St. Petersburg State University Graduate School of Management Master in Management

## FORMATION OF SUSTAINABLE SUPPLY CHAINS IN RUSSIAN FMCG SECTOR

Master's Thesis by 2nd year student Safarova Sabrina Rahibovna

Scientific supervisor: Candidate of Economics, Associate Professor: Blagov Yuri Evgenievich

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#### выпускной ЗАЯВЛЕНИЕ 0 САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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## ABSTRACT

Master Student's Name	Safarova Sabrina Rahibovna							
Academic Advisor's Name	Blagov Yuri Evgenievich							
Master Thesis Title	Formation of Sustainable Supply Chains in							
	Russian FMCG sector							
Description of the goal, tasks and main results	The research goal of my work is to identify							
the research	factors that influence the development and key							
	characteristics of establishing sustainable							
	supply chains. To study the theoretical							
	concepts and approaches to sustainable supply							
	chain. To identify the key factors that affect the							
	sustainability of companies' supply chains. To							
	identify the relevant sustainable supply chain							
	development practices. To develop							
	recommendations for companies, to help them							
	bring their supply chain to sustainability based							
	on research findings. The result of the first step							
	of my research was the identification of the							
	four most common sustainability factors							
	among international FMCG companies. The							
	second step, using semi-structured interviews,							
	revealed how applicable these four							
	sustainability practices are in Russian FMCG							
	companies. As a result, it became possible to							
	identify a number of recommendations for							
	companies in the surveyed sector.							
Keywords	Sustainable supply chain, sustainability in							
	FMCG sector, sustainability practices							

## АННОТАЦИЯ

Автор	Сафарова Сабрина Рахибовна						
Научный руководитель	Благов Юрий Евгеньевич						

Название ВКР	Формирование устойчивых цепочек					
	поставок в российском секторе товаров					
	повседневного спроса					
Описание цели, задач и основных	Исследовательская цель моей работы -					
результатов исследования	выявить факторы, влияющие на развитие и					
	на ключевые характеристики создания					
	устойчивых цепочек поставок. Изучить					
	теоретические концепции и подходы к					
	устойчивым цепочкам поставок.					
	Определить ключевые факторы, влияющие					
	на устойчивость цепочек поставок					
	компаний. Определить соответствующие					
	методы устойчивого развития цепочки					
	поставок. Разработать рекомендации для					
	компаний, которые помогут им привести					
	свою цепочку поставок к устойчивому					
	развитию на основе результатов					
	исследований. Результатом первого этапа					
	моего исследования стало выявление					
	четырех наиболее распространенных					
	факторов устойчивого развития среди					
	международных компаний сектора FMCG.					
	На втором этапе, используя полу					
	структурированные интервью, я выяснила,					
	насколько эти четыре практики					
	устойчивого развития применимы в					
	российских компаниях сферы FMCG. В					
	результате стало возможным выделить ряд					
	рекомендаций для компаний в					
	исследуемом секторе.					
Ключевые слова	Устойчивая цепочка поставок,					
	устойчивость в секторе товаров					
	повседневного спроса, устойчивые					
	практики					

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#### **INTRODUCTION**

Sustainable supply chain management has been a subject of scholarly debate since the 1990s. The relevance of this dissertation, dedicated to the formation of sustainable supply chains in the Russian FMCG sector, is conditioned by the need for an in-depth analysis of existing practices to optimize operations in accordance with contemporary sustainability requirements. The increasing importance of sustainable development in Russian business practices necessitates a detailed understanding of the factors influencing the development and implementation of sustainable supply chains.

My motivation for this work is driven by the current world's issue of globalization and the exacerbation of environmental problems not only current but also those accumulated over many years. This issue is particularly pertinent now, as the present environmental challenges will have an even greater impact on future generations and the environment. My decision to focus on the supply chain industry of the FMCG sector stems from the fact that supply chains are an intermediary link between two crucial components, such as production and consumption. Although most major foreign corporations have already demonstrated the benefits of sustainable supply chains through their examples, not all companies fully understand the importance of this, specifically, what they should focus on when transitioning to sustainable development. In my view, sustainable supply chains are the foundation of the global economy as they integrate economic responsibility, environmental care, and social responsibility, which go beyond the usual focus on profitability and production capabilities. Accordingly, my motivation comes from understanding that there is a dire need to reassess how the supply chain operates in current realities.

