RNI – MPENG/2011/46472 **ISSN-2249-9512**

Journal of Management Value & Ethics

(A quarterly Publication of GMA)

GWALIOR MANAGEMENT ACADEMY

C-17 Kailash Nager, Near New High Court, Gwalior-M.P. 474006 (INDIA)
Phone No. 0751-2230233,9425121133

C O N T E N T S

FEATURES OF ESG CRITERIA IN UZBEKISTAN'S CONSTRUCTION INDUSTRY

Madina Sayfullaeva[1]

ABSTRACT

This article is devoted to ESG criteria in the construction industry, as a manifestation of the green economy. The concept prioritizes environmental sustainability, social justice and economic growth. In this study, the author used the PESTEL analysis technique to analyze the construction industry in the Bukhara region of Uzbekistan.

Keywords. ESG Criteria, Green Economy, Construction Industry.

Introduction

Today, more and more people, companies and governments recognize the need to move towards a more sustainable and environmentally responsible economy. The green economy is a concept that prioritizes environmental sustainability, social justice and economic growth. It aims to balance the needs of humanity and the preservation of the environment.

The relevance of the green economy stems from a number of global problems that we face today. The first and perhaps most important of these is climate change, caused by greenhouse gas emissions and the exploitation of natural resources. We also experience depletion of certain types of resources, increasing waste streams and inequitable distribution of wealth.

Thus, in recent years, there has been a worldwide trend towards applying the principles of responsibility and environmental friendliness in the field of investment. And the result was the emergence of such a concept as ESG (Environmental , Social , and Governance). These criteria in the construction industry are becoming increasingly relevant and important throughout the world, including in the Bukhara region of the Republic of Uzbekistan, for the following reasons:

1. Environmental protection: Construction, being one of the industries, has a significant impact on the environment. The application of ESG criteria allows the implementation of effective environmental practices, such as emissions reduction, energy efficiency , the use of renewable energy sources, effective waste disposal and other measures to reduce negative environmental impacts.

2. Social Responsibility: Construction projects can have significant social impacts, including working conditions, worker health and safety, community relations, etc. The application of ESG criteria helps ensure compliance with fair working conditions, socially responsible practices and interaction with the local community.

3. Governance and transparency: ESG criteria also include aspects of governance and transparency, such as corporate governance, ethical standards, reporting, etc. The application of these criteria in the construction industry helps improve the ethical behavior of organizations, strengthening trust with investors, customers, contractors and subcontractors, as well as increasing the level of transparency and reporting [5].

[1] PhD student at Tashkent State University of Economics

4. International integration: The Bukhara region is actively seeking to attract foreign investment and develop international cooperation in the construction industry. The application of ESG criteria is one of the requirements of international investors and customers, which helps to improve the country's attractiveness for external partners.

It is important to note that in 2019, the President of the Republic of Uzbekistan adopted the Resolution "On approval of the Strategy for the transition of the Republic of Uzbekistan to a green economy for the period 2019-2030". The main goal of the developed Strategy is to achieve sustainable economic progress that contributes to social development, reduction of greenhouse gas emissions, climate and environmental sustainability, through the integration of the principles of a green economy into ongoing structural reforms. [1].

Thus, the application of ESG criteria in the construction industry in Uzbekistan is important for achieving sustainable development, preserving the environment, strengthening social responsibility and increasing the country's competitiveness in the international arena. The ESG agenda in Uzbekistan is just beginning to gain momentum and is mainly used in large companies preparing to enter an IPO (the first public offering of a company's shares on the stock exchange). Also, the purpose of applying the criteria is to attract investment in ambitious projects [6].

Research methodology

The study of ESG criteria, which evaluate the environmental, social and governance performance of companies, can be carried out using various scientific methodologies. Some of them may include quantitative and qualitative analysis, an integrated approach, a multidisciplinary approach. For this scientific research, the author used the PESTEL analysis method.

Research results

As a result of a PESTEL analysis of the construction industry of the Bukhara region, the author provides expected changes in the industry under the influence of 6 PESTEL factors. It should be taken into account that PESTEL analysis includes an assessment of ESG criteria that are relevant in modern conditions.

Environmental legislation has a significant impact on the construction industry in the Bukhara region, requiring companies to comply with eco-standards, which leads to changes in construction processes, increased costs and stimulates the development of environmentally friendly and energy efficient technologies.

Organizations and enterprises of the construction industry in the region, in cooperation with government agencies and specialized organizations of the environmental department in the field of environmental protection, help the construction industry comply with norms, requirements and standards, as well as adapt to the changing environmental situation and increase their environmental responsibility. JSC " Amubuhorokanalkurilish ", which is the object of our research, is no exception . To conduct a PESTEL analysis, expert assessments were obtained in 6 areas from the heads of structural divisions and various levels, as well as specialists from the economic and production departments of the company.

