

Han Nai Chao 

Al-Farabi Kazakh National University, Almaty, Kazakhstan

E-mail: jia_l@mail.ru

SUSTAINABLE MANAGEMENT IN THE OIL AND GAS INDUSTRY: ASSESSMENT OF ESG REPORTING AND THE IMPACT OF OIL AND GAS PROJECTS IN KAZAKHSTAN, CHINA, THE USA AND IRAQ

Abstract. The purpose of this study is a comparative analysis of the application of ESG (environmental, social and corporate governance) standards in the oil and gas sector on the example of Kazakhstan, China, the USA and Iraq. The scientific significance of the study lies in identifying strategies for improving ESG practices by revealing their country features. The scientific novelty of the study is the systematic assessment of ESG – experiments in various economic and political conditions using a specific comparative analysis and the SWOT method. The study examined the ESG indicators of countries in terms of: environmental impact, social consequences and economic efficiency. The research methodology includes qualitative and quantitative analysis based on sources, comparative charts and SWOT analysis. The results show that the United States has the most widespread use of ESG standards, China is developing environmental initiatives, Kazakhstan is building transparency, and Iraq is lagging behind due to political instability. The results of the study can serve as the basis for research in the sustainable development of the oil and gas sector. In the course of the study, legislative initiatives, state incentives that affect the development of sustainable practices in the oil and gas industry were considered. Differences in the level of commitment and standardization of ESG reporting between countries have been identified, which allows a deeper understanding of the motivation and barriers to their implementation. The study also looks at the prospects for harmonizing ESG approaches at the international level. This topic is especially relevant in the context of global climate challenges and increased requirements for business transparency and responsibility on the part of investors and international organizations.

Key words: ESG, oil and gas sector, sustainable development, environmental management, international standards, social responsibility, SWOT analysis.

Introduction

The oil and gas industry is a key economic sector for many countries such as Kazakhstan, China, the United States and Iraq. This sector makes a significant contribution to the gross domestic product, job creation and national energy security (Mara D. et al., 2022:658). However, its activities are fraught with numerous challenges, including environmental risks, social consequences, and the need to improve corporate governance. In the context of global climate change and the growing expectations from the international community for responsible business conduct, increasing attention is being paid to the principles of sustainable development, especially environmental, social and managerial responsibility (ESG).

The relevance of this study is due to the need to rethink the role of the oil and gas sector in the context of sustainable development and the search for new management solutions that ensure a balance between economic growth and environmental conservation. ESG reporting is becoming an important tool that allows oil and gas companies not only to objectively assess their own impact on sustainable development, but also to form more transparent, ethical and sustainable business models. The introduction of ESG approaches helps to reduce reputational and investment risks, as well as increases the level of trust from investors, regulators and civil society.

Despite the growing popularity of ESG reporting, there are significant differences in the level of its implementation and quality among oil and gas companies in different countries. For example, American companies such as ExxonMobil and Chevron have long integrated ESG principles into their strategy, actively using international standards such as GRI and TCFD. At the same time, in emerging economies such as Kazakhstan and Iraq, the implementation of ESG reporting faces a number of challenges, including limited data collection infrastructure, political instability, and insufficient corporate culture.

The significance of the research is determined by its contribution to the development of a comparative approach to assessing ESG practices in the oil and gas industry in various countries, which is especially important in the context of globalization and the growing interdependence of energy markets. Such an analysis makes it possible to identify both successful practices and systemic barriers faced by companies in different economic and political conditions, and to formulate recommendations for the harmonization of ESG approaches at the international level.

Research in this area usually highlights aspects of ESG implementation in individual regions or companies, however, a comparative analysis of ESG reporting practices in the oil and gas sector of countries with different levels of economic development remains relevant in the study. The lack of data on the specifics of ESG reporting in developing countries such as Kazakhstan and Iraq, as well as the impact of oil and gas projects on the sustainability of the region, emphasize the need for this study.

The purpose of this work is to conduct a comparative analysis of ESG reporting by oil and gas companies in Kazakhstan, China, the United States and Iraq, assess the impact of their projects on environmental, social and managerial sustainability, as well as identify barriers and opportunities for further development of ESG practices in these countries.