By delving into the study of factors that facilitate the formation of companies and organizations, you can explore ways and useful knowledge that will encourage more and more organizations to follow you towards sustainable activities. In my research, I aim to identify the most important aspects that influence the development of sustainable enterprises.

Despite the growing interest in SSC, there is still a significant research gap regarding the integration of sustainable practices into the Russian FMCG sector. We also need to delve much deeper into what currently exists a plethora of theoretical research on what a sustainable supply chain is, how to approach it, and what needs to be done but just as little information on how this happens in practice. All this needs further detailed study and research because all these processes in developed countries may be quite obvious but in developing countries there is still a large gap.

Thus, the basis of sustainable leadership in the supply chain is the integration and implementation of social, financial, and environmental sustainability goals into the supply chain strategy. The difficulty in developing and implementing such a strategy, undoubtedly, lies in the

geographical distance separating individual links in the chain, as well as in the position of certain divisions throughout the chain structure. Various expectations can be associated with cultural differences and a lack of transparency in supply chains (including among suppliers or subcontractors from developing countries, where the external environment is assumed and protected differently, and regulatory acts are not always properly observed).

I can also highlight the main research questions that interest me:

1. What factors influence the formation of a sustainable supply chain and which of them are of priority importance?

2. What are the key SSC practices adopted by organizations in the FMCG sector?

Based on all of the above, I can outline the research goal of my work which is to identify factors that influence the development and key characteristics of establishing sustainable supply chains. During my research, I will study literature on this topic, company practices. Additionally, I will study the factors that slow down the process of implementing practices in Russian companies. In my work, I would like to outline a clear understanding of what exactly can motivate a company or, conversely, repel it from sustainable development. Therefore, it is initially necessary to determine what exactly can affect the successful implementation of sustainable supply chains in the company.

Initially, I will analyze the literature on the topic of sustainable supply chains. This will help form a theoretical base for my work and give me a deeper understanding. Then I will use a qualitative research method - case study. The sample will consist of professionals, managers who deal with supply chain management. Using semi-structured interviews, I will be able to obtain the necessary information for my further research. Then the obtained information will be analyzed, based on which I will be able to propose a universal model for implementing sustainable practices in the supply chain.

Accordingly, the tasks of my work are:

• To study the theoretical concepts and approaches to sustainable supply chain.

- To identify the key factors that affect the sustainability of companies' supply chains.
- To identify the relevant sustainable supply chain development practices.

• To develop recommendations for companies, to help them bring their supply chain to sustainability based on research findings.

The contribution of my research to the theory lies in the fact that they combine real modern empirical research with theoretical foundations and reviews. In the context of a developing market within the country, this is especially important, since, unlike the usual supply chains, it is precisely sustainable chains that have significant differences in their mission, purpose, and effectiveness, while in supply chains they are largely limited by economic benefits.

The practical contribution of this research is to reflect the various paths and means of sustainable cooperation in the supply chain in the developing Russian market, as well as to determine the main foundations that can form or stimulate joint efforts. It is very important that identifying these factors can serve as a guideline for developing Russian companies, defining a development vector for them in a sustainable direction, and allowing them to accurately understand which initiatives can be implemented to ensure sustainability throughout the supply chain.

## CHAPTER 1. THEORETICAL ASPECTS OF SUPPLY CHAIN MANAGEMENT 1.1 Discussion issues of the definition of the terms "supply chain" and "supply chain management"

The concept of SCM (Supply Chain Management) has been widely used in industrially developed countries since the late 1990s. A supply chain is a combination of organizations and activities related to the movement and transformation of goods.

The formation of the supply chain begins with the raw material complex necessary to produce products and ends with the delivery of finished products to the consumer. The entire range of operations performed within supply chains is associated with information flows. Among other things, distribution channels are always present in the supply chain, including suppliers, leading companies, dealer networks, etc.