Analysis

The algorithm for conducting PESTEL analysis consisted of the following stages:

The first step was to compile a list of factors that could affect the construction industry in the Bukhara region in the long term (3-5 years). Factors are divided into 6 groups: political, economic, socio-cultural, technological, environmental and legal.

In the next step, data on each factor were collected. To collect primary information and further analysis, the author used collections and reports of the Agency for Statistics under the President of the Republic of Uzbekistan, the Department of Statistics of the Bukhara Region, and data from the legal framework lex.uz , BCG report “Uzbekistan: Window of Opportunity”, publications of Forbes, Bloomberg, KMPG, specialized literature, Internet, media.

Further, when compiling the summary table, the author indicated the most significant influencing factors. Then the strength of influence of each factor was assessed, which was assessed on a scale from 1 to 3, where:

- 1 - the influence of the factor is small, any change in the factor has practically no effect on the company’s activities;
- 2 - only a significant change in the factor affects the company’s sales and profits;
- 3 – the influence of the factor is high, any fluctuations cause significant changes in the company’s sales and profits [15].

Factors that do not affect the company's activities at all were simply not included in the table. Assessing the strength of a factor's influence is a subjective expert assessment.

Invited experts assessed the probability of fluctuations on a 5-point scale, where 1 means the minimum probability of a change in the environmental factor, and 5 means the maximum probability. To obtain a more accurate assessment, the experts worked together, since each specialist's specific experience in the industry was important.

This approach allows to formulate a development plan for a company or industry, as well as identify the most important factors and likely risks.

The next step was to calculate a score that would show the actual importance of the factor and the need for its monitoring, using the formula:

Weight-adjusted score = Factor influence ÷ sum of influences × average expert rating

All calculations performed, levels of influence of factors, expert assessments, average assessment and weight-adjusted assessment are given by the author in Table 1.

Table 1. Analysis of PESTEL factors taking into account the expert assessment of specialistsJSC " Amubuhorokanalkurilish "

Description of the factor	Factor influence	Expert review					average rating	Weight-adjusted estimate
		1	2	3	4	5		
(P) POLITICAL - political factors								
Stability of political power and existing government	2	3	3	1	3	2	2.3	0.06
Bureaucratization and level of corruption	3	4	4	2	2	3	3.0	0.11

Tax policy (tariffs and benefits)	3	4	4	5	3	4	3.8	0.14
Freedom of information and media independence	1	2	1	1	2	1	1.3	0.02
Trends towards regulation or deregulation of the industry	3	4	3	3	4	4	3.5	0.13
The desire for industry protectionism, the presence of state-owned companies in the industry	2	3	2	2	2	3	2.3	0.06
(E) ECONOMICAL - economic factors								
Economic growth rate	3	4	4	5	4	4	4.0	0.14
Inflation rate and interest rates	3	5	4	4	4	5	4.2	0.15
Major currency rates	2	3	4	4	4	4	3.5	0.08
Unemployment rate, size and conditions of remuneration	2	3	4	3	3	3	3.0	0.07
Level of development of entrepreneurship and business environment	2	4	4	4	4	3	3.5	0.08
Monetary and fiscal policy of the country	3	4	3	3	3	4	3.3	0.12
Level of disposable income of the population	1	4	3	4	4	3	3.2	0.04
Degree of globalization and openness of the economy	1	2	3	3	3	2	2.3	0.03
Level of development of the banking sector	3	2	3	3	3	3	2.8	0.10
(S) SOCIO-CULTURAL - socio-cultural factors								
Level of health and education	2	2	1	1	1	2	1.5	0.04
Attitude towards imported goods and services	1	1	2	2	2	1	1.5	0.02
Attitudes towards work, career, leisure and retirement	1	2	2	1	2	2	1.7	0.02
Requirements for product quality and service level	2	4	3	3	2	2	2.7	0.06
Culture of savings and lending in society	1	1	2	2	3	2	1.8	0.02
Lifestyle and consumption habits	1	1	2	2	2	2	1.7	0.02
Development of religion and other beliefs	2	2	1	1	1	1	1.3	0.03
Attitude towards natural and environmentally friendly products	1	1	2	1	1	2	1.3	0.02
Population growth rate	3	5	4	4	4	4	4.0	0.14
Migration rates and immigration sentiment	2	2	3	4	4	3	3.0	0.07
Sex-age structure of the population and life expectancy	1	3	4	3	4	3	3.0	0.04
Family size and structure	1	2	4	3	3	3	2.7	0.03
(T) TECHNOLOGICAL - technological factors								
Level of innovation and technological development of the industry	3	4	3	3	3	3	3.2	0.11

