

## SUSTAINABLE DEVELOPMENT AND ORGANIZATION MANAGEMENT ON A SELECTED EXAMPLE

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**Purpose:** The aim of this article is to present solutions in the field of sustainable development and to showcase best practices in this area using the example of a native, thriving company, such as Press Glass Holding SA.

**Design/methodology/approach:** The study was based on purposive sampling. An inquiry was sent to the company regarding their willingness to participate in the study. The thematic scope was presented, and participation was voluntary. The research tool used was a survey questionnaire. Contact with the company was conducted via email correspondence, and a meeting with the management of the establishment took place.

**Findings:** The study can serve as a small contribution to presenting good managerial practices for other companies and indicates the importance of applying principles of sustainable development. Based on the study, areas requiring special attention and places in the company management have been identified. The company's actions can serve as inspiration for other organizations to implement principles of sustainable development.

**Research limitations/implications:** This study could be expanded to include a significantly larger number of enterprises from the territory of the Republic of Poland. This would enable the creation of sustainable development principles tailored to Polish conditions. The main weakness of the study is the presentation of only one company without comparison with others in the same industry.

**Practical implications:** This study could serve as a starting point for the creation of universal principles of sustainable management in Polish conditions for developing companies. It can serve as inspiration for undertaking such actions.

**Social implications:** Better management in implementing principles of sustainable development and respecting the environment contributes to improving the work and life of future generations by showing respect for the natural environment and its resources.

**Originality/value:** Presenting a company that successfully implements principles of sustainable development in its activities, achieving market successes, and enjoying the recognition of employees.

**Keywords:** Sustainable development, green deal, management, internal marketing, corporate social responsibility.

**Category of the paper:** Research paper, case study.

## Introduction

We are witnessing an increasing awareness of climate change and the need to build in a sustainable manner. It is extremely important to maintain the highest standards and norms regarding both the construction, functioning, and subsequent dismantling of investments, which close the building's life cycle. A holistic approach facilitates the implementation of principles of a circular economy and reduces the carbon footprint. Therefore, the construction sector is one of the key targets of the European Commission's policy on the circular economy: a renewable economic system where resource and energy consumption is minimized. The necessary direction of development is to strive for buildings with a zero carbon footprint. The Paris Agreement of 2015 makes this issue clear: by 2050, it is necessary to decarbonize the global economy, and construction is one of its pillars. Buildings require enormous amounts of energy, which contributes to greenhouse gas emissions. One of the key elements in building construction is glass components such as windows, glass facades, etc. This issue is examined in his article by, among others, M. Wojas (Wojas, 2020, pp. 61-72).

This approach to the problem is facilitated by principles of sustainable development. Deepening imbalance leads to exceeding the tolerance limits of nature and the uncontrolled growth of social problems. To prevent this, changes are necessary in many aspects of human activity, including both consumption and production. Management should play a crucial role in these activities. Sustainable management has been written about by, among others, S. Cohen (Cohen, 2011, p. 146). A. Pabian has developed issues in this area regarding individual management functions (Pabian, 2013, pp. 3-8).

## Literature review

The United Nations is making efforts to construct a transparent set of global goals aimed at saving the planet and improving the lives of people. Agenda 21, adopted at the "Environment and Development" conference in Rio de Janeiro in 1992 (in Poland in 1993), emphasized the interconnections between the three dimensions of sustainable development: economic, social, and environmental (UN Conference Documents, June 3-14, 1992, and Earth Summit, Warsaw 1993). In 2000, the Millennium Summit was held in New York, during which eight goals related to sustainable development were formulated ([http://www.un.org/pl/...](http://www.un.org/pl/)). 189 UN member states committed to achieving these goals by 2015. The Millennium Development Goals (MDGs) focused on the social dimension through actions, among others, in the environmental and economic spheres, aiming to reduce poverty, hunger, diseases, and to improve human rights. Unfortunately, over the course of fifteen years, new financial, economic, military, food,