Issues that have a close correlation with practice and the theory of supply chain formation and management are reflected in the works of foreign authors (A. Garrison, D. Bowersox, D.M. Christopher, Kloss, D. Stock, M. Linders, D. Waters, D. Lambert, etc.) and Russian scientists (Voronov V.I., Anikin B.A., Dybskaya V.V., Gadzhinsky A.M., Evtodieva T.E., Kurenkov P.V., Gerami V.D., Persianov V.A., Lukinykh V.F., Meshalkin V.P., Fedorov L.S., Lukinsky V.S., Mirotin L.B., Novikov D.T., Nerush M.Yu., Prokofieva T.A., Protsenko I.O., Rodkina T.A., Sergeev V.I., Stepanov V.I., Sharova I.V., etc.), however, a single definition of the term "supply chain" has not yet developed, despite the variety of scientific works, and is a significant issue.

Defining what a "supply chain" is remains a serious problem to this day. Terms such as "demand chain," "supply chain," "logistics network," "value chain," and "supply chain" make the task more difficult, as using many similar-sounding and interrelated terms complicates the task because they sound as though they mean the same thing, which is not the case. Table 1 shows the most commonly used meanings of the term "supply chain".

Table 1 – Analysis of the definition of the term "supply chain"

Author	Definition
1	2
Beamon B. M. <sup>1</sup>	The supply chain is a complex legal entity that includes echelons of
	various types, for example, suppliers, manufacturers, distributors and consumers

<sup>&</sup>lt;sup>1</sup> Beamon B.M. Supply chain design and analysis: Models and methods / B.M. Beamon // International Journal of Production Economics. – 1998. - 55(3). - 281-294 p.

Christopher M. <sup>2</sup>	The supply chain is a network of organizations involved in various
	processes and activities that create value in the form of products and services for
	end users.
Shapiro J. <sup>3</sup>	The company's logistics chain integrates geographically differentiated
	facilities where the acquisition, transformation, storage or sale of raw materials,
	unfinished and finished products takes place, and distribution channels
	combining these objects through which the process of moving products is carried
	out
Mentzer J. <sup>4</sup>	The supply chain is a complex of three or more interconnected
	institutions involved in moving upstream and downstream flows of products,
	services, finance, and information from sources of purchase to the end user
Gattorna J. <sup>5</sup>	The supply chain acts as the backbone of any company, representing
	those "roads" along which goods and services move, integrating a lot of costs
	along the way to the end consumer, which maximizes the total cost
Ivanov D. A. <sup>6</sup>	The supply chain in the process sense is a complex of flows and
	correlated processes of a cooperative and coordinating nature that occur between
	various entities involved in the value chain to maximize customer satisfaction in
	goods and services.
	The supply chain in the object sense is a complex of entities
	(manufacturing enterprises, warehouse complexes, distributors, 3-PL and 4-PL
	providers, forwarders, wholesale and retail trade) that interact in the flows of
	material, financial and informational nature, as well as the flows of services from
	the sources of raw materials to the end consumer
Cohen S. <sup>7</sup>	The supply chain is a network of companies interconnected by flows of
	material, informational and financial properties, aimed at meeting the needs of
	the end user

<sup>&</sup>lt;sup>2</sup> 2. Christopher M. Logistics and supply chain management / under the general editorship of V.S. Lukinsky. – St. Petersburg: Peter, 2004. – 316 p.

<sup>&</sup>lt;sup>3</sup> Shapiro J. Supply chain modeling / translated from English. edited by V.S. Lukinsky. – St. Petersburg: Peter, 2006. – 720 p.

<sup>&</sup>lt;sup>4</sup> Mentzer J., Defining supply chain management / J. Mentzer // Journal of Business Logistics. – 2001. - 22(2). - 1–25 p.

p.
 5 5. Gattorna J. Expert's view: live supply chains / J. Gattorno [Electronic resource]. – Access mode: http://johngattorna.com/documents/Gattorna\_Living\_SC.pdf

<sup>&</sup>lt;sup>6</sup> Ivanov D.A. Supply chain management / D.A. Ivanov. – St. Petersburg: Publishing House of the Polytechnic University. unita, 2010. – 660 p.

<sup>&</sup>lt;sup>7</sup> Cohen S., Roussel J. Strategic Supply Chain Management: The Five Disciplines for Top Performance / S. Cohen, J. Roussel. - New York: McGraw Hill, 2005. - 316 p.

