

# SUSTAINABILITY AND TRANSPORT CONSTRUCTION COMPANIES

Jaroslava Hyršlová – Jan Chocholáč – Dana Sommerauerová – Petr Štěpán

---

## Abstract

Governments and societies throughout the world are increasingly calling on business to be environmentally and socially responsible and many businesses appear to be responding to this call. This inclusion of environmental and social sustainability in business practices has also resulted in enhanced academic attention – a growing number of expert studies have focussed on economic, environmental and social aspects of corporate sustainability. Construction industry belongs among those sectors that have big impact on society sustainable development. Construction industry has impacts on socio-economic development of nations and on quality of human life. This paper focuses especially on the environmental and social aspects of sustainability in selected construction companies providing services in the sphere of transport structures. Particularly those aspects these companies regard as important considering their branch of business and which they communicate via their websites to interested parties are our subjects of interest. The obtained data are processed using methods of content analysis and comparative analysis.

**Key words:** Sustainable business, corporate social responsibility, construction industry

**JEL Code:** M14, Q56

---

## Introduction

Construction industry belongs among those sectors that have big impact on society sustainable development. Construction industry has impacts on socio-economic development of nations and on quality of human life (Ofori, 2015; Lopes, 2012; Sev, 2009). Construction industry is an industry that employs a large number of employees, both directly and indirectly via material suppliers, energy suppliers and services suppliers who participate in construction projects (Giang & Pheng, 2011). However, on the other hand, construction industry has also a number of negative impacts on the environment and on society. This sector consumes natural resources (raw material, energy, water and land), it generates a large quantity of waste, it causes damages to natural systems (rivers, forests) and it pollutes air, water and soil. As an

important employer it can contribute to denial of employees' rights (Banihashemi et al., 2017; Valdes-Vasquez & Klotz, 2013; Zuo et al., 2012). The above-mentioned are the reasons why interested parties and stakeholders (e.g. customers, governments, NGOs, civil society) give a lot of attention to how construction companies approach sustainable development issues. The objective of such attention is to provide for social equity, economic prosperity and environmental conservation throughout the entire life cycle of construction projects (Gan et al., 2015). Thus Triple Bottom Line model becomes widely accepted by this sector. This model is based on respecting economic, environmental and social aspects as well as impacts of construction projects (Berardi, 2013).

## **1 Material and methods**

This article deals with approaches of selected transport construction companies to sustainable development. Under this research the attention is given to two most important companies in this field in the Czech Republic. These companies are SKANSKA a.s. and METROSTAV Group.

Company SKANSKA a.s. (hereinafter SKANSKA) belongs among the largest construction and development companies in the CR. SKANSKA's main activity is construction, in particularly construction of transport, civil, housing, engineering and industrial buildings. In year 2017 this company had total operating income in the amount of 8.3 billion CZK, and the net profit was 202.2 million CZK. In year 2017 the company had 2 427 employees (SKANSKA, 2019).

The METROSTAV Group (hereinafter METROSTAV) belongs among the largest groups of companies operating their business activities in the construction sector in the CR. This group has 55 companies. Next to construction activities (in the construction industry this represents construction of tunnels, of roads and bridges, and of railway tracks) this group focuses also on development activities and on services for construction industry. This group has continuously good financial results. In year 2018 this group had 35.1 billion CZK of total operating income and the net profit was 743.2 million CZK. This group employed 5 100 employees in year 2018 (METROSTAV, 2019).

Our research focuses on how these companies approach sustainable development issues; it focuses on values promoted by these companies, on their goals in the area of sustainable development and on the main areas of focus of these companies. We focus also on management systems used by these companies in order to reach their goals. The objective

of this paper is to present these approaches, to compare these approaches and to identify what are the common features and what are the differences in these companies’ approaches. In order to reach the objective of this paper we have used content and comparative analyses. These analyses are based on publicly available information presented by both companies on their websites. Those aspects, that these companies consider important in relation to their business activities, are segmented according to recommendations provided by the Global Reporting Initiative (GRI) for the area of sustainability reporting. The GRI Sustainability Reporting Standards are developed with true multi-stakeholder contributions and rooted in the public interest; standards represent global best practice for reporting publicly on a range of economic, environmental and social impacts. GRI groups the standards into three basic areas (see Table 1).

