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SUSTAINABLE MANAGEMENT OF THE COMPANY'S PRODUCTION ACTIVITIES: STRATEGIES AND TOOLS

СТАЛЕ УПРАВЛІННЯ ВИРОБНИЧОЮ ДІЯЛЬНІСТЮ ПІДПРИЄМСТВОМ: СТРАТЕГІЇ ТА ІНСТРУМЕНТИ

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Філіппов В.Ю., Заїченко К.С., Понтус К.М., Перевозна М.О. Стале управління виробничою діяльністю підприємством: стратегії та інструменти. Науково-методична стаття.

Стаття присвячена дослідженню сталого управління виробництвом підприємств у сучасних умовах, з огляду на те, що воно є критично важливим аспектом корпоративної соціальної відповідальності. Розглянуто основні публікації та дослідження вчених, в яких охарактеризовані головні методи, стратегії та інструменти. Проаналізовано переваги та недоліки сталого управління виробництвом у діяльності підприємства та його впливу на стан довкілля. Було визначено необхідність прийняття екологічних методів виробництва, інвестицій у відновлювані джерела енергії, зменшення відходів, а також використання екологічних матеріалів та технологій. Запропоновано різноманітні стратегії та інструменти, які підприємства можуть використовувати для досягнення сталого управління виробничою діяльністю, зосереджуючись на перевагах і недоліках впровадження цих практик для ефективного та швидкого досягнення високого рівня виробництва та розвитку підприємств.

Ключові слова: стале управління, стратегії, інструменти, корпоративна соціальна відповідальність, вплив на навколишнє середовище, стійкі методи виробництва, екологічно чисті матеріали та технології

Filippov V.Yu., Zaichenko K.S., Pontus K.M., Perevozna M.O. Sustainable Management of the Company's Production Activities: Strategies and Tools. Scientific and methodical article.

The article is devoted to the study of sustainable production management of enterprises in modern conditions, given that it is a critical aspect of corporate social responsibility. The main publications and studies of scientists that characterize the main methods, strategies and tools are considered. The advantages and disadvantages of sustainable production management in the activities of an enterprise and its impact on the environment are analyzed. The author identifies the need to adopt environmentally friendly production methods, invest in renewable energy sources, reduce waste, and use environmentally friendly materials and technologies. Various strategies and tools that enterprises can use to achieve sustainable production management are proposed, focusing on the advantages and disadvantages of implementing these practices, to effectively and quickly achieve a high level of production and development of enterprises.

Keywords: sustainable management, strategies, tools, corporate social responsibility, environmental impact, sustainable production methods, environmentally friendly materials and technologies

Sustainable management of a company's production activities is a critical aspect of corporate social responsibility and involves the implementation of strategies and tools that help a company minimize its environmental impact while maintaining profitability. Its research is relevant given the growing interest of individual companies and the general level of social awareness of the importance of sustainable development and the need to reduce the negative impact of production on the environment. In addition, by ensuring more efficient use of resources, a company can, among other things, not only save money but also increase its income.

Sustainable production management has a positive impact on the company's reputation, which in turn is one of the important factors in attracting new customers and investors.

In addition, due to the growing requirements for companies to reduce their environmental impact, global governments are developing and implementing legislation governing environmental safety and the use of natural resources. In view of this, the use of sustainable management strategies and tools helps enterprises not only to comply with legal requirements, but also to increase their competitiveness in the market.

Thus, the study is relevant in the current environment and can be used by enterprises to improve the efficiency of resource use, enhance their reputation and competitiveness in the market.

Analysis of recent researches and publications

Increasingly, modern businesses are looking for and developing sustainable production strategies.