Harrison A. <sup>8</sup>	A logistics chain is a group of partners that process basic goods
	(upstream) into finished products (downstream) of value to the end user and
	manage returns at each stage
Anikin B.A. <sup>9</sup>	The supply chain is an array of links in the logistics system, combined
	into a single optimized complex along the flow of material (informational,
	financial) nature, with the purpose of designing and implementing individual
	business processes that meet the needs and requests of customers

Terms often identified with the concept of "supply chain" include:

Demand chains - the main element of the product value creation process. Demand chains provide consumers the opportunity to choose from a variety of competing services and goods, integrating sales, marketing, and after-sales service. Thus, consumers play a crucial role in determining demand within the supply chain.

The logistics chain - a collection of elements of the logistics system, optimized and ordered by material flows such as information, to develop a project and perform individual business processes related to meeting the needs and demands of consumers.

The value chain is a holistic and integrated approach to management, interaction, and cost formation, which allows consideration of common related cost factors in the company's activities from the source of raw materials to the final services and goods received by the end consumer.

A logistics network is a collection of interconnected organizations that form a logistics chain and manage flows of material and related types. Logistics networks integrate internal and external resources, consisting of consumers, suppliers, transport companies, and distribution centers.

The term "chain" is not fully adequate to convey the actual state of affairs in the supply chain or value chain, therefore, based on the opinion of many scholars and practitioners, the terms either supply web or supply network are used in this case.

Table 2 - Comparison of the terms "logistics" and "supply chain management»<sup>10</sup>

Criteria	Term "logistics"	Term SSC
1	2	3

<sup>&</sup>lt;sup>8</sup> Гаррисон А., Ван Г.Р. Логистика. Стратегия управления и конкурирования через цепочки поставок. / А. Гаррисон, Г.Р. Ван. – М.: Дело и сервис, 2010. – 368 с.

<sup>&</sup>lt;sup>9</sup> Fundamentals of logistics // edited by B.A. Anikin, T.A. Rodkina. – M.: Prospekt, 2013. - 344 p.

<sup>&</sup>lt;sup>10</sup> Pustokhina I.V. Organization and management of supply chains in logistics clusters. Dissertation for the degree of Candidate of Economic Sciences in the specialty 08.00.05 – Economics and management of national economy (logistics). – Moscow, 2015.

Organization	The structure of the functional property,	The process of integration with				
	the presence of intra-organizational	the supply chain, the presence of				
	relationships	organizational relationships				
Field of vision	Tier 1 suppliers and consumer groups	An end-to-end system				
Management targets	Optimization of intra-organizational	Advanced corporate				
	processes from a logistical point of view	optimization				
Choice by partners	Setting the price level and competition	Proposal and negotiations				
Cooperation from	Short-term contracts	Long-term contracts and				
partners		strategic alliances				
Relationship with the	A source	The resource component				
supplier						
Risk-factors	Low	High				

## 1.2 Controversial issues of approaches to the classification of supply chains

Today, foreign and domestic literature contains many approaches to the classification of supply chains.

One of the most common is the approach according to which all supply chains are divided according to the level of complexity <sup>11 12</sup>:

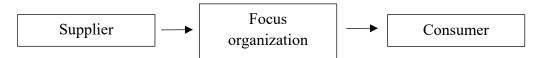


Figure 1. Type of supply chain "direct"

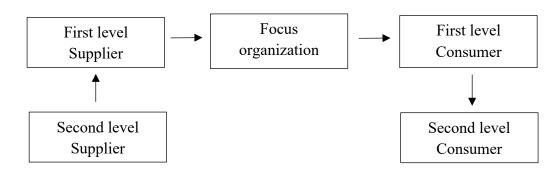


Figure 2. Type of supply chain "extended"

<sup>&</sup>lt;sup>11</sup> 11. Poplavskaya E.V. The main features of the classification of supply chains / E.V. Poplavskaya // Economic sciences. Logistics. – Issue 36 (106). – pp. 243-246

<sup>&</sup>lt;sup>12</sup> Kovaleva N.A. Fundamentals of logistics and supply chain management: textbook. the manual / N.A. Kovaleva, A.V. Guzenko. – Rostov n/A: FGBOU VO RGUPS, 2016. – 127 p.

