

## Instruments for Retail Sustainability

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### Abstract

*Human existence faces catastrophic natural and climatic threats and environmental factors that have reached a critical level. Today, with the greatest urgency, measures are put on the agenda and taken for implementation with a view to achieving a slowing rate of development of unfavorable and negative changes in the living environment. This requires every individual, business entity and government to change their traditional behavior and way of being with a view to reformation in the present, but with much greater and radical significance for the near future. The work systematizes a variety of tools, broad-spectrum policies and organizational-technological transformations applied in commerce, with a view to achieving sustainable development. The brief overview of leading European retailers confirms the commitment of modern retail business to make a contribution to achieving change in all 17 UN Sustainable Development Goals.*

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### Introduction

The natural aspiration of human existence is to achieve a better and quality life. It is an eternal impulse and motive that drives the daily decisions, actions and overall behavior of the individual, but aggregately shapes national and global economic growth, limited by the available resources, the ways and efficiency of their use and the footprint they form on the planet's ecosystem in the present and with growing concerns about the future. The economic section "Retail trade" (G47), which is part of the economic sector "Trade, repair of motor vehicles and motorcycles", stands out for its increasing importance and wide application of policies and instruments regarding the achievement of sustainable development and as an integral element of the overall concept of socially determined, ecologically friendly and stable economic progress.

The term sustainable development and its conceptualization were popularized by the report "Our Future" presented by G. Brundtland in 1987, where it was postulated that it is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs", which is defined by "the limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities" (World Commission on Environment and Development, 1987, p. 16). This means that, through their complex behavior, people, companies and countries should be in a systematic process of adaptation and improvement of social and economic life in the direction of the allocation of limited resources to ensure stable development in the present, but also with a view to the future. This cannot be achieved only by setting a strategic framework, criteria for monitoring and the implementation of strategic goals, but should be a micro-process implemented and involving every human individual and independent business unit. Therefore, sustainable development is a comprehensive and all-encompassing process for any economic activity, whose "postulates are also an integral part of trade" (Zhelyazkova, p.138). This predetermines a radical change in the behavior and responsibility of all participants in the economic process, including end users and agents of exchange in search of an improved state of resource utilization in the present and future development. With the help of which it is aimed to achieve continuous improvement of the utilization of resources and the creation of a fully functioning circular economy.

The main aim of the present work is to systematize the various tools and areas of action that retail trade sector currently implements in a narrower or broader scope in order to achieve sustainable development.

For the purposes of the theoretical generalization, the methods of content analysis, theoretical systematization and abstraction are applied. A specific limitation of the work arising from its size is that it does not allow to cover all possible aspects and applications of sustainable development in trade. The research part uses data from the annual sustainability progress reports of leading European retailers.

### **1. Theoretical framework of sustainable development**

At present, sustainable development is set forth as a fundamental principle in the Treaty on the European Union (Article 3) and all the desired effects of the internal and external policies are developed around it. The understanding of sustainable development is represented in the set out 17 goals in the United Nations program for implementation until 2030 (Sustainable Development Goals, no date) and which are related to: eradication of poverty; eliminating hunger; good health and well-being; quality education; gender equality; clean water and sanitation; affordable and clean energy; decent work and economic growth; industry, innovation and infrastructure; reducing inequalities; sustainable cities and communities; responsible consumption and production; climate action; life below water; life on land; peace, justice and strong institutions and partnership to achieve the goals. In this way, “the global goals for sustainable development address key barriers to achieving sustainable development, such as inequality, unsustainable consumption, outdated production models, inadequate infrastructure and the lack of decent work” (United Nations in Bulgaria, 2016, p. 7). Within the framework of the “National Development Program Bulgaria 2030”, the overall effect of the measures and policies will lead “the economy to be positioned on a higher trajectory of economic growth, where for the simulated time horizon 2021 – 2030, the calculated effects give reason to expect a significant expansion of the country's production output, with the results pointing to an additional growth in GDP of 33.4% by the end of 2030 compared to the baseline scenario, which will allow the Bulgarian economy to achieve an accelerated convergence of the standard of living measured by the GDP per capita indicator of the population in terms of purchasing power standards and, more specifically, to reach 75% of the average level of GDP in the Union” (National Development Program BULGARIA 2030, 2020, p. 122). The implementation of this favorable scenario is linked to the implementation of a wide range of activities and policies that will directly or indirectly affect the economic sector of trade, and along the supply chain they will reach every single product producer.

