport with new and more eco-friendly means of transport.

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