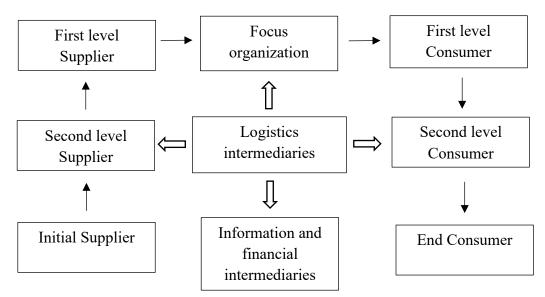


Figure 3. Type of supply chain "maximum"

J. R. Stock and D.M. Lambert<sup>13</sup> offer a classification of supply chains by types of distributive processes:

- with exclusive distribution;

- with selective distribution;

- with intensive distribution;
- with mixed distribution.

The classification of supply chains by types of distribution processes is used by companies that have the development of various target markets as defining benchmarks.

The classification of supply chains in accordance with the territorial and geographical scale is proposed by M.A. Parfenov<sup>14</sup>:

- international (interstate);

- national (interregional);
- local (regional);
- global (cross-border).

According to V.D. Serbina<sup>15</sup> the entire diversity of supply chains can be divided according to the following main characteristics:

• According to the number of links (operations): two-link, three-link, and multi-link supply chains;

<sup>&</sup>lt;sup>13</sup> Stock J.R. Strategic logistics management / J.R. Stock, D.M. Lambert. – M.: INFRA-M, 2005. – 797 p.

<sup>&</sup>lt;sup>14</sup> Parfenov M.A. Typology of supply chains and features of their flow processes / M.A. Parfenov // Bulletin of AGTU. Ser. Economy. - 2013. – No. 2. – pp. 167-169.

<sup>&</sup>lt;sup>15</sup> Serbin V.D. Fundamentals of logistics: studies. the manual / V.D. Serbin. – Taganrog: Publishing House of TRTU, 2004. – 339 p.

• According to the composition of participating entities – internal (involving divisions within the enterprise) and external (resulting from interactions between economically independent entities);

- According to the temporal aspect: permanent or long-term, periodic, and one-time;
- According to the markets served: global, regional, and local supply chains.

After analyzing existing classifications and gathering all types of supply chains, the following groups can be distinguished:

- By type of product: supply chains of goods and services;
- By the number of levels: direct, extended, and maximum supply chains;
- By the direction of flow: forward and reverse supply chains;
- By product standard/innovation: lean, customer-oriented, and innovative supply chains;
- By type of nationality: regional, interregional, international, and global supply chains;
- By type of differentiation policy: supply chains with intensive distribution, selective distribution, exclusive distribution, and mixed distribution;
  - By frequency of supply: permanent, periodic, and one-time supply chains;
- By differentiation of supplied resources: single-product and multi-product supply chains;
  - By transportation method: unimodal and intermodal supply chains;
  - By regularity of supply: regular and irregular supply chains;
  - By volume of supply: mass, batch, and piece supply chains;
  - In relation to the company's environment: internal and external supply chains;

• By deferred demand: supply chains of deferred production demand and deferred logistics demand;

• By profitability level: highly profitable, moderately profitable, and low-profitable supply chains;

• By differentiation of supply chains: homogeneous and differentiated;

• By product categories: supply chains of basic products, strategic products, noncritical products, and problematic products.

The wide variety of types of supply chains in the real economy actually facilitates the analysis and design of supply chains and the fact that their types must be pre-organized will simplify their subsequent management.

#### 1.3 Key issues in sales management and supply chain systems

Nowadays there is the following set of theoretical and methodological problems in the sales management system and supply chains <sup>16</sup>:

- the database has not been fully developed to assess the degree of integration of the company, as well as to manage the processes of product sales in the supply chain of integrated companies;

– a significant part of the companies that make up the industrial production sector carry out work on the organization of sales activities without an intersystem approach, in which the coordination of sales functions of all entities included in the chain must be achieved;

- the lack of a method of "careful" management technology for sales processes;

- there is still no clear concept of determining the "point of entry of the order", managing cost chains and