### **2. Tools and policies of sustainable engagement in trade**

In a number of areas of commerce and mainly in retailing, business strategies and a wide arsenal of tools exist and can be applied, with the help of which various dimensions of sustainability can be achieved, such as:

1. The role of commerce in full and wide-ranging satisfaction, through commercial offers and the product assortment of all dimensions of consumer demand. The ensuring product supply is the basis of the possibility, when and where consumer demand arises, to satisfy it in the best way, regardless of the place and time of its formation. Important here is not only the provision of the population with a retail network, but also the variety of alternative forms of out-of-store sales, which in certain segments are gaining increasing importance in satisfying consumer demand (for example, e-commerce and its varieties of mobile, fast, voice, social and other forms of internet commerce). At the same time, the main role of commercial agents in the chain of product realization is to ensure the necessary quantities of stock and the continuity of the product supply under any conditions of consumer demand and characteristics of the economic situation. At the same time, the variety of applications of commercial forms and the provision of a network of sales

contact points is a guarantee that the place of origin of consumer demand and its full satisfaction will be achieved with the least physical distance and time gap, which ensures low or even insignificant costs (of fuel when using personal transport, pedestrian access, travel time and stay at the commercial site, etc.) to reach the "place" (real or virtual) where the commercial contact and sale are made.

2. Ensuring a healthier lifestyle. Primarily here, the role of commerce is in relation to the supply of products that are scientifically proven to be related to the improvement of the physical condition, biological value and health status of the person. Such are, for example, the products of organic origin and biological agriculture, products that are created with safe and human- and environment-friendly technologies, productions, etc. Here, the goods and services offered under the trader's own brand, which are labelled and recognizable as products representing the supply from the so-called healthy segment, become relevant and important. Also, within this scope are products created through sustainable production strategies. The commodity units created in the local economy of home-grown or regional origin are also increasing in popularity. Sustainable agriculture strategies are a source for improved food security, traditional farming, micro-entrepreneurship and common economic interest of all involved in local business. Moreover, important are products with the added nutritional elements (vitamins, minerals, micronutrients, etc.), which compensate for scientifically proven and expressed deficiencies of them in the local or regional human population.

3. Guaranteed merchandise safety by means of product certification and quality management systems, independent supervision, testing and compliance. Safety is designed not only in terms of the product, but also to its packaging (product, group, transport, etc. packaging), including the provision of opportunities and systems for reverse logistics and appropriate capabilities and recycling. The application of packaging and materials with a lower carbon footprint, impact on the environment, opportunities for resource recovery, for repeated or multiple reuse is increasingly popular.

4. Improved supply chain resilience, stability and longevity. Building partnerships allows the participating parties to exchange information about the parameters of consumer supply and demand and its possible change. Long-term and stable management of business relationships are the basis for achieving mutual effects of scale, improved control over stock in various parts of the goods movement and application of the Just In Time (JIT) concept, which ensures high utilization of resources and timeliness of their use.

5. Protection of human and labor rights. Ensuring that pay is tailored with the individual contribution of each member of the sales staff. This should be done in such a way that the labor compensation meets not only the skills and competencies of the individuals, but also their commitment and achieved individual, team and business-wide effects of the sales activity, as well as gender equality in pay. At the same time, the guaranteed payment of remuneration and compliance with labor-law norms is evidence of an established labor-law standard, including its improvement for the benefit of the worker (additional systems and incentives for material and moral stimulation, safe and ergonomic working conditions, policies for organizing of breaks during the labor process and outside it, etc.). Engaging staff in energy and resource conservation activities and educating customers.