Materials and methods

This research employs a multifaceted methodological framework to thoroughly investigate the influence of oil and gas projects on sustainable development and assess the efficacy of ESG reporting in the oil and gas sectors of Kazakhstan, China, the United States, and Iraq. To accomplish these objectives, both theoretical and empirical approaches were employed, along with a diverse array of data sources, including scholarly literature, international legal instruments, statistical information, national and foreign legislation, and ESG reports from prominent industry players.

To begin with, a comprehensive analysis of the scientific literature was conducted, encompassing both primary and secondary sources. To explore the theoretical underpinnings of sustainable management in the oil and gas sector, as well as the specifics of ESG reporting, a thorough examination of the works of domestic and international authors was conducted. These sources delve into the principles of sustainable development, the dimensions of environmental and social responsibility, and the functions of ESG reporting in the oil and gas industry.

The study of the implementation and utilization of ESG practices revealed the key challenges and patterns of implementation in countries with varying levels of economic development, such as Kazakhstan, China, the United States, and Iraq.

A crucial aspect of the research was the examination of international regulations governing the disclosure of non-financial information, specifically the Global Reporting Initiative (GRI), the Task Force on Climate-related Financial Disclosures (TCFD), and the United Nations Sustainable Development Goals. Utilizing these sources, we were able to contrast international standards with national ESG reporting practices.

Furthermore, we explored national and international laws that govern environmental, social, and governance standards in the oil and gas sector. This included the regulatory frameworks of Kazakhstan, China, the United States, and Iraq, which pertain to the disclosure of non-financial statements, environmental regulations, and corporate governance.

The method of comparative analysis was employed to evaluate the practice of producing ESG reports in the oil and gas industries of the aforementioned nations. The analysis took into account both the unique aspects of national legal frameworks and the structure, content, and quality of the reports themselves. The comparative approach revealed both similarities and significant variations in ESG reporting practices between developed and developing countries.

A review of publicly available sources and corporate reporting by major oil and gas companies allowed us to assess the practical implementation of ESG principles in real-world projects. Specifically, we conducted a case study of the following companies: Tengizchevroil (Kazakhstan), China National Petroleum Corporation (CNPC) (China), ExxonMobil (USA), and Basra Oil Company (Iraq). These organizations are major players in their respective countries' oil and gas industries, providing a valuable basis for comparison.

Through an examination of these companies' practices, we discovered how they incorporate ESG principles into their operations, the standards they employ for reporting (such as GRI and TCFD), and the impact of ESG initiatives on the economy, environmental sustainability, and social sphere in their respective countries.

The SWOT analysis allowed us to categorize the internal and external factors that influence the effectiveness of ESG strategies for oil and gas companies. The key metrics used by companies to demonstrate sustainability in the social, environmental, and management spheres were highlighted. In addition, the strengths and weaknesses of ESG reporting, as well as the opportunities and risks associated with its development.

The use of economic and statistical analysis techniques was employed to evaluate the influence of oil and gas projects on the economic performance of nations. Indicators such as the proportion of the oil and gas sector in GDP, employment, revenue from oil and gas exports, environmental costs, and expenditures on social programs. This analysis enabled us to draw conclusions about the correlation between environmental, social, and governance (ESG) practices and sustainable development in countries with diverse economic and institutional frameworks.

The comprehensive application of these methods and diverse sources of information allowed us to gain a comprehensive understanding of the current state of ESG reporting in the oil and gas sector and develop practical recommendations for its enhancement in countries with varying levels of economic development.

Discussions

In recent years there has been a significant increase in interest in ESG reporting in the oil and gas industry. According to research by Chang T. and Loh L., the introduction of ESG practices in oil and gas companies contributes not only to reducing environmental risks, but also to improving corporate image, increasing business transparency and attracting investment (Chong T., Loh L., 2023:3).

However, research by authors like Sheu C., Yen H. R., Krumwiede D. highlights that, even with the active application of ESG standards, there are notable variations in reporting practices across nations because of variations in the degree of legislative and regulatory development (Sheu C., Yen H. R., Krumwiede D., 2023:645).