Research and development expenses	1	2	1	2	2	2	1.7	0.02
Legislation in the field of technological equipment of the industry	1	5	3	3	2	2	2.7	0.03
Development and penetration of the Internet, development of mobile devices	3	4	2	2	2	2	2.5	0.09
Access to the latest technologies	2	4	3	3	2	2	2.7	0.06
Extent of technology use, adoption and transfer	1	5	4	3	4	4	3.5	0.04
(L) LEGAL - legal factors								
Future and current legislation governing the industry	3	5	4	4	4	5	4.2	0.15
Antitrust and labor laws	2	4	3	2	3	3	2.8	0.07
Tax law	3	5	4	4	4	4	4.0	0.14
International and trade regulations	1	3	2	2	3	3	2.3	0.03
Protection laws (data, intellectual property, consumer)	1	3	2	2	2	2	2.0	0.02
(E) ENVIRONMENTAL OR ECOLOGICAL - environmentalfactors								
Environmental legislation	3	5	4	4	4	4	4.0	0.14
Climate change, natural disasters	3	5	4	3	3	4	4.0	0.14
Interactions with government agencies and specialized organizations of the environmental department in the field of environmental protection	2	4	3	3	3	4	3.7	0.09
Efficient use of energy	1	2	3	3	4	4	3.2	0.04
Caring for the environment	2	4	3	3	4	4	2.8	0.07
Grand total	84						121.50	

Compiled by the author based on the expert assessment of specialists and the financial statements of Amubuhorokanalkurilish JSC .

Based on Table 1, the author presents calculations in the form of a matrix, arranging the factors in descending order. That is, the higher the calculated indicator is located in the table, the more attention this factor requires. To compile the matrix, the author chose the first most significant three factors (Table 2).

Table 2. The most significant PESTEL factors in the analysis of the activities of JSC " Amubuhorokanalkurilish "

(P) POLITICAL - political factors		(E) ECONOMICAL - economic factors	
Factor	**Weight**	**Factor**	**Weight**
Tax policy (tariffs and benefits)	0.14	Inflation rate and interest rates	0.15
Trends towards regulation or deregulation of the industry	0.13	Economic growth rate	0.14

Bureaucratization and level of corruption	0.11	Monetary and fiscal policy of the country	0.12
(S) SOCIO-CULTURAL - socio-cultural factors		**(T) TECHNOLOGICAL - technological factors**	
Factor	**Weight**	**Factor**	**Weight**
Population growth rate	0.14	Level of innovation and technological development of the industry	0.11
Migration rates and immigration sentiment	0.07	Development and penetration of the Internet, development of mobile devices	0.09
Requirements for product quality and service level	0.06	Access to the latest technologies	0.06
(L) LEGAL - legal factors		**(E) ENVIRONMENTAL OR ECOLOGICAL - environmentalfactors**	
Factor	**Weight**	**Factor**	**Weight**
Future and current legislation governing the industry	0.15	Environmental legislation	0.14
Tax law	0.14	Climate change, natural disasters	0.14
Antitrust and labor laws	0.07	Interactions with government agencies and specialized organizations of the environmental department in the field of environmental protection	0.09

Identification of important factors of PESTEL analysis of the construction industry of the Bukhara region allowed the author to identify likely changes that could have an impact on the company's activities in the industry. And on the basis of this, further develop proposals and recommendations that can help reduce the negative impact of the external environment on the activities of a construction organization (Table 3).

Table 3. Analysis of the likely consequences of the most significant PESTEL factors

Significant factors	Likely change	Impact on the industry	Possible solutions
(P) POLITICAL - political factors			
Factor 1	Expected changes in tax policy. High probability of changes in tax rates, VAT, tariffs and benefits	Tax payments and deductions will increase	Having agreed with the rules and requirements of tax legislation, the company must hire tax planning professionals and conduct optimization of tax obligations and search for tax benefits.
Factor 2	Expected trends towards government regulation or deregulation of the industry	Control and reporting to government bodies and departments will increase	A company can develop and implement policies and procedures to increase the transparency and compliance of its activities with regulatory requirements .