**Tab. 1: Areas of sustainability**

<b>Economic area</b>	<b>Environmental area</b>	<b>Social area</b>
Economic performance	Materials	Employment
Market presence	Energy	Labour/management relations
Indirect economic impact	Water and effluents	Occupational health and safety
Procurement practices	Biodiversity	Training and education
Anti-corruption	Emissions	Diversity and equal opportunity
Anti-competitive behaviour	Effluents and waste	Non-discrimination
	Environmental compliance	Freedom of association and collective bargaining
	Supplier environmental assessment	Child labour
		Forced or compulsory labour
		Security practices
		Rights of indigenous peoples
		Human rights assessment
		Local communities
		Supplier social assessment
		Public policy
		Customer health and safety
		Marketing and labelling
		Customer privacy
	Socioeconomic compliance	

Source: Global Reporting Initiative (2019)

Selected companies’ approaches to sustainable development are further discussed in the context of approaches published for this area in expert studies.

**2 Results and discussion**

Table 2 summarizes the approaches of the selected companies to sustainable development.

**Tab. 2: Sustainable development approaches**

Sustainable development approach	SKANSKA	METROSTAV
Company values	Care for life Act ethically and transparently Be better-together Commit to customers	Professionalism Credibility Stability We keep our promises
Sustainable development targets (corporate social responsibility priorities respectively)	Gender equality Potable water and sewage Accessible and clean energy Dignified work and economic growth Industry, innovations and infrastructure Sustainable cities and municipalities Responsible production and consumption Climate measures	Transparent business Innovation in the construction industry Our employees Safety on structures Environmental protection Corporate citizenship
Company's main areas of interest in sustainable development	Health and safety Business ethics Environment and green business Support of communities Diversity and equal opportunities	Transparent business Innovation in the construction industry Our employees Safety on structures Environmental protection Corporate citizenship
Code of Ethics	SKANSKA Code of Conduct Supplier's Code of Conduct	METROSTAV Group Code of Ethics Ethical line
Management systems	Integrated Management System (Quality Management System, Environmental Management System, Occupational Health and Safety Management System, Information Security Management System)	Quality Management System Environmental Management System (according to ISO 14001 and according to EMAS) Occupational Health and Safety Management System Safe Enterprise Information System for Handling of Classified Information Corporate Social Responsibility (certificate according to Standard SA 8000)
Sustainable development awards	TOP responsible large company 2015 Sustainable product of 2015 Long-term contribution in the area of corporate social responsibility 2015	Nation Prize of the Czech Republic for Corporate Social Responsibility and for Sustainable Development – year 2017 Founding member Business for Society

Source: METROSTAV (2019), SKANSKA (2019)

Company SKANSKA clearly demonstrates its efforts for safety, health care and environment (with the objective to promote so called „green solutions“) and also its responsibility toward future generations. It promotes ethical and transparent behaviour described in its Code of Conduct as well as open work place atmosphere where individuals can show their opinion openly. Under the value *Be better-together* there is demonstrated the effort for continuous improvement, innovation and learning and sharing its expertise

in cooperation with both its customers and business partners. The company wants to use diversity to achieve the best results and to develop open, welcoming and fair business culture with mutual confidence and respect. This company sees its customers as a very important stakeholder. The company strives to understand their needs and to help their business to succeed.

In 2017 SKANSKA defined its Sustainable Development Goals (SDGs) as a framework for its sustainable development activities. This company wants to be the leader in diversity (to employ people from various ethnical groups, of various ages, of various gender and social status). It focuses on water utilization during the whole building construction life cycle. It is the company priority to reduce utilization of potable water in its production processes on all levels. The company target is to utilize 100% of energy from renewable sources. This company is active also in the area of management of energy with focus on storing energy in buildings. This company is very active in the area of occupational health and safety and in the area of ethical conduct. In line with the goal *Industry, innovation and infrastructure* this company cooperates with its partners on innovative solutions that evaluate the entire products and buildings life cycles (using LCC, LCA methods). This company gives attention not only to reducing negative impacts on the environment but also to effective utilization of resources. This requires new ways of material handling and of cooperation with suppliers. This company supports solutions friendly to the climate with the objective to reduce carbon trace (both of the organization and of its customers).

The objective of SKANSKA is to operate all its activities on high moral level in agreement with all of the above mentioned company values. Principles and requirements stated in the Code of Conduct must be obeyed by all company employees. This Code of Conduct is however applied also on company's subcontractors, suppliers, consultants, middlemen and agents. The Supplier's Code of Conduct must be included in contracts with the above-mentioned parties. Regarding the code itself there is focus on meeting all legal requirements related to the company business activities. The code is divided into a couple of chapters that represent company obligations in work place, in the markets and obligations towards the society as a whole (focused on reduction of negative impacts on the environment, fair market competition and contribution to communities in which this company is active). The company is aware of the fact that fair and transparent business behaviour depends on the company culture.

The company SKANSKA demonstrates its approach to its customers, employees and to environmental protection by the fact that it has implemented Integrated Management

System. SKANSKA was the first large construction company with verified environmental product declaration (EPD) and with developed study for life cycle assessment (LCA) in the Czech Republic. In year 2015 the company received the main prize for long-term support to green building.