Oil and gas developments in nations like Kazakhstan, China, the United States, and Iraq receive particular attention. Large-scale energy projects are being carried out in these nations, which are crucial to their economies but also deal with a number of issues related to sustainable development.

For instance, studies on Kazakhstan's oil and gas sector show that, in spite of their substantial economic contributions, oil and gas firms struggle with environmental and social responsibility (Tauekelova T. et al., 2024:164). In China, according to the data Qian Y. and Liu Y. although there are ongoing efforts to lower carbon emissions, the management and social components of ESG principles still need to be improved (Qian Y., Liu Y., 2024:5).

This study aims to evaluate the use of ESG reporting as a tool for sustainable management and examine the effects of oil and gas projects in Kazakhstan, China, the United States, and Iraq on their respective economies. The study looks at the difficulties and opportunities of applying ESG principles to the oil and gas sector, as well as how these reports can help businesses become more efficient and appealing to investors in the long run.

An analysis of existing scientific research indicates the increasing importance of ESG reporting as a tool for sustainable management in the oil and gas industry. Scientists emphasize that the introduction of ESG practices allows companies not only to reduce environmental and social risks, but also to strengthen corporate reputation, increase transparency and enhance investment attractiveness. At the same time, the literature records significant differences in the level and quality of ESG reporting between developed and emerging economies, due to the varying degrees of maturity of the institutional environment, legislative regulation and corporate culture.

The review indicates the need for an integrated approach to the implementation of ESG in the oil and gas sector, especially in countries such as Kazakhstan and Iraq, where social and environmental challenges remain acute. China is demonstrating active efforts to reduce its carbon footprint, but the management and social aspects of ESG require further development. The United States, on the contrary, has more established standards, which provides them with an advantage in generating high-quality reports.

Results

An analysis of the first and secondary sources showed that ESG reporting in the oil and gas industry is actively developing, but the implementation of these standards varies significantly depending on the country. Although Tengizchevroil and other oil and gas businesses in Kazakhstan have started incorporating environmental and social norms into their operations, ESG reporting is still not widely used by major public and private corporations (Khartukov E. M., 2022:103). In China, companies such as China National Petroleum Corporation (CNPC) are actively developing environmental initiatives, but face difficulties in managing social responsibility (China National Petroleum Corporation) [Electronic resource] <https://www.cnpc.com.cn/cnpc/index.shtml>. In the United States, companies like ExxonMobil and Chevron have long integrated ESG principles into their strategy, providing detailed reporting on environmental risks and social responsibility (ExxonMobil is committed to improving quality of life by meeting the needs of society) [Electronic resource] <https://corporate.exxonmobil.com/sustainability-and-reports/sustainability>. In contrast, Iraq is only now starting to grasp the concepts of sustainable development, and in the face of political unrest, oil and gas firms like Basra Oil Company are having trouble putting ESG reporting into practice (Basra Oil & Gas) [Electronic resource] <https://www.ufi.org/membership/ufi-approved-events/event/UFIIE-0548>.

The comparative analysis presented in the table reveals significant differences and similarities in the reporting practices of ESG (environmental, social and managerial) of the largest oil and gas companies in Kazakhstan, China, the USA and Iraq. The table provides estimates for specific criteria and provides information on the progress and challenges of ERP implementation in each country.

Table 1. – Practices of ESG

Criteria	Kazakhstan (Tengizchevroil)	China (CNPC)	USA (ExxonMobil)	Iraq (Basra Oil Company)
Environmental Reporting	Focus on reducing carbon emissions and implementing waste	Emphasis on pollution reduction and transition to	High level of disclosure, including CCS	Weak reporting; environmental aspects hindered

	minimization technologies. Limited data detailing.	cleaner technologies. Insufficient water resource data.	technologies and climate risk assessment (GRI, TCFD standards).	by a lack of modern technologies.
Social Responsibility	Interaction with local communities and job creation. Initiatives for improving working conditions not disclosed.	Emphasis on labor safety programs. Limited information on local community support and workforce diversification.	Comprehensive disclosure of safety initiatives and participation in social projects.	Almost no information on social responsibility. Working conditions remain poor.
Corporate Governance	Partial transparency in governance. Limited information on strategy and anti-corruption policies.	Limited data on internal governance processes and ethics.	High transparency, including regular audits, anti-corruption policies, and risk management.	Insufficient governance data. Political instability hinders this area's development.