Factor 3	Presence of bureaucratization and corruption	May result in delays in obtaining permits, licenses and various documents necessary to begin and continue construction processes.	This can significantly slow down the pace of development and completion of projects.
(E) ECONOMICAL - economic factors			
Factor 1	Increased inflation expectations and possible increase in interest rates on loans	May result in increased costs of construction materials, equipment and labor.	This may increase construction costs for facilities and projects.
Factor 2	Expected economic growth rate	Increasing demand for housing, commercial real estate and infrastructure facilities, as well as creating an enabling environment for new construction projects and initiatives	This will stimulate the development of the construction industry and create new opportunities for construction companies.
Factor 3	Expected changes in the country's monetary and fiscal policies	Better borrowing conditions could encourage investors to invest in construction projects and help grow the industry	Investors may be more inclined to invest in real estate and infrastructure projects, expecting high returns during periods of economic growth.
Factor 4	Possible changes in the banking sector	Increasing interest rates or reducing the availability of credit could reduce demand for residential and commercial real estate, which could impact construction activity in the construction industry.	Finding alternative sources of financing: Companies may seek investors or partners who can provide financial support and infrastructure.
Factor 5	Possible changes in the rates of major currencies	Changes in major currencies can have a significant impact on the construction industry, affecting import costs, exports, investment and the overall competitiveness of the industry.	If major currencies decline against a country's currency, the cost of imported construction materials, equipment and components may increase. This could result in higher costs for construction projects and lower profitability for companies in the industry.
(S) SOCIO-CULTURAL - socio-cultural factors			
Factor 1	Expected population growth rate	Stable population growth in the Bukhara region and in Uzbekistan as a whole inevitably leads to an increase in demand for real estate.	Accordingly, construction companies must respond to increased demand for housing and infrastructure by increasing the volume of work performed and increasing the number of facilities put into operation.
Factor 2	Possible changes in migration levels and immigration sentiment	Given the increase in immigrants to Central Asian countries in recent years, it can be argued that there will also be a demand for real estate in large cities from those arriving in the country.	This factor also leads to an increase in the permanent resident population in the country, therefore it is necessary to respond to growing demand.
Factor 3	Expected requirements for product quality and service level	If requirements for product quality and service increase, this may lead to increased competition in the industry. Companies that fail to meet the new standards risk losing customers and	This can encourage construction companies to improve their processes and improve the quality of services they offer.

		market share.	
(T) TECHNOLOGICAL - technological factors			
Factor 1	Likely changes in the level of innovation and technological development of the industry	The introduction of new innovations and technologies can significantly improve processes and increase operational efficiency in the construction industry. For example, the use of construction robots, drones , automated control systems or 3D printing can reduce construction time and costs, increase the accuracy and quality of work.	The use of innovations and new technological solutions helps improve the quality of the project and reduce the number of errors at the execution stage.
Factor 2	Future development and Internet penetration, development of mobile devices	The Internet allows construction companies to establish more effective communications with clients, suppliers and contractors.	Online chats, video conferencing and specialized project management platforms facilitate the exchange of information, reduce feedback time and help coordinate work more effectively.
(E) ENVIRONMENTAL OR ECOLOGICAL - environmentalfactors			
Factor 1	Environmental legislation	Environmental legislation sets the rules and standards that construction companies must comply with during the construction process. This may include emission limits, hazardous waste regulations, and energy efficiency requirements .	Companies must meet these requirements, which may require additional costs, process revisions and the use of more environmentally friendly materials and technologies.
Factor 2	Climate change, natural disasters	Climate change leads to an increased likelihood of emergencies such as floods, earthquakes, hurricanes, etc. This can have a direct impact on construction sites, causing destruction, damage and increasing the risk to workers.	The cost of restoration and repair work can also increase significantly. This may require additional costs, the use of new materials and technologies.
Factor 3	Changes in interaction with government agencies and specialized organizations of the environmental department in the field of environmental protection	Government agencies and environmental department organizations can provide recommendations and requirements regarding the use of environmentally friendly technologies and materials, energy efficiency , waste management, and resource management.	Collaboration with these organizations allows construction companies to provide the necessary information and respond to requirements related to assessing and reducing environmental impact.
Factor 4	Possible changes in environmental requirements and standards	Innovation and technological development are driving the development of environmentally sustainable solutions in the construction industry.	Using green materials, energy-saving systems, recycling construction waste and designing buildings with a minimal carbon footprint.
(L) LEGAL - legal factors			
Factor 1	Likely changes in future and current legislation governing the rules of work in the industry	Future legislation may introduce new requirements in the construction industry. These could be changes in environmental standards, energy efficiency, safety, labor protection, etc.	These requirements must be met by construction companies, which can require additional effort and impact their budgets.