6. Engagement of business in socially significant initiatives - reverse logistics of product packaging and end-of-use products (batteries, accumulators, electrical appliances, equipment, components, textiles, etc.), utilization of waste from commercial activity, campaigns (reforestation, sustainable aquaculture, animal husbandry and agriculture, waste collection, etc. public activities and initiatives). Provision of informational materials for the merchant's engagement, transfer and media promotion for the company's applied policies, tools and activities to the company's audiences (customers, suppliers, partners, competitors, etc.). Participation of commercial operators in various programs to reduce the impact on the environment - sustainability of production and distribution of products, biodiversity, etc. Reducing the use of pesticides, herbicides, fungicides, etc. Direct and

indirect trade support through the distribution chains of agricultural production based on traditional breeds and plant species, without the input of genetically modified organisms. The distribution of products created by manufacturers affiliated to various sustainability alliances, initiatives and policies (e.g. rainforest alliance).

7. Improved energy efficiency of the commercial environment. This aspect is valid both in relation to the commercial infrastructure (buildings, premises and adjacent territory (parking lots, pedestrian accesses), as well as in relation to commercial equipment and furniture that use electrical energy. The widest opportunity is the utilization of free roof spaces for the placement of photovoltaic elements and systems, as well as the utilization of the temperature released by the refrigeration equipment for the purposes of water and halls/premises heating, recuperation, etc. Improved architecture of buildings to achieve the effects of the so-called passive building construction and maximum limit of the impact on the environment. For this purpose, the following possibilities can be used: orientation towards the sun, thermal insulation, air permeability, natural circulation of air flow, use of geothermal energy for various purposes, etc. Use of electronic and electrical equipment with higher energy efficiency, lower power consumption in standby mode, precise electronic control and more. This also includes the possibilities, with the help of information accumulated by the trader and distributed along the supply chain to the manufacturer, to create product alternatives with lower energy consumption, for example product packaging that does not require a low-temperature mode of storage of the products (controlled atmosphere packaging, etc.). Setting manufacturers to meet increased energy efficiency requirements for products preferred by end users. Implementing workable solutions for a lower carbon footprint is not just about end-to-end exchange activities, but has a cumulative effect that spreads throughout the supply chain back to the manufacturer. Or all the intermediary units involved in the movement of goods have their role and contribution to the formation of lower emissions, as their presence, in addition to achieving purely economic effects, aims to achieve decarbonization of the entire product distribution process. Here is the key role of agents of product exchange, who are an indispensable element that can best ensure the activities related to the reverse logistics of packaging and used products. This is valid both in terms of recycling and disposal processes, but also in relation to the development of the market for second-hand products. The latter is associated with promoting the possibilities of using the products after their initial use, which is a significant aspect of the sustainable consumption of durable products. It is an important point that, by means of the product label, consumers are informed about the use of products, in the production of which or as a content, raw materials from the circular economy have been used.

Targeted impact on consumer preferences and fashion trends towards the consumption of products created through more sustainable production and distribution models. For example, clothing created using sustainable raw material production systems, their processing and the creation of new products, which already at the initial moment contain the potential for the subsequent use or utilization of the raw materials contained in them, with a negligible or zero footprint on the environment. Offering products with extended warranty and periods of use, as well as those covered by the “right to repair” principle.

Also, here are the opportunities to improve the efficiency of the use of other valuable and important resources, for example, electronic or mechanical control of systems for using smaller amounts of water in common premises of commercial establishments, automatic regulation of lighting in commercial premises and adjacent territories, according to natural lighting, collection of rainwater from roof spaces to be used for irrigation purposes, automatic doors (rotating and sliding) with access sensors, etc.

8. Thanks to the accumulation of big data about consumers and their product demand characteristics, a quantitative basis is created for more accurate forecasting of inventory needs. This allows, in relation to food products and those with a shorter shelf life, to provide with conditionally high precision the necessary product stocks to ensure the continuity of the commercial process.

Wide possibilities also exist for the application of the principles of timeliness of deliveries, as well as for the effective interaction with the so-called "food bank" and other initiatives and organizations for the distribution of food to socially vulnerable groups. The reduction of products that must be eliminated from the point of sale at the expiry of their shelf life, which is also possible through the improved management of promotional activities of such product units and groups. As such, it is best done at the point of sale. The association of commercial operators with various social initiatives, such as "free meals" and other campaigns with a strong commitment to the local community and its disadvantaged groups.