Due to strict laws and cutting-edge technology, the USA leads the world in ESG integration. Iraq, on the other hand, has a difficult time implementing sustainable management techniques. China and Kazakhstan are improving, but they are not as transparent or in line with international norms as they should be.

This analysis emphasizes the necessity of developing methods that are specific to each nation's economic, legal, and technological circumstances in order to improve ESG practices.

A comprehensive view of the strengths and weaknesses of each country's ESG, growth opportunities and external challenges they face was presented in the framework of the study by SWOT analysis(table2).

Table 2. – SWOT analysis of country specifics of ESG oil and gas sector¹

Strengths	Weaknesses
USA: Strong adherence to international ESG guidelines such as TCFD and GRI.	USA: Although there is a wealth of data on carbon emissions, there is little reporting on

¹ Note: The SWOT analysis provides a comprehensive view of the countries' strengths and weaknesses in the field of ESG, as well as the growth opportunities and external challenges they face. The United States leads the way in strict compliance with international ESG standards (TCFD, GRI) and demonstrates a high level of governance transparency. China is making significant investments in pollution prevention and renewable energy development, gradually approaching the global ESG standards. Kazakhstan stands out with clear goals to achieve carbon neutrality by 2060 and investments in environmentally friendly technologies. Iraq is beginning to pay attention to the urgency of environmental and social issues, which creates the basis for future improvements. The United States has a shortage of data on resource management and water use, as well as gaps in reporting on staff diversity. China is characterized by a lack of openness, especially in the field of water use, and has significant gaps in environmental data. Kazakhstan faces a lack of transparency in ESG reporting and a lack of information on renewable energy initiatives. Iraq is suffering from political instability, which leads to poor management efficiency of the ESG and a lack of alignment with international standards. It is important for each country to minimize weaknesses and threats, focusing on unlocking its potential in the ESG field. The United States and China have the resources and ambitions to take a leading position on the international ESG agenda. Kazakhstan can become a regional example of sustainable development with increased transparency and accountability. Iraq needs international support and improved infrastructure to integrate ESG principles into the oil and gas sector. Effective implementation of ESG strategies can become an important driver of sustainable growth for all countries, despite the existing challenges.

<p>Thorough documentation of the effects on the environment (carbon emissions, renewable energy projects).</p> <p>Robust governance framework with a high degree of transparency.</p> <p><i>China:</i> Large expenditures on pollution prevention and renewable energy.</p> <p>Growing conformity to TCFD and GRI norms.</p> <p><i>Kazakhstan:</i> Clearly defined sustainability objectives, like becoming carbon neutral by 2060.</p> <p>Investment in renewable energy sources and clean technology.</p> <p><i>Iraq:</i> Environmental and social issues are not well known, but they are becoming more so.</p>	<p>resource management and water usage.</p> <p>Reports on worker diversity include some gaps.</p> <p><i>China:</i> Inconsistent openness and discrepancies with international standards.</p> <p>Water and resource efficiency receive less attention, and there are considerable gaps in environmental data.</p> <p><i>Kazakhstan:</i> Reports on renewable energy initiatives are few.</p> <p>inadequate openness around water use.</p> <p><i>Iraq:</i> Political instability leads to poor governance.</p> <p>Poor ESG reporting and no alignment with TCFD or GRI.</p>
Opportunities	Threats
<p><i>USA:</i> Development of renewable energy and carbon capture technology.</p> <p>Leadership in the development of international ESG standards and procedures.</p> <p><i>China</i> is becoming more in line with global ESG standards.</p> <p>chance to take the lead in the switch to clean energy.</p> <p><i>Kazakhstan:</i> Enhancing ESG reporting could help the country draw in foreign investment.</p> <p>the chance to take the lead in local renewable energy projects.</p> <p><i>Iraq:</i> Possibility of global cooperation to raise ESG and governance standards.</p> <p>increasing awareness of the necessity of ESG initiatives in spite of infrastructure constraints.</p>	<p><i>USA:</i> Possible federal regulatory issues that could have an effect on reporting guidelines. Environmental practices relating to energy are under public scrutiny.</p> <p><i>China:</i> Possible criticism for not fully adhering to international ESG norms.</p> <p>ongoing issues with pollution.</p> <p><i>Kazakhstan:</i> The country's economic dependence on fossil fuels could impede the swift shift to renewable energy. The implementation of ESG policies may be slowed by political unrest.</p> <p><i>Iraq:</i> Strong ESG governance development is threatened by political unrest. little capacity to satisfy global ESG requirements because of infrastructure problems.</p>