This is especially important for companies engaged in the production of goods and services that have a significant impact on the environment: chemical and oil industries, agriculture, transportation companies, etc. Sustainable management has become the basis of many studies, and research is conducted not only by foreign scientists but also by domestic scientists, including: O. Malin [1], S. Filippova, O. Balan, Y. Kovtunenکو, L. Voloshchuk, A. Viknianska [2], D. Harinovych-Yavorska, M. Sahaidak, A. Zhavoronok, A. Durmanov [3], V. Bartoshova, S. Drobiazko, O. Melnyk, V. Antoshchuk [4], V. Boltenkov, S. Kondratiev, and A. Denysenko. In their works, sustainable management, among other things, includes the use of the latest technologies, renewable energy sources, reducing the use of harmful substances and waste, enhancing employee safety, observing working conditions, and ensuring the protection of the rights of those involved. The involvement of stakeholders in the management process is also important.

These methods and tasks were studied by German researchers Weiss D., Haiduk T. and Knopf J. In their work "Step-by-Step Guide to Sustainable Supply Chain Management", they analyzed the impact of sustainable production management on enterprises in emerging economies. The researchers found that the traditional approach to the company's activities is not cost-effective in the face of growing concerns about the sustainable production strategy (Weiss, Hajduk & Knopf, 2017) [5].

It has been found that the economic aspect of sustainable development is related to the economic benefits received not only by enterprises, but also by society or countries as a whole. Thus, sustainable management has become a major challenge globally, given its key role in economic, environmental and social prosperity. In turn, companies are considering ways to minimize waste, focusing no longer on social or environmental factors, but also on economic factors aimed at obtaining material benefits. At the level of global markets, advanced countries are becoming a priority, contributing to increased interest in sustainable production management, as opposed to countries whose economies are characterized by lower incomes, slower economic growth and business activity.

The researchers Hall D.M., Feldpausch-Parker A., Peterson T.R., Stevens J.K. and Wilson E.J. conducted similar studies, the main principles of which were based on the United Nations Charter and the Declaration on the Right to Development. The scientists presented their observations and conclusions in the article "Social-ecological system resonance: a theoretical framework for brokering sustainable solutions", which mainly analyzed the social aspects of the benefits of sustainable production management (Hall, Feldpausch-Parker, Peterson, Stephens & Wilson, 2017) [6].

It can be concluded that one of the important achievements of the United Nations conferences held during the critical issues of sustainable production management is the laying of a solid foundation in favor of social development. It has been found that production has a negative impact on social well-being, causing, among other things, environmental degradation, global warming, posing threats to human health, depleting non-renewable natural resources, etc. Climate change is one of the most serious problems of our time, and its adverse effects affect the ability of all countries to introduce and promote sustainable management of production activities of the enterprise.

The researchers Huang H., Zhang J., Yang J., Wang L. and Gong Y. conducted a study of the environmental aspect of sustainable management in China (PRC), the results of which are presented in the article "Supply chain network structure and firm's R&D investments: empirical evidence from Chinese manufacturing firms". Particular attention was paid to the concept of ESG (Environmental, Social, and Corporate Governance performance), which is one of the three main dimensions by which the international community measures the ability of business entities to develop sustainably. It has been found that under current market conditions, large Chinese listed power generating companies can improve their financial performance through a high level of ESG (Huang, Zhang, Yan, Wang & Gong, 2022) [7].

The findings of the researchers show that investors are paying more and more attention to the ESG performance of a company when making investment decisions. For example, by interpreting a company's ESG report, the value of the company and its risks are determined, and thus companies with investment potential are selected. Companies, accordingly, also focus on improving their ESG performance at the insistence of potential investors. The results of this study are also of practical importance for company management and decision makers, as well as for industry regulators.

Unsolved aspects of the problem

As can be seen from the above, the problem of sustainable production development is multifaceted, consisting of many aspects that may not be resolved at the current time. The problem of regulating production waste containing toxic substances is a pressing one, which, if neglected, can have serious consequences for the environment, human health and economic sustainability.

Waste, in turn, is a source of additional costs for the company for its collection, transportation and processing. Thus, production waste is not only an environmental but also an economic problem. It is also of great importance in terms of the loss of useful resources such as energy, water or metals. The problem can also have an obvious social aspect, given the impact on public health and well-being due to air and water pollution.

The need to address the issues of sustainable production development makes our research relevant. This requires a comprehensive approach and solutions to preserve the environment for future generations. Understanding social aspects, such as working conditions and staff development, will help to create a favorable environment for employees and maintain their motivation and productivity. In addition, the implementation of circular economy principles will help to reduce resource consumption and minimize the negative impact on nature. Combining these aspects into a comprehensive approach will ensure the sustainable development of production activities, conserve resources and create a sustainable future for future generations.

The main part

In this study, Sustainable Production Management is defined as a set of approaches to managing the production process, which is aimed at achieving efficiency and sustainability of production processes. It includes various strategies and tools that allow enterprises to achieve these goals. Among other things, sustainable management of a company's production activities is an important component of corporate social responsibility.

The World Business Council for Sustainable Development (WBCSD) [8] is a global association of large corporations that focus on sustainable development. The WBCSD works with businesses, governments, and other stakeholders to promote economic growth that is balanced across social, environmental, and economic dimensions. The organization develops strategies, standards and guidelines for businesses in the area of sustainable development and environmental responsibility. It also promotes joint activities of companies to address global issues related to sustainability and climate change.

Having analyzed the above and other sources [9-11], we conclude that the issue of environmental problems and ways to solve them is indeed becoming increasingly relevant for companies due to the obvious need to take active measures to minimize the impact of production on the environment. At the same time, it is important to maintain the company's profitability. In order to achieve it, companies must implement strategies and use management tools that can help them achieve sustainable production.

Also, as stated in the Sustainable Development Strategy for Ukraine until 2030 (a document that defines key goals, priorities and measures to achieve sustainable development in Ukraine over the next decades), we should focus on balanced development that takes into account economic, social and environmental aspects [12].

The Strategy contains recommendations and specific measures in the areas of economy, energy, transport, environment, social policy, education, and health. It also envisages the creation of the necessary institutional and legal framework for implementing the strategy and monitoring its implementation.

The strategy is aimed at ensuring economic growth, improving the quality of life, preserving natural resources and ecosystems, and implementing the principles of sustainable development in all areas of the country's activities.

This strategy is an important guiding document for Ukraine and reflects the country's commitment to sustainable development at the national level over the next decade, and it states that the goal of sustainable development is to ensure economic growth, social justice and environmental protection. Research on this topic is aimed at identifying measures that can help improve the effectiveness of the enterprise risk management system in an uncertain environment. Taking into account the principles of sustainable development, it is proposed to implement an integrated approach that combines elements of environmental, social and economic responsibility [13].

The relationship between economic growth, social justice, and environmental sustainability as the main components of sustainable development is illustrated in Figure 1. The diagram demonstrates that sustainable development requires a harmonious combination of these three aspects to achieve long-lasting and sustainable prosperity.

The tools that belong to the block "Sustainable management of production activities" in Figure 1 correspond to the following definitions:

- quality management includes the implementation of a quality management system, quality standards and product quality control procedures to ensure sustainable production quality;
- resource efficiency focuses on the efficient use of resources, including energy, raw materials and water. This can include energy efficiency, the use of recycled materials, and process optimization to reduce resource consumption;
- environmental responsibility takes into account the impact of production activities on the environment and takes measures to reduce the negative impact, such as the introduction of environmentally friendly technologies, the use of renewable energy sources and the implementation of waste management policies;
- risk management includes the assessment and management of risks associated with production activities, such as environmental risks, production deficiencies and poor financial performance;
- cooperation and engagement takes into account the importance of cooperation with stakeholders, including cooperation with suppliers, consumers, public organizations and government agencies, to ensure mutually beneficial results and take into account social and environmental aspects;

- continuous improvement involves the process of continuously analyzing and improving production processes, technologies and management methods to achieve optimal performance and sustainable development. This may include implementing innovative practices, improving production efficiency and supply chain management, and developing new products and services to meet sustainability requirements;
- strategic planning – defining long-term goals and strategies for the enterprise's development with a focus on sustainable development. This includes developing a mission, defining goals, formulating strategic plans, and identifying key performance indicators in terms of economic, social, and environmental dimensions;
- internal control systems – establishing systems for controlling, monitoring and evaluating the company's production activities in order to identify potential problems and improve efficiency. This may include the implementation of a quality management system, production audit and reporting system;
- stakeholder engagement. Active communication and cooperation with stakeholders, including employees, customers, suppliers, and public organizations, to take into account their needs, expectations, and contribution to the development of sustainable production activities;
- compliance with laws and ethical standards – understanding and fulfilling the requirements of laws, regulations and standards related to production activities, in particular in the areas of quality, safety, environmental protection and ethics. This includes the implementation of ethical principles in the company's management and stakeholder relations.

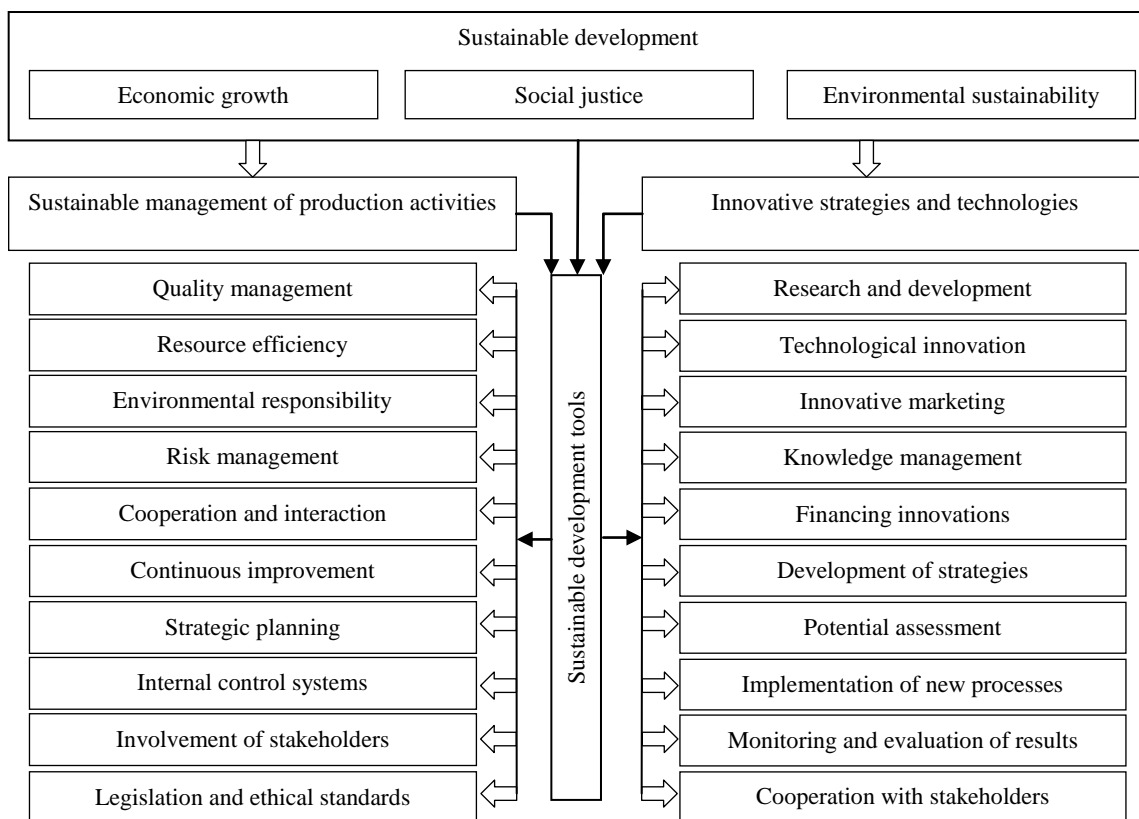


Figure 1. Scheme of combining innovative strategies and technologies to achieve sustainable production development at the enterprise

Source: authors' own elaboration

These components of enterprise performance management point to the need for a comprehensive and integrated approach to achieving sustainability. This means ensuring economic efficiency, social responsibility, environmental sustainability and innovative development. Taking these components into account, enterprises can ensure sustainable management of their production activities, reducing environmental impact, creating social value and achieving economic sustainability in the long term.

The tools that belong to the block "Innovative strategies and technologies" in Figure 1 correspond to the following definitions:

- research and development includes activities aimed at finding new ideas, concepts, technologies and solutions to improve production activities. This may include scientific research, experiments, and the introduction of new technologies and methods;
- technological innovation – the use of new technologies and methods in the production process to improve efficiency, quality and competitiveness. This may include automation, artificial intelligence, robotics and other advanced technologies;

- innovative marketing. The use of new strategies and approaches in marketing, including the introduction of new products, services and market strategies that meet changes in consumer behavior and market requirements;
- knowledge management is the systematic collection, storage, and use of knowledge within an organization to enhance its innovation potential. This can include creating a database, training programs, knowledge sharing, and creating an innovation culture;
- cooperation with stakeholders – interaction and cooperation with stakeholders, such as universities, research institutions, other enterprises and public organizations, for the purpose of joint development and innovative growth;
- financing innovation is about securing adequate funding to implement innovative strategies and technologies. This may include seeking external sources of funding, such as investment funds, agreements with partners, or government innovation support programs;
- development of innovation strategies – defining the purpose, use and development of strategies that promote innovation in the production activities of the enterprise. This may include creating long-term development plans, implementing an innovative culture, and stimulating creativity and initiative among employees;
- innovation potential assessment is the analysis and evaluation of opportunities for innovative development in production activities. This includes identifying potential innovations, their economic benefits, market impact and possible risks;
- implementation of innovative processes – organization and management of the processes of introducing innovative strategies and technologies into production activities. This may include planning, coordination, implementation and control of new innovation projects;
- monitoring and evaluation of results, as a systematic analysis and assessment of the results of the implementation of innovative strategies and technologies. This allows to determine the effectiveness of the innovation process, make necessary adjustments and ensure the achievement of the set goals in terms of sustainable management of production activities. Monitoring and evaluation of results help to identify the success of the implemented innovations, identify potential problems and establish improvements for future development.

These components of innovative strategies and technologies reflect the need to constantly search for and implement innovative solutions to improve the company's production activities. This means stimulating creativity and initiative, developing development strategies, collaborating with stakeholders, and ensuring adequate funding. Innovative strategies and technologies contribute to the sustainable management of production activities, increase competitiveness and ensure the successful development of the enterprise in the long term.

All the elements of Figure 1 take into account the economic, social and environmental components under consideration. These elements are closely interconnected and complement each other, which contributes to the sustainable development of business activities and preservation of the environment for future generations.

The economic component of sustainable production management is primarily aimed at ensuring sustainable economic growth.

The economic component includes the following elements:

- reducing production costs through the efficient use of resources (such as water, energy, raw materials, etc.);
- development of innovative technologies in new production methods that reduce costs and conserve resources;
- reducing emissions and waste in the production process by reducing the use of harmful substances, ensuring the reuse and recycling of waste;
- ensuring economic sustainability of production and long-term stability through effective financial and economic policies;
- ensuring access to resources while preserving the natural environment;
- creating positive conditions for the development of small and medium-sized businesses;
- promoting economic development and ensuring sustainable production management.

The social component of sustainable production management is primarily aimed at ensuring a high level of social justice and protecting the rights and well-being of employees.

The social component includes the following elements:

- ensuring social justice through proper distribution of employees' salaries;
- protecting the health of employees by creating safe working conditions (prevention of occupational injuries, protection from hazardous substances, etc.);
- development of human potential through training and professional development of employees aimed at their career growth and creative development;
- protection against discrimination, which ensures equal opportunities for all employees, regardless of gender, race, nationality, etc.;
- preservation of cultural heritage;
- development of cooperation between production and local communities;
- ensuring public access to services and infrastructure;
- ensuring the right to social protection (pensions, health insurance, financial assistance, etc.).

The environmental component of sustainable production management is primarily focused on the balanced use of resources and environmental protection.

Environmental elements of sustainable production management include:

- balanced use of natural resources (water, soil, etc.) for their efficient and economically feasible use;
- reducing electricity consumption to minimize emissions of harmful substances into the atmosphere;
- application of energy efficient technologies;
- use of alternative energy sources;
- protecting ecosystems and restoring their biodiversity;
- recycling of waste;
- use of renewable energy sources (hydro, solar or wind power);
- implementation of waste reduction and recycling programs;
- use of environmentally friendly materials in production processes;
- controlling the level of environmental pollution caused by the company's activities.

The implementation of each component complements and ensures an integrated approach aimed at preserving the natural environment and ensuring sustainable economic development. This approach is one of the important conditions for the long-term success of the company, as it allows to ensure business growth in the context of limited resources and the need to support ecosystems. Sustainable development also helps to attract new customers and investors, who are increasingly paying attention not only to the economic, but also to the environmental and social aspects of companies' activities.

In the context of sustainable production management, businesses can use tools such as LCA (Life Cycle Assessment) to assess the environmental impact of their operations and identify opportunities to reduce the negative impact [10].

Businesses can also use eco-friendly marketing tools and social efforts to promote their products and attract the attention of new customers looking for more reputedly attractive products and services.

Sustainable Production means ensuring efficient production activities with minimal negative impact on the environment. Of course, sustainable production management requires investments in new technologies, reorganization of business processes and engagement of environmental specialists, but in the long run it potentially leads to positive results for the company and the entire society.

One of the key strategies for achieving sustainable production is to implement methods aimed at minimizing the environmental impact of the company's production processes (reducing waste and emissions, etc.), as well as ensuring that the company uses environmentally friendly materials and technologies.

A key strategy for achieving sustainable production is, as already mentioned, the introduction of renewable energy sources, which are becoming increasingly popular as companies seek to reduce their carbon footprint. By investing in renewable energy sources, companies can reduce their dependence on fossil fuels, cut energy costs, and minimize their environmental impact.

The introduction of environmentally friendly materials (recycled plastic, biodegradable materials, ecological wood, etc.) and technologies in production processes is another key strategy to achieve sustainable production by minimizing the use of non-renewable resources [14]. By implementing waste reduction and recycling programs, investing in energy-efficient technologies, and using environmentally friendly materials, you can reduce your environmental impact and increase profits by reducing production costs. In the same way, the use of environmentally friendly technologies (energy-efficient lighting and heating systems, etc.) helps to reduce the consumption of non-renewable energy.

The tools for implementing these strategies at the enterprise include:

- conducting an environmental impact assessment to identify and reduce potentially negative factors;
- using the environmental management system to organize production processes;
- fulfillment of legal requirements and ensure compliance with environmental standards;
- adherence to the principles of social responsibility of business, aimed, in particular, at developing strategies to support local communities and maintain the level of social justice;
- use of environmentally oriented marketing to promote own products that meet the standards of sustainable production management and environmental responsibility;
- attracting investments for the development of safe, environmentally friendly infrastructure and technologies.

Implementing strategies and tools for sustainable production development is important for an enterprise both in terms of environmental protection and social responsibility, as well as in terms of increasing competitiveness and economic sustainability.

When using these tools and adhering to the principles of sustainable management of production activities, a number of advantages can be obtained:

- reducing electricity and water costs by implementing energy-efficient technologies and processes, which is an additional bonus for the company;
- preventing losses related to environmental issues by reducing the risk of negative environmental impact;
- improving the reputation of the enterprise, which operates in accordance with environmental and social justice issues, among consumers, investors and stakeholders.

While implementing sustainable production management has a number of these benefits, there are certain disadvantages and challenges that will take time and experience to minimize. For example, it should be borne in mind that the initial costs of implementing environmentally friendly production methods and technologies can be high, so companies will not immediately receive a return on their investment. In addition, the pace of implementation of changes to the production process may be relatively slow for some companies, and the experience required to effectively implement sustainable production activities may be insufficient.

Such disadvantages may include:

- the high cost of implementing environmentally friendly production methods that require significant investments in new technologies and processes;
- lack of necessary experience and knowledge for effective implementation of sustainable production methods;
- the slow pace of implementation of changes in production processes potentially complicates the implementation of sustainable production practices.

As already mentioned, there are tools and strategies available to help companies implement sustainable production practices, including:

- use of LCA, which involves assessing the environmental impact of a product or production process throughout its entire life cycle (from raw material extraction to disposal);
- management and control of the supply chain, which involves direct cooperation with suppliers to monitor the implementation of environmentally friendly production methods (use of environmentally friendly materials, waste reduction, etc.);
- using an international quality standard (ISO 9001 or ISO 14001) to manage the environmental impact of production and comply with environmental regulations;
- carbon footprint control, which involves calculating the amount of greenhouse gas emissions, identifying areas for improvement and possible options for reducing the carbon footprint associated with a product or production process.

Sustainable management of a company's production activities is an important aspect of modern business. Taking into account environmental, social and economic factors allows companies to ensure long-term success and meet the growing demands of consumers and regulators.

One of the main aspects of sustainable management is the development and implementation of strategies aimed at achieving economic efficiency, reducing environmental impact and increasing social responsibility. Businesses should consider sustainability goals in their strategic planning and implement them at all levels of the organization.

For effective sustainable management of production activities, a company needs to use various tools. Implementation of a quality management system, such as ISO 9001, allows an enterprise to ensure consistent quality of products or services, ensure customer satisfaction, and improve production processes. This tool helps a business to identify and control key processes, improve management systems, and achieve continuous improvement.

The use of environmental tools, such as the ISO 14001 environmental management system, allows a company to effectively manage its environmental impact. This tool promotes the implementation of environmental standards, rational use of resources, reduction of emissions of harmful substances and energy saving.

Integrating social aspects into a company's strategy is another important step in sustainable management. Stakeholder engagement, safe and fair working conditions, and the development of corporate social responsibility (CSR) programs help to increase employee satisfaction, improve the company's reputation, and attract new customers.

Particular attention should be paid to innovative strategies that contribute to the continuous improvement of products and production processes. Implementation of the latest technologies, creation of an innovative environment and cooperation with third-party organizations allow the company to remain competitive in the market and adapt to changing conditions.

Successful sustainable management of an enterprise's production activities requires systematic evaluation and monitoring of results. Implementation of key performance indicators (KPIs) allows to measure and analyze the progress in achieving strategic goals, identify problem areas and take appropriate corrective measures.

Particular attention should be paid to staff training and development. Businesses should ensure continuous professional development of their employees, organize trainings and seminars on sustainable management, and create motivational systems that help attract and retain talented staff.

Effective communication is a key aspect of sustainable management. Businesses should ensure open and transparent communication both within the organization and with stakeholders, including customers, suppliers, employees and the public.

Conclusions

Sustainable management of a company's operations is a key factor in its success and sustainable development. The path to sustainable management includes the development and implementation of strategies, the use of appropriate tools, systematic monitoring and evaluation of results, training and development of personnel, and effective communication. Sustainable management requires an integrated approach to the

economic, environmental and social aspects of a company's operations, ensuring a balance between profit, environmental protection and stakeholder satisfaction.

The use of tools such as quality management and environmental management systems helps to establish efficient processes, improve product quality and reduce negative environmental impact. The development of innovative strategies helps the company to adapt to changes, introduce new technologies and ensure competitiveness.

The key role in sustainable management is played by the company's staff. Developing their skills, ongoing training and creating a motivating environment help to attract talented staff and increase the efficiency of the organization. Communication is a key tool for cooperation with all stakeholders, taking into account their expectations and needs.

In order to implement sustainable management of the company's production activities to achieve a high level of sustainable production, companies should implement strategies and tools that can help with the implementation of environmentally friendly production methods, the use of environmentally friendly materials, technologies and renewable energy sources, and the reduction of waste and emissions associated with the company. Sustainable management of production activities involves taking into account not only environmental, but also economic and social components of the regulation of such activities.

Although the implementation of these strategies and tools is fraught with challenges, the benefits are clear. These include not only a reduction in environmental impact, but also increased profitability, corporate social responsibility, and improved reputation. Based on the above, it is necessary to introduce additional elements that not only take into account the analyzed experience of foreign companies, but also take into account the current state of the economic, social and environmental sphere in Ukraine. For example, it is necessary to develop tools for the implementation of sustainable production in the context of the general deterioration of the environment caused by the full-scale war on the territory of Ukraine.

Thus, ensuring sustainable management of an enterprise's production activities requires a comprehensive approach and the use of various strategies and tools. This helps companies achieve economic success, preserve natural resources, improve working conditions and meet the requirements of society. By implementing sustainable management, companies are able to pursue more sustainable and efficient development, maintain competitive advantages and promote sustainable growth.

Abstract

Sustainable Production Management (SPM) is an approach to managing the production process that aims to achieve efficiency and sustainability of production processes. It includes various strategies and tools that allow enterprises to achieve these goals. Sustainable management of an enterprise's production activities involves the use of a set of strategies and tools that allow achieving economic efficiency and sustainability of production processes, reducing negative impact on the environment and ensuring social responsibility to the community. The main principles of sustainable production management include the use of environmentally friendly technologies, rational use of resources, recycling of raw materials and waste management, increasing the efficiency of production processes and reducing energy and other resource costs.

The main tool for sustainable management of production activities is the sustainability management system, which provides an integrated approach to managing production processes to ensure the sustainable development of the enterprise. Other tools such as product life cycle analysis, green marketing, environmental management systems, and sustainability assessment systems are also used to implement this strategy.

Sustainable management of production activities is an important element of modern business, as it allows companies to reduce energy and other resource costs, ensure product quality and competitiveness, and reduce negative environmental impact. In addition, sustainable management of production activities allows companies to ensure a high level of social responsibility, which is becoming increasingly important for consumers, investors and other stakeholders.

Sustainable management tools also include quality standards and certification systems.

These systems establish requirements for managing production activities, help reduce negative environmental impacts and increase the responsibility of enterprises to consumers and other stakeholders.

Another important tool for sustainable management is the involvement of stakeholders, i.e. various groups of stakeholders that can influence the company's activities. These may include consumers, investors, government, activists of public organizations, etc. Stakeholder engagement allows companies to take into account different interests and needs and ensure more effective management of sustainable development. One of the main principles of sustainable management is the "circular economy", which involves maximizing the use of resources and reusing waste in the production process. This approach helps to reduce waste and consume fewer natural resources, which is important for preserving the environment and maintaining the economic sustainability of the enterprise.

In today's environment, when the issue of sustainable development is becoming increasingly important, sustainable management of production activities is a key factor in the success of enterprises. It allows companies to ensure efficient use of resources, reduce waste and negative environmental impact, and increase social responsibility and competitiveness.

In order to implement sustainable management of an enterprise's production activities to achieve a high level of sustainable production, companies should implement strategies and tools that can help with the implementation of environmentally friendly production methods, the use of environmentally friendly materials, technologies and renewable energy sources, and the reduction of waste and emissions associated with the enterprise. Sustainable management of production activities involves taking into account not only environmental, but also economic and social components of the regulation of such activities.

Although the implementation of these strategies and tools is fraught with difficulties, the benefits are clear. This includes not only reducing the environmental impact, but also increasing profitability, corporate social responsibility and improving reputation. Based on the above, it is necessary to introduce additional elements that not only take into account the analyzed experience of foreign companies, but also take into account the current state of the economic, social and environmental sphere in Ukraine. For example, it is necessary to develop tools for the implementation of sustainable production in the context of the general deterioration of the environment caused by the full-scale war on the territory of Ukraine.

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