9. Information security both in the back and in the front activities of the trade. This relates to the traceability of the supply chain and the various activities and manipulations that have been carried out with the product until it is exposed and offered for commercial sale. At the same time, it is also related to the provision, upon request, of information desired by the user at the point of sale, which can be fulfilled with information terminals, electronic labels, QR codes and other modern information and communication technologies used in the commercial establishment, including before and after the sale, as well as at any subsequent time at the customer's request. Providing additional information is a source of increasing customer satisfaction and service complexity. The presence of traceability and the registration of manipulations along the product distribution chain increases information satisfaction for each of the participants. Modern automated scanning technologies, the use of embedded electronic components (smart labels, tags, microelectronics, etc.), and blockchain technology for decentralized, secure, encrypted distribution of product information can be widely used here. The latter is applicable both to guarantee the authenticity of luxury and branded products, as well as to batches of goods of daily consumption, to guarantee their origin and compliance with specific storage requirements. Eliminating these dimensions of information asymmetry between actors improves satisfaction with commercial transaction decisions and drives consumer loyalty.

10. Accessibility of the commercial environment for disadvantaged persons. This includes the guaranteed right of access to service animals for blind people in commercial establishments, as well as to licensed animals used for emotional support. A similar attitude towards animals also develops in relation to other dimensions (product assortment, agricultural production, and processing). These include, for example, are the practices for the extensive husbandry of animals, which are associated with improved conditions of the breeding environment, increased volumes and freedom of movements, access to open and closed areas and natural lighting according to the needs of the reared species, provision of specific supplements related to the natural behavior of the animal species, provision of a varied nutritional regime, etc., consistent with sustainable agricultural production.

### **3. An overview of achievements in the field of sustainable development of leading retailers in the EU**

According to the Retail-Index, the three largest retailers in Europe are Schwarz (Germany, with a turnover of 113 billion euros), Aldi (Germany, with a turnover of 76 billion euros) and Carrefour (France, 73 billion euros) (Veraart Research, 2023).

- The Schwartz Group, which operates in 30 countries with 13 300 stores and 530 000 employees (Schwarz, 2023, p. 6), has an indicative goal by 2025 of using 20% less plastic and 25% recycled materials products under own brand and in used transport packaging (Schwarz, 2023, p. 95). Of the total waste generated in 2021, 2 978 172 tons, 86.6% or 2,578,382 tons are recycled, reused, fermented or composted (Schwarz, 2023, p. 100), which compared to 2019 is an increase of 2.3 percentage points, when up to 84.3% of the generated waste was recovered (Schwarz, 2023, p. 98). In total, Schwarz Group companies will reduce their operational emissions (Scope 1 and 2) by 55% by 2030 compared to 2019 (Schwarz, 2023, p. 117). The indicative target that has been set is that from 2022 Lidl, and at the latest from 2025 Kaufland, to achieve Climate Neutrality (Schwarz,

2023, p. 119), which will be the result of operating by 2021 1 587 573 sq. m or 1,896 units own photovoltaic systems, which will allow self-generation of 195 923 MWh from renewable energy sources (Schwarz, 2023, p. 120) with an annual consumption from renewable sources of 5 171 091 MWh and a total annual energy consumption of the group of 11 107 440 MWh (Schwarz, 2023, p. 132), which implies the outsourcing of this service to third-party renewable energy producers. The group's contribution to limiting global warming to 1.5 °C is also linked to the requirement for suppliers to also limit their emissions through their production and distribution and to set their own climate targets by 2026, as and they are responsible for up to 78% of the emissions associated with the products offered (Schwarz, 2023, p. 122). In this way, the group reported a 13.2% reduction in its own operating emissions (Scope 1 and 2) compared to the base year 2019 (Schwarz, 2023, p. 123).