United States is leading the way in implementing ERP practices, China and Kazakhstan are making significant steps in developing reporting, while Iraq is facing challenges due to infrastructural and political constraints.

A comparative analysis of the economic impact, social impact and environmental costs of oil and gas projects in four countries: USA, China, Kazakhstan, Iraq is shown in the diagram (figure 1).

1. Economic Impact This indicator reflects the impact of ESG practices on economic activity in the oil and gas sector. It includes the level of investment in sustainable technologies and projects (for example, renewable energy).

Economic benefits from the introduction of carbon capture technologies and increased energy efficiency. The opportunity to attract foreign investment through ESG initiatives and transparency.

His calculation is based on this way of data on the level of investments in sustainable technologies. The growth of economic profits from new ESG projects.

Attracting foreign investments.

2. Social Impact - This indicator evaluates the impact of ESG practices on social aspects, including

the creation of jobs related to renewable energy sources or environmental projects.

Impact on the local community (reducing pollution, improving health) and social justice and diversity (e.g. gender equality and employee rights).

His calculation includes the level of involvement of local communities in ESG projects. Employee health and safety indicators and equality and diversity data in ESG reports.

3. Environmental Costs - this indicator reflects the negative impact of the oil and gas sector on the environment, despite the introduction of ESG practices, these are emissions of carbon dioxide and other pollutants. Use of water and land resources and damage caused by pollution or destruction of ecosystems.

Its calculation includes the amount of greenhouse gas emissions TCFD data, the level of impact on water and land resources.