Factor 2	Changes in tax legislation	Changes in tax laws may include changes in tax rates for construction companies.	High tax rates can increase costs and negatively impact companies' profitability, which could impact their ability to invest in new projects, expand, or maintain competitive prices.
Factor 3	Changes in antimonopoly and labor legislation	Antitrust and labor laws may provide for increased penalties for violations of rules and regulations in the construction industry. This may include fines, deprivation of licenses, criminal liability, etc.	Such measures encourage construction companies to comply with legislation and comply with requirements to avoid loss of reputation and financial costs.

Conclusions

Economic, legislative and social reforms carried out throughout the country have led to positive changes in the main indicators of investment and construction activity in the Bukhara region in the last few years [10]. Also, in the analysis, the author took into account the development of foreign exchange and financial markets, growing competition among construction organizations and in the process of selling finished construction products, which require tightening organizational and economic requirements for business entities.

In such conditions, the further development of the construction industry will depend on the ability of enterprises and organizations of various forms of ownership to be flexible, respond to changing market conditions, the ability to realize internal potential, and also meet the modern requirements of investors. And the author considers the main solution to this situation to be the mandatory application of ESG criteria, the importance of which is growing every day both at the local and global levels [9].

Consequently, a number of positive results should be expected from the application of ESG criteria in construction, in the form of reducing the environmental footprint of construction and increasing the use of renewable energy sources, improving social performance and increasing investment attractiveness.

Thus, the obvious benefits of a green economy include the creation of new jobs, reduced energy and material costs, improved environmental quality and human health, and improved living standards and social equity.

It is important to note that the transition to a green economy is a complex but necessary process that requires the cooperation of all participants in society - from government agencies and businesses to individual consumers. However, investments and efforts made now will create a more sustainable and prosperous future world for all of us.

References:

- *Decree of the President of the Republic of Uzbekistan No. 60 dated January 28, 2022 "On the development strategy of New Uzbekistan for 2022-2026."*
- *Resolution of the President of the Republic of Uzbekistan No. PP-436 dated December 2, 2022 "On measures to increase the effectiveness of reforms aimed at transitioning the Republic of Uzbekistan to a green economy until 2030."*

- *Resolution of the President of the Republic of Uzbekistan No. PP-4477 dated 10/04/2019. "On approval of the strategy for the transition of the Republic of Uzbekistan to a green economy for the period 2019-2030" https://lex.uz/ru/docs/4539506*
- *Resolution of the President of the Republic of Uzbekistan No. PP-4611 dated February 24, 2020. "On additional measures for the transition to international financial reporting standards" (https://lex.uz/docs/4746049).*
- *Kilicheva F.B., Urmanova D.T. Corporate Governance: Principles, Policies and Practices. Tutorial. – T.: " Fan vatexnologiya ", 2019, 440 pp.*
- *Masyutin S.A. Corporate governance: experience and problems. Monograph. – M.: Finstatinform LLC , 2003 – 280 p.*
- *Khairova D. R., Sayfullaeva M. I. Assessment of the export potential of the cement industry of Uzbekistan // Innovative Economics. – 2014. – P. 206-208.*
- *Rimovna KD, Ismatovna SM INNOVATIVE MARKETING SOLUTIONS AND THEIR EFFICIENCY IN DETERMINING THE MARKET CAPACITY OF CONSTRUCTION PRODUCTS //INTERNATIONAL SCIENTIFIC CONFERENCES WITH HIGHER EDUCATIONAL INSTITUTIONS. – 2022. – T. 1. – No. 25.10. – pp. 52-57.*
- *KhairovaDinaraRimovna , SayfullaevaMadinaIsmatovna TRENDS IN THE DEVELOPMENT OF THE CEMENT INDUSTRY IN UZBEKISTAN // Bulletin of Science and Practice. 2021. No. 6. URL: https://cyberleninka.ru/article/n/tendentsii-razvitiya-tsementnoy-industrii-v-uzbekistane*
- *Saifullaeva M. Modern Construction Industry of Uzbekistan: Trends, Problems and Prospects // BulletinSciencesAndpractices . 2023. T. 9. No. 7. pp. 310-316. https://doi.org/10.33619/2414-2948/92/43*
- *https://stat.uz/ru/ Official website of the Agency for Statistics under the President of the Republic of Uzbekistan*
- *BCG report "Uzbekistan: Window of Opportunity" 2019 http://media-publications.bcg.com/RUS-UZ-Tier_MAY-2019-FIN.pdf*
- *Khasanov, 2015, Evolution of Corporate Governance: International experience. Society and Management , 2015 No. 2, pp . 52-61*
- *Uzbekistan: ESG dossier – https://sber.pro/digital/uploads/2022/09/ESG_Uzbekistan_A3_2_718a6609cc.pdf*
- *http://powerbranding.ru/BIZNES-ANALIZ/PEST/EXAMPLE/*