and energy crises have emerged, and the interconnections between them have also become more complicated. As a result, the MDGs were not achieved on a global scale. During the conference in Rio de Janeiro in 2012, the document "The Future We Want" was created (The Future We Want..., 2012). It contained the framework for the planned Sustainable Development Goals, intended to ensure economic transformation, including the eradication of poverty, the establishment of the rule of law, and the protection of nature. The United Nations Conference on Sustainable Development in September 2015 confirmed the necessity of political commitments by the international community in pursuit of sustainable development, following the principles of Agenda 21, including the principle of common but differentiated responsibility. The summit's final document contains guidelines for achieving sustainable development as a way to increase the prosperity of current and future generations in all countries – the 17 Sustainable Development Goals. They are based on minimizing types of consumption and production that have negative external effects, while simultaneously striving to maximize types of consumption and production that have positive external effects. Examples of minimizing negative external effects include reducing environmental pollution, while examples of positive external effects include technology adaptation, reducing food waste, and increasing energy efficiency (Reflection Paper..., 2019). Changes in consumption patterns can drive the creation of new technologies necessary for sustainable development and their adoption and dissemination at the fastest possible pace. Success in implementing these changes will require significant reorganization of the economy and society and promoting changes in lifestyle. Understanding the connections between these trends and the associated changes in economic, social, and environmental conditions has become essential. In this broad context, climate and environmental protection must become a global endeavour – a scale embodied by the 17 UN Sustainable Development Goals. The UN Sustainable Development Goals (SDGs) were established as a "shared blueprint for peace and prosperity for people and the planet, now and into the future". Since buildings account for 40 percent of CO<sub>2</sub> emissions, transforming existing buildings or constructing new eco-friendly ones is a responsible step in the right direction (Wojas, 2020, p. 64).

It is also necessary to transform consumer societies into sustainable societies based on responsible production and consumption. The need for such transformations began to be strongly emphasized in the field of economic sciences already in the 1980s (Pabian, 2013). Sustainable development economics aims to sustainably preserve natural resources. The Earth is seen as a closed, non-materially growing system. Thus, the primary task of sustainable development economics is to solve economic, ecological, and social problems (Rogal, 2010, pp. 20-24, 130-134). Management plays a crucial role in achieving this task through organization managers. Articles by A. Pabian (Pabian, 2013), S. Cohen (Cohen, 2011, pp. 1-13), who criticizes traditional management and recommends sustainability management principles, address issues related to managing organizations sustainably. B. Bossink deals with aspects of eco-innovation and sustainability management (Bossink, 2012, pp. 1-4). According

to A. Pabian (Pabian, 2017), sustainable management is a process of achieving organizational goals while considering the principles of sustainable development. Achieving sustainable management will be possible through the work of sustainable personnel and the involvement of other sustainable organization resources. Managers at all levels play a particularly important role here. However, their attitudes and beliefs should be based on values rooted in the following orientation: taking responsibility for the state of the Earth, acting for future generations, focusing on the future, balancing economic, ecological, and social goals, preferring sustainability over growth, minimizing negative impacts on the environment and humans (Pabian et al., 2013, pp. 6-7). Aspects related to sustainable management are also addressed by G. Haugen (Haugen, 2014), M. Epstein, A. Buhovac (2014), M. Jones (Jones, 2010), and the previously cited A. Pabian (Pabian, 2011, 2015a, 2015b, 2016).

The above assumptions seem to be met by the researched company Press Glass Holding SA, headquartered in Konopiska near Częstochowa, Silesian Voivodeship (<https://www.pressglass.com/pl/holding/>).

## Discussion

To familiarize solutions in the field of sustainable development and present best practices in this area using the example of a native, thriving company such as Press Glass Holding SA, a survey and interview were conducted. Company documents were also reviewed. The study was based on purposive sampling. An inquiry was sent to the company regarding their willingness to participate in the study. The thematic scope was presented, and participation was voluntary. The research tool used was a survey questionnaire. Contact with the company was conducted via email correspondence, and a meeting with branch managers took place. The questionnaire comprised 26 open-ended questions, for which comprehensive responses were obtained. Press Glass Holding SA was established in 1991. The company is privately owned and operates as a joint-stock company. It conducts holding and financial activities, providing services to other subsidiary companies. The company's headquarters are located in Konopiska, Silesian Voivodeship. Press Glass Holding SA is the sole shareholder of Press Glass Sp. Z o.o., Press Glass Z. o.o., Press Glass UAB, the Press Glass UK Group (which includes Glass Systems UK and Press Glass, Inc.), and AMC Aviation Sp. Z o.o. It employs 5060 people, each of whom has clearly defined rights and responsibilities. Functional and substantive dependencies overlap, and the hierarchical structure of the company is clear and transparent. Individuals involved in the management process continuously enhance their competencies in this area. The company systematically conducts market research in the form of market analysis and utilizes market research agency reports. Management in the company is referred to as *laissez-faire* management, meaning that leadership style is characterized in such a way that

leaders do not tend to micromanage their employees or overly involve themselves in tasks already assigned to employees. They allow employees to take initiative in projects, trusting their creativity, training, and experience. There is a high level of trust in employees' competencies. Although delegating leaders usually do not engage in decision-making by employees, they provide guidance in the form of mentoring and assume responsibility when needed. This leadership style works best in an organization where professional, qualified, and motivated employees work (<https://www.studysmarter.co.uk/...>). The company's main website presents the main mission and goal of the company, as well as a code of conduct. "Our responsibility as an employer, employee, and business responsibility is to act in accordance with PRESS GLASS values, which are very important to us. We care about embodying them in daily relationships with our employees and business partners. We want those who cooperate with us to share the values we follow" (<https://cdn.pressglass.com/...>). Responsibility is divided into 3 categories:

- employer towards employees (We treat employees equally and with respect, We protect personal data; We avoid professional dependencies in the case of family members;
- employees towards employer (We adhere to the provisions of the Labor Code and other procedures; We respect the employer's property and care about its image; We protect data and do not disclose confidential information; We avoid conflicts of interest; We care about the quality of our work);
- company towards business partners (We care about relationships with business partners; We responsibly decide on the choice of a business partner; We do not disclose confidential information; We comply with antitrust laws; We adhere to the principles of giving and receiving gifts; We prohibit corruption; We are friendly to the environment) (ibid.).

The mission of Press Glass Holding is: strengthening the competitiveness of our Clients by satisfying their requirements. We offer added value to our Business Partners, which we understand as enriching our products, services, and solutions with new, better features and values. (<https://www.pressglass.com/pl/o-firmie/>) Additionally, on the main page of the company's information, attention is paid to environmental protection: "To reduce our impact on the environment, we are constantly making changes in the production of products and in our habits" (<https://www.pressglass.com/pl/o-firmie/>) In line with such a declaration, it is not surprising that the company conducts a series of activities related to ecology and sustainable development. The company's main website lists the Agenda 21 goals being pursued, including:

- GOAL 3: Ensure healthy lives and promote well-being for all at all ages.
- GOAL 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.
- GOAL 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

- GOAL 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation.
- GOAL 11: Make cities and human settlements inclusive, safe, resilient and sustainable.
- GOAL 12: Ensure sustainable consumption and production patterns.
- GOAL 13: Take urgent action to combat climate change and its impacts.
- GOAL 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development (<https://www.pressglass.com/pl/zrownowazony-rozwoj/>).

One of the main initiatives regarding solutions related to sustainable development undertaken by Press Glass SA is the implementation of a closed-loop economy. Every waste is treated as secondary raw material. The main waste is glass cullet. It is sent directly (Radomsko branch) or indirectly (other plants) back to the glassworks as charge material for the glass furnace, where new glass sheets are melted again. Glass cullet in Radomsko has the status of a by-product. Additionally, the main components necessary for the production of laminated glass, such as sealing compound, are processed on-site for full utilization. Due to the density of the compound, it would not be possible without a special installation. Other production wastes are recycled/recovered or returned to the manufacturer for reprocessing. The "zero waste to landfill" policy has been implemented. Other pro-environmental initiatives related to sustainable management include:

- reporting carbon dioxide and other greenhouse gas emissions (e.g., to the international CDP database);
- installation of photovoltaic installations in plants (in the Croatian plant, it covers almost 20% of the total demand);
- machines are constantly optimized and replaced with newer ones for energy efficiency and increased efficiency;
- in the plants, 90% of the gas forklift fleet has been replaced with electric forklifts;
- the transport fleet is one of the most modern; loading is fully optimized, and there are no "empty" runs;
- in one of the plants, a system for full recovery of heat from the tempering furnace has been implemented to reduce gas usage for heating;
- Integrated Environmental Management System 14001 and Risk 9001 have been implemented;
- Press Glass products have special Environmental Product Declaration declarations, which present the values and units characterizing the product's impact on the natural environment; the Main Headquarters building is the highest energy-efficient class building;
- Press Glass glazing is installed in buildings that seek BREAAAM/LEED certification;
- in the production plants, energy efficiency is constantly being increased, confirmed by obtaining White Certificates. Closing the waste loop and preventing its generation has been taking place at Press Glass for years and is a quite natural element of the raw material management process.

All initiatives related to sustainable development and reducing the company's impact on the environment are part of Press Glass's business strategy. Increasing the energy efficiency of machines is done in real-time, and new projects regarding innovation are being developed. Work is constantly being done to define specific goals for reducing the carbon footprint and media consumption. Among the biggest problems of the company related to the closed-loop economy and other elements of sustainable development, one can include:

- lack of data in the supply chain,
- the process of recycling laminated glass is a challenging one,
- lack of appropriate recovery technologies in the region served by the waste recipient,
- lack of awareness and education regarding sustainable development,
- a large scale of greenwashing.

To improve management actions, the company continuously conducts marketing activities to inform about sustainable development efforts. Such actions are communicated on the website, during employee training sessions, and noteworthy initiatives are also shared on social media. However, no marketing research is conducted regarding the company's reception as socially responsible. This is mainly due to the nature of Press Glass' B2B business and its direct contacts with contractors. Data on competitors' activities are continuously collected and analysed. To develop in line with the implementation of technological innovations, the company participates in trade fairs and conducts development activities directly with equipment suppliers.