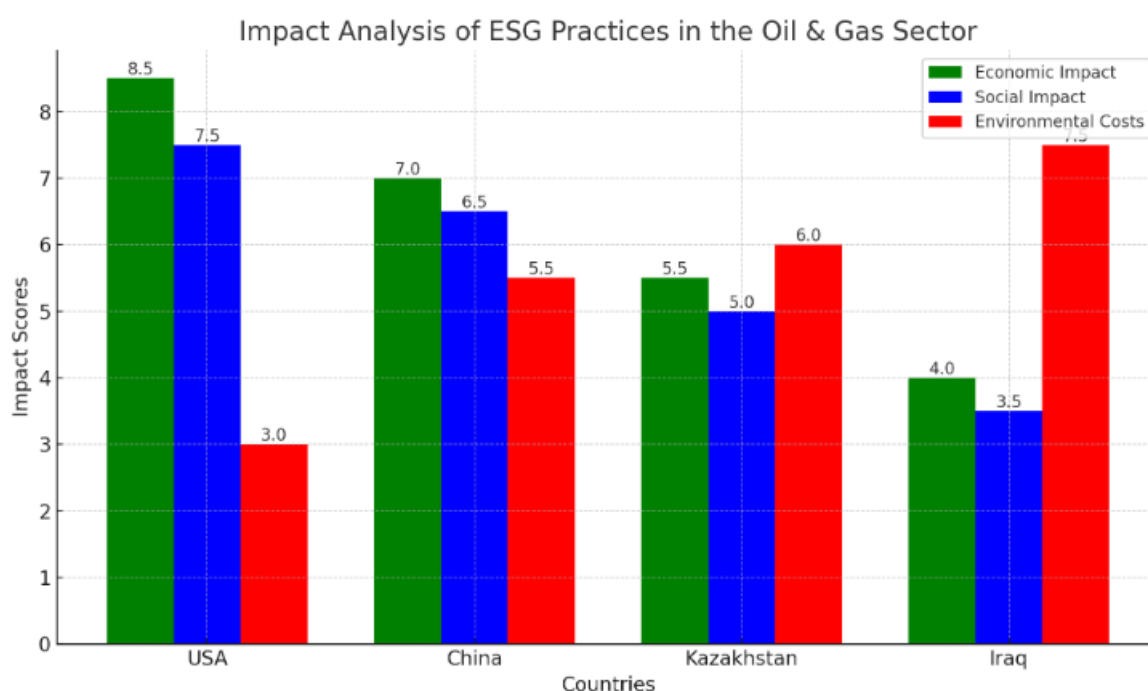


Figure 1. Impact Analysis of ESG Practices in the Oil&Gas Sector

The source was compiled by the author based on the data [17-19]

Characteristics of the chart by country:

The United States has a high integration of the oil and gas industry into the economy, a significant contribution to GDP and jobs(Qun L. E. I. et al. ,2023:946). Moderate progress in improving infrastructure and living conditions. Low compared to other countries due to the use of emission reduction technologies. Although environmental costs are lower (3.0), the United States exhibits strong economic (8.5) and social (7.5) effects from ESG practices. And China is making a big contribution to the economy through export-oriented projects.Social programs are gradually improving, but are being held back by high urbanization. Problems with water and air pollution remain significant. Although China is mediocre in every way, its environmental costs (5.5) are nevertheless more than those of the US.

In Kazakhstan, the contribution to GDP is due to dependence on commodity exports. Progress in infrastructure development is limited, although there are prospects(Kadyrov B., Kuantkan B.,2024:119). There are serious pollution problems due to outdated mining technologies.

Although Kazakhstan exhibits a balanced approach, its economic and social impact metrics are not as high as those of China and the United States. In Iraq, there is a limited impact on GDP due to political instability. Weak social infrastructure and low standard of living (Alyaseri I. J. J., Awthaefa S. S., 2021:1). High level of environmental damage due to the lack of modern technologies. The chart helps to see the balance between economic benefits, social responsibility and environmental costs in each region, providing key information for comparative analysis. Iraq has substantial environmental expenses (8.0), but little impact on the economy (4.0) or society (3.5).

A comparative analysis using tables, charts, and the SWOT approach, revealed that environmental, social, and governance (ESG) practices in the oil and gas industry are advancing, yet their implementation varies widely across nations, influenced by economic, political, and infrastructure factors.

The United States stands out as a leader in ESG integration due to its advanced regulatory system, technological advancements, and transparent corporate governance practices. China is actively pursuing environmental initiatives, aiming to meet international standards, but faces challenges in terms of openness and environmental pollution (Coenen J. et al. ,2021:5). Kazakhstan is making significant progress towards sustainable development, but faces issues with transparency and the effectiveness of ESG reporting (Spankulova L. et al. ,2025:62).

Iraq is at the early stages of implementing ESG practices due to political instability and underdeveloped infrastructure, which results in limited social and economic impact and high environmental costs (Mazhar L. M., Obaid R. N.:23).

The application of SWOT analysis allowed us to pinpoint the strengths and weaknesses, as well as the potential and risks of each nation in the context of ESG. The chart of the equilibrium of economic, social, and environmental effects underscored the significance of a holistic approach to sustainable development management.

Therefore, for the successful implementation of ESG reporting in the oil and gas sector, it is crucial to tailor approaches to the specific circumstances of each country, foster an institutional framework, and enhance international collaboration. This will enhance the industry's investment appeal, bolster environmental and social accountability, and foster sustainable economic growth.

Conclusion

According to a study on ESG (environmental, social, and managerial) reporting practices in the oil and gas sector, there are notable variations in how sustainable management is implemented in the US, China, Kazakhstan, and Iraq. Economic circumstances, national priorities, and the degree of technological advancement are the causes of these discrepancies. Because of its high levels of transparency, adherence to international standards, and incorporation of cutting-edge technology that lower environmental costs and promote social responsibility, the USA leads the world in ESG. China is making significant investments in ESG principles and sustainable energy, but it still faces obstacles from high environmental costs and a lack of transparency. Kazakhstan has high carbon neutrality targets despite its limited resources, but it still has to upgrade its resource management and reporting systems. Despite its enormous oil and gas potential, Iraq struggles with political unrest and inadequate infrastructure, which makes it much harder to establish sustainable governance.