Employees are a very important stakeholder of the company; SKANSKA declares that both the professional and private development of its employees are the company's priorities. The company presents, on its website, a developed system for employee training and education; the company also declares intensive cooperation with schools.

In its vision and mission METROSTAV unambiguously declares its effort to be a dynamic and respected construction company that strives for meeting its customer's requirements with major respect to the environment. It is aware of the importance of its employees for its business activities and thus it gives major attention to professional development of its employees, to developing relevant organization culture and to developing good name for the company. The group presents as its basic values professionalism, credibility, stability and keeping its promises.

The group has set its priorities in the area of sustainable development. The group is aware of its importance as an employer – the bearer of patterns of behaviour also in ethical aspects (priority *Transparent business*). The group strives for innovations of its products and solutions that create added value and contribute to friendly and quality construction (priority *Innovation in the construction industry*). The group sees care for its employees to be an important part of sustainable development. Working conditions quality can be demonstrated by meeting SA 8000 standard requirements and the commitments of collective agreement (priority *Our employees*). The group gives a lot of attention to occupational health and safety (priority *Safety on structures*) and to the environmental protection (priority *Environmental protection*). The group officially declares responsibility towards regions in which it does its business and towards the inhabitants of such regions. It promotes on a long-term basis CSR projects (priority *Corporate citizenship*).

METROSTAV behaves according to METROSTAV Group Code of Ethics. This code is a binding document demonstrating moral principles of the group. It sets rules of behaviour for all companies belonging to the group, for all their employees and associates. The group focuses on obeying the Czech Republic laws as well as laws of all countries in which the group realizes its business activities. The group not only obeys laws and any relevant rules, but it also takes necessary steps to prevent any problematic business behaviour or business conduct. The group has basic shared values; these values are credibility, professionalism and

stability – that means safe, creative and stable work environment and professional behaviour with the highest level of expert care. The group puts a lot of attention to developing relations based on trust. The group finds satisfied customers to be the most important goal (but never at the cost of violating ethical or legal regulations). The group understands its social responsibility towards citizens; it strives for minimum negative impacts of its activities on the environment and on the related community. It declares equal opportunities and it does not allow for any discriminatory behaviour. Each employee is responsible for obeying the METROSTAV Group Code of Ethics.

METROSTAV gives consideration to the environmental and to the social aspects of its activities, its products and services under its strategic and tactical-operational management. It has implemented systems for quality management, environmental management and also for occupational health and safety management and it is the holder of a certificate that proves compliance with requirements in the area of corporate social responsibility according to SA 8000 standard. In year 2017 this group received the Nation Prize of the Czech Republic for Corporate Social Responsibility and for Sustainable Development.

The following findings are the result of our research:

- Both companies give attention to sustainable development issues and their approach to sustainable development is publicized on their websites.
- They have anchored their efforts for sustainability (sustainable development respectively) in their business policies and strategies. They manage their environmental and social aspects and impacts by means of their management systems – quality management system, environmental management system and occupational health and safety management system (by means of integrated management systems respectively). The implementation and certification of these systems shows and proves that these aspects receive attention not only on the strategical level but also on the tactical-operational level.
- Both companies profile themselves as socially responsible companies. The prizes received in past years evidence their efforts in this area.
- Regarding sustainable development areas (according to GRI classification) both companies focus on all three areas – economic, environmental, social.
- In the economic area they publicize their economic performance (in their annual reports), big attention is given to presentation of their approach to products and to all activities that must be implemented in relation to products. Both companies have code of ethics including definition of rules of behaviour for all employees, cooperating subjects and for business

partners so that conditions for transparent business behaviour are created and their credibility is strengthened (see the aspects *procurement practices, anti-corruption, anti-competitive behaviour*).

- Regarding the environmental area both companies declare that they obey environmental laws and efforts for protective approach to the environment, both in their business activities and with regard to the future users of the constructions (customers). Any innovation activities are focused on developing of new procedures that shall allow for savings of materials, of energy and of water and are also focused on prevention of waste production. Both companies give attention to the entire life cycle of their products (buildings).
- In the social area main attention is given to employees. Both companies have, in their priorities, anchored dignified work, diversity and equal opportunities. Big attention is given to occupational health and safety and to work conditions and to work place relations. Both companies are aware of the importance of their employees for overall company business success and for this reason they publish, on their websites, company approaches to employee development and education. Professional and personal development of their employees belongs among main priorities of both companies. Both companies declare their responsibility towards regions in which they have their business activities and towards citizens of these regions.