- The second leading European retail group ALDI Group is represented by two subsidiaries – ALDI Nord (Belgium/Luxembourg, Denmark, France, Netherlands, Poland, Portugal and Spain) and ALDI South Group (Germany, Austria, Switzerland, Slovenia, Hungary, Italy, USA, UK, Ireland, Australia, China). In 2021, ALDI Nord operates through 5 329 sites with 86 385 employees, of which 56 607 are women or resp. a share of over 65.5% (ALDI Nord, 2022, p. 5). Compared to 2020, there is an 89% increase in photovoltaic areas in systems located on the roofs of retail outlets, 872 products are marked as vegetarian or vegan, which is an increase of 27.5% compared to a year earlier, over 1 370 products have a visual identity for an organic product produced in the EU, 82% of the cotton used in the production of clothing under its own brand is certified as originating from sustainable production (ALDI Nord, 2022, p. 3). The company has 2 006 pcs. products under own retail brand in 2021 or 79.7% of the assortment, compared to 1 875 pcs. in the previous year and a share of 79.1% (ALDI Nord, 2022, p. 4). According to the type of shopping bags sold/distributed to customers in 2021, 97 909 thousand pieces were reported, of which 53 851 thousand pieces or 55% are of short-life use and 44 058 thousand pcs. or 45% are long-life use (ALDI Nord, 2022, p. 32). 76.7% of stores will donate unsold but still edible food to charitable institutions in 2021 (ALDI Nord, 2022, p. 34). In all ALDI Nord sites, 100% of the eggs offered are from certified free-range animals (ALDI Nord, 2022, p. 37), and the share of products containing free-range eggs in their composition is 79.1% (ALDI Nord, 2022, p. 38). In 2018, the company had set itself the target of reducing emissions by 40% in 2021 compared to the base year of 2015. This escalates into the defined new target for reducing greenhouse gas emissions (Scope 1 and 2) with 55% by 2030 compared to its own 2020 levels (ALDI Nord, 2022, p. 65). Direct energy consumption in 2021 is 794 328 MWh with a total energy consumption of 2 083 736 MWh, of which 90 056 MWh from renewable sources (ALDI Nord, 2022, p. 68). The total amount of waste generated in 2021 is 381 242 metric tons (ALDI Nord, 2022, p. 74). ALDI South operates 7 162 stores, 84 distribution centres and 201 361 employees. In the direction of sustainable development by 2025, targets are set to a 15% reduction in the weight of the packaging of products under our own brand and priority use of recyclable and compostable materials in packaging, an increase in the recycled content in plastic packaging by up to 30% are set (ALDI Sud, 2023, p. 5). In 2021, a 38% reduction in greenhouse gas emissions was achieved with a set target of 26% reduction in 2025, with 2016 adopted as baseline (ALDI Sud, 2023, p. 8).

- The third leading retailer in the EU is the Carrefour Group, which operates in 30 countries, with 13 000 outlets and 320 000 employees. In 2018, the group launched a five-year sustainable development transformation plan “Carrefour 2022”, one of its targets is to achieve a 30% reduction in GHG by 2030 and a 55% reduction in greenhouse gases by 2040 compared to 2019. (Carrefour, 2021, p. 12). Reduction of packaging waste by 20 000 tons by 2025 (Carrefour, 2021, p. 17). Reduction of food waste by 50% by 2025 (Carrefour, 2021, p. 23).

These indicative targets and the progress made in all applicable dimensions of sustainable development at Europe's leading retailers demonstrate the strong commitment and importance of agents of retail exchange to achieve the common goals and targets of climate neutrality and

combating the harmful impact of business and consumption on the environment. Retailers and wholesalers taking leadership in setting out their plans to halve greenhouse gas emissions by 2030 and achieving net-zero carbon emissions by 2050 at the latest (EuroCommerce, no date).

### **Conclusion**

Currently, and even more so in the near future, the problems of sustainable development will continue to escalate in the direction of affecting the activity and life of every business entity and end user. The achievement of relative stability in the long term and an attempt to reverse the negative dimensions of the deteriorated indicators of the ecological environment and its improvement depends on their proper perception and effective management. In this respect, the key importance of modern retailers is of particular importance and role, both in the dimensions of a unit, a stage, a participant in the circular economy, and as a point of contact where consumer products find their market realization.

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