In the USA, the reports are detailed and cover a wide range of data. Special attention is paid to the issues of carbon emission reduction, the use of renewable energy sources, water resources management, staff diversification and transparency of management processes. The TCFD, GRI, and SASB standards are most fully respected. In China, the Reports are structured, but less detailed. Information on investments in renewable energy and measures to reduce air pollution is disclosed, but information on water resources, biodiversity and the sustainable use of land resources is often missing. Transparency of reporting is inferior to Western standards. In China, the emphasis is on the environmental component, such as pollution control and the development of renewable energy, but

it does not pay due attention to social responsibility, transparency of corporate governance and workers' rights.

In Kazakhstan, the reports focus on strategic goals such as carbon neutrality by 2060, as well as the introduction of environmentally friendly technologies. However, data on social aspects (for example, the diversity of workers or contributions to the development of local communities) and water resources management are not sufficiently disclosed. In Kazakhstan, the focus is on carbon neutrality goals and investments in clean energy. At the same time, there is no detailed information on the mechanisms for achieving the goals and on the contributions of companies to social development. In Iraq, ESG reporting is just beginning to develop, and the structure of reports is extremely simplified. Information on environmental impact prevails, but there is practically no information on social aspects and transparency of corporate governance. In the USA and China, more attention is paid to the technological and economic aspects of ESG, while the social aspects are covered in less detail. In Kazakhstan, reporting is strategic in nature, with an emphasis on long-term goals, but specific data, such as on water use or social impact, are poorly disclosed. In Iraq, most of the ESG information remains at the level of declarations rather than analytical data. According to the report, the oil and gas industry's ESG projects' performance is contingent upon a number of criteria, including adherence to global standards, the utilization of contemporary technologies, and efficient management. However, political unpredictability and a vague legal framework can also pose serious challenges to the advancement of ESG practices.

Therefore, it is essential to improve international cooperation, modify ESG norms to suit local circumstances, and boost managerial efficiency and transparency in the oil and gas sector in order to guarantee sustainable development. This will balance the economic benefits, social improvements and minimization of environmental damage in each country.

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Хань Найчао

Экономика және Бизнес жоғары мектебі, Әл-фараби атындағы қазақ Ұлттық университеті, Алматы, Қазақстан

E-mail: jia_l@mail.ru

МҰНАЙ-ГАЗ САЛАСЫНДАҒЫ ТҰРАҚТЫ МЕНЕДЖМЕНТ: ESG ЕСЕПТІЛІГІН БАҒАЛАУ ЖӘНЕ ҚАЗАҚСТАН, ҚЫТАЙ, АҚШ ЖӘНЕ ИРАКТАҒЫ МҰНАЙ-ГАЗ ЖОБАЛАРЫНА ӘСЕРІ

Аңдатпа. Бұл зерттеудің мақсаты – ESG (экологиялық, әлеуметтік және корпоративтік басқару) стандарттарының мұнай-газ секторындағы қолданысын Қазақстан, Қытай, АҚШ және Ирак елдері мысалында салыстырмалы түрде талдау. Зерттеудің ғылыми маңыздылығы ESG тәжірибелерінің елдік ерекшеліктерін ашу арқылы оларды жетілдіру стратегияларын анықтауда жатыр. Зерттеудің ғылыми жаңалығы – әртүрлі экономикалық және саяси жағдайлардағы ESG-тәжірибелердің нақты салыстырмалы талдауы мен SWOT әдісі арқылы жүйелі бағалануы. Зерттеу барысында елдердің ESG көрсеткіштері: экологиялық әсер, әлеуметтік салдарлар мен экономикалық тиімділік тұрғысынан қарастырылды. Зерттеу әдістемесіне дереккөздерге негізделген сапалық және сандық талдау, салыстырмалы диаграммалар және SWOT-талдау енді. Нәтижелер көрсеткендей, АҚШ ESG стандарттарын ең кеңінен қолданады, Қытай экологиялық бастамаларды дамытып келеді, Қазақстанда ашықтық негізделініп келеді, ал Ирак саяси тұрақсыздықтың салдарынан артта қалып отыр. Зерттеу нәтижелері мұнай-газ секторының тұрақты дамуындағы зерттеулергенегіз бола алады. Зерттеу барысында мұнай-газ саласындағы тұрақты тәжірибелердің дамуына әсер ететін заңнамалық бастамалар, мемлекеттік ынталандырулар қарастырылды. Елдер арасындағы ESG есептілігінің міндеттілігі мен стандарттау деңгейіндегі айырмашылықтар анықталды, бұл оларды жүзеге асырудағы мотивация мен кедергілерді тереңірек түсінуге мүмкіндік береді. Зерттеу сонымен қатар халықаралық деңгейде ESG тәсілдерін үйлестіру перспективаларын қарастырады. Бұл тақырып әсіресе жаһандық климаттық сын-қатерлер мен инвесторлар мен халықаралық ұйымдар тарапынан бизнестің ашықтығы мен жауапкершілігіне қойылатын талаптардың күшеюі жағдайында өзекті.