Approaches of both companies as presented on their websites are in agreement with findings of previous research. For instance Sfakianaki (2019) points to the fact that there is a growing number of customers who require construction companies in developed countries to respect sustainable development principles and to apply these principles in their company policies. The described approach of both researched companies shows that customers represent a very important stakeholder and that both companies address the customers by their activities. Focus on employees and on local community is also in line with previous research's results. For instance Valdes-Vasquez & Klotz (2013) point out the importance of occupational health and safety, the importance of working conditions, employees development and education for the social area as well as the importance of projects with impacts on the local community.

## **Conclusion**



It issues clearly from the above text that the selected construction companies give a lot of attention to sustainable development issues and they present their approaches to sustainable development on their websites. They give attention to the above-mentioned environmental and social aspects in their business activities and also in their decision-making processes on the strategic and tactical-operational level. Both companies approach sustainable development in a similar way. They consider their customers, their employees and local communities to be their key stakeholders, which is fully in agreement with previous studies implemented in construction companies operating in developed countries. Both selected companies belong among large companies. For any further research into this field it would be interesting to focus on small and medium-sized construction companies in the CR and to compare their approaches to sustainable development with approaches of large construction companies.

## **Acknowledgment**

This paper is published within the solution of the scientific research project of the University of Pardubice no. SGS\_2019\_010. The authors are grateful for the support. The authors are also grateful for the support provided by the University of Economics and Management, Prague.

## **References**

- Banihashemi, S., Hosseini, M.R., Golizadeh, H., & Sankaran, S. (2017). Critical success factors (CSFs) for integration of sustainability into construction project management practices in developing countries. *International Journal of Project Management*, 35(6), 1103-1119.
- Berardi, U. (2013). Clarifying the new interpretations of the concept of sustainable building. *Sustainable Cities and Society*, 8, 72-78.
- Gan, X., Zuo, J., Ye, K., Skitmore, M., & Xiong, B. (2015). Why sustainable construction? Why not? An owner's perspective. *Habitat International*, 47, 61-68.
- Giang, D.T., & Pheng, L.S. (2011). Role of construction in economic development: review of key concepts in the past 40 years. *Habitat International*, 35(1), 118-125.
- Global Reporting Initiative. (2019). *Standards* [online]. [accessed 2019-03-22]. Available from: <https://www.globalreporting.org/standards/gri-standards-download-center/>
- Lopes, J. (2012). Construction in the economy and its role in socio-economic development. In Ofori, G. (Ed.). *New Perspectives on Construction in Developing Countries*, Abingdon, Spon Press, 40-71.

METROSTAV. (2019). *METROSTAV* [online]. [accessed 2019-03-21]. Available from: <https://www.metrostav.cz/cs>

Ofori, G. (2015). Nature of the construction industry, its needs and its development: a review of four decades of research. *Journal of Construction in Developing Countries*, 20(2), 115-135.

Sev, A. (2009). How can the construction industry contribute to sustainable development? A conceptual framework. *Sustainable Development*, 17(3), 161-173.

Sfakianaki, E. (2019). Critical success factors for sustainable construction: a literature review. *Management of Environmental Quality*, 30(1), 176-196.

SKANSKA. (2019). *SKANSKA* [online]. [accessed 2019-03-19]. Available from: <https://www.skanska.cz/>

Valdes-Vasquez, R., & Klotz, L.E. (2013). Social sustainability considerations during planning and design: framework of processes for construction projects. *Journal of Construction Engineering and Management*, 139(1), 80-89.

Zuo, J., Zillante, G., Wilson, L., Davidson, K., & Pullen, S. (2012). Sustainability policy of construction contractors: a review. *Renewable and Sustainable Energy Reviews*, 16(6), 3910-3916.

## **Contact**

Jaroslava Hyršlová

University of Pardubice, Faculty of Transport Engineering, Department of Transport Management, Marketing and Logistics

Studentská 95, 532 10 Pardubice

[jaroslava.hyrslava@upce.cz](mailto:jaroslava.hyrslava@upce.cz)

Jan Chochooláč

University of Pardubice, Faculty of Transport Engineering, Department of Transport Management, Marketing and Logistics

Studentská 95, 532 10 Pardubice

[jan.chocholac@upce.cz](mailto:jan.chocholac@upce.cz)

Dana Sommerauerová

University of Pardubice, Faculty of Transport Engineering, Department of Transport Management, Marketing and Logistics

Studentská 95, 532 10 Pardubice

[dana.sommerauerova@student.upce.cz](mailto:dana.sommerauerova@student.upce.cz)

Petr Štěpán

University of Economics and Management, Prague

Národní 2600/9A, 158 00 Praha 5

petr.stepan@infovsem.cz