Press Glass focuses on continuous development, constantly increasing its executive capabilities. The continuous development of production facilities, sales markets, and competence growth allows for even better service and offering a wider range of products of increasingly higher quality.

The company has modern production facilities. Their location, production capacity, range of certifications, and assortment make it the only one to have adapted to the market demand in such an efficient manner. Each plant specializes in manufacturing a different assortment, but together they form an efficient system of connections. In line with the assumptions of the company's management policy, it uses the most modern equipment. The machine park is constantly being expanded and modernized. The company participates in testing and implementing new technologies. It helps to indicate development directions to its equipment suppliers.

As part of its sustainable management policy, Press Glass Holding SA provides individual support, building with customers an individual, satisfying both parties, long-term cooperation model.

Press Glass is open to introducing new products and solutions, with customers being their inspiration. A dedicated team managing orders ensures efficient and timely flow of information at every stage. Comprehensive and timely service is guaranteed, and business partners can count on a quick response, even in critical moments.

The company has its own fleet of trucks and collaborates with experienced international carriers. Every month, the company's products are transported over a total distance exceeding 1 million kilometres.

Press Glass is a partner of branded window manufacturers, where the increased quality of products is a necessary condition for cooperation. The company's products are adapted to the requirements of general European and American standards, regulations applicable in individual countries, and individual agreements with customers. The entire European product range meets CE marking requirements, and all plants are covered by ISO 14001 environmental management systems and ISO 9001 quality management.

Press Glass is financially and organizationally independent, allowing it to offer products from all major suppliers. It provides independent and objective advice on selecting components for products.

In addition to its core business, as part of its sustainable development policy, the company conducts educational, cultural, and charitable activities, achieving goals 3 and 4 of the Agenda.

- Environmental actions - goal 3, Agenda 13.
- Sports - goal 3.
- The company's environmental and social responsibility are goals: 8, 9, 11, 12, 13.
- Quality management - goals 8, 9, 11, 12, 13.
- Emission neutrality: goals 8, 9, 11, 12, 13.
- Values and "Code of CONDUCT": 4, 8, 11, 12, 13.
- Responsible production: goals 4, 8, 11, 12, 13.

The biggest limitation, apart from the current technological capabilities for Press Glass Holding SA, is the limited financing possibilities that do not allow the company to develop according.

## Summary

Undoubtedly, Press Glass has been directing its efforts towards sustainable development for many years. By implementing state-of-the-art technological solutions, it is able to meet the expectations and needs of its customers. It delivers energy-efficient products that maximize the use of natural light. The company is responsible for ensuring that buildings create environments that are as conducive to life, work, and development as possible. Transparency of actions is one of Press Glass's fundamental values. Therefore, the company has decided to report on environmental matters according to the highest global standards. Data regarding Press Glass is included in the international CDP database, which includes information on carbon dioxide emissions, among other things. Press Glass's carbon footprint has been calculated using the Greenhouse Gas Protocol, enabling it to have full control and monitoring of the sources of greenhouse gas emissions emitted by its production facilities. The new Press Glass facilities,



scheduled to start operating between 2023 and 2026, will be low-emission facilities, partly due to the use of renewable energy sources. In existing facilities, actions are being taken to reduce emissions by installing renewable energy installations and implementing closed-loop economy strategies. Press Glass continuously expands its product offering to meet market needs. Through its policies and appropriate actions, it contributes to real changes aimed at protecting the environment. Glass is the main building material for sustainable infrastructure. According to the words of the company's owner, Arkadiusz Musiał, "There are no modern buildings without modern windows and glass facades. Thanks to this dependence, we become one of the main shareholders of green construction. We spend the most time in buildings - we live, work, and rest in them. The world is changing before our eyes. Urbanization, energy requirements, climate change - we must constantly adapt to the dynamic reality. Life and work are better in beautiful places. Europe and North America are on the brink of a green turnaround, in which glass and other modern materials will play a key role. Press Glass is prepared to participate in this process because glass undoubtedly has a bright future. As a modern and conscious company aware of ongoing social changes, we also want to contribute to shaping a better and more civic society, understanding that building a modern and efficient economy requires development and engagement from each of us. I am convinced that striving for a higher standard of living should come through investment in entrepreneurship and civic education, also understood as responsibility for the state of the country. That is why I have created the Foundation for Economic Freedom, which supports valuable initiatives in four areas: economic liberalism, education for the future, democratic rule of law, and Poland in the European Union. In addition to freedom and a free market, building a well-functioning company requires a community of values such as honesty, commitment, respect, trust, and discipline. We build our company's reputation on them every day" (Muś, Sustainable Development, Press Glass - company documents - 2023). These words are supported by specific actions that fit precisely into activities related to sustainable development. The company's results also indicate that such an approach is beneficial and fully allows the company to utilize its potential, especially when its management policy is conducted in a consistent manner.

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