Кілт сөздер: ESG, мұнай-газ секторы, тұрақты даму, экологиялық басқару, халықаралық стандарттар, әлеуметтік жауапкершілік, SWOT-талдау.

Хань Найчао

Высшая школа экономики и бизнеса, Казахский национальный университет имени Аль-Фараби, Алматы, Казахстан

E-mail: jia_l@mail.ru

УСТОЙЧИВОЕ УПРАВЛЕНИЕ В НЕФТЕГАЗОВОЙ ОТРАСЛИ: ОЦЕНКА ОТЧЕТНОСТИ ESG И ВЛИЯНИЯ НЕФТЕГАЗОВЫХ ПРОЕКТОВ В КАЗАХСТАНЕ, КИТАЕ, США И ИРАКЕ

Аннотация. Целью данного исследования является сравнительный анализ применения стандартов ESG (экологического, социального и корпоративного управления) в нефтегазовом секторе на примере Казахстана, Китая, США и Ирака. Научная значимость исследования заключается в определении стратегий их совершенствования путем раскрытия страновых особенностей практик ESG. Научная новизна исследования заключается в систематической оценке ESG-практик в различных экономических и политических условиях с помощью точного сравнительного анализа и метода SWOT. В ходе исследования были рассмотрены показатели ESG стран с точки зрения: экологического воздействия, социальных последствий и экономической эффективности. Методология исследования включала качественный и количественный анализ на основе источников, сравнительные диаграммы и SWOT-анализ. Результаты показывают, что США наиболее широко используют стандарты ESG, Китай развивает экологические инициативы, в Казахстане строится прозрачность, а Ирак отстает из-за политической нестабильности. Результаты исследования могут стать основой исследований устойчивого развития нефтегазового сектора. В ходе исследования были рассмотрены законодательные инициативы, государственные стимулы, влияющие на развитие устойчивых практик в нефтегазовой отрасли. Выявлены различия в уровне обязательности и стандартизации отчетности ESG между странами, что позволяет глубже понять мотивацию и барьеры для их реализации. В исследовании также рассматриваются перспективы гармонизации подходов ESG на международном уровне. Данная тема особенно актуальна в условиях глобальных климатических вызовов и ужесточения требований к прозрачности и ответственности бизнеса со стороны инвесторов и международных организаций.

Ключевые слова: ESG, нефтегазовый сектор, устойчивое развитие, экологическое управление, международные стандарты, социальная ответственность, SWOT-анализ.

Information about author:

Han Naichao , 3rd year Doctoral Student, Higher School of Economics and Business, Al farabi Kazakh National university, Almaty, Kazakhstan.

Автор туралы мәлімет:

Хань Найчао, Экономика және бизнес жоғары мектебінің 3 курс Докторанты, Әл-фараби атындағы қазақ Ұлттық университеті, Алматы, Қазақстан.

Информация об авторе:

Хань Найчао, докторант 3 курса, Высшая школа экономики и бизнеса, Казахский национальный университет имени Аль-Фараби, Алматы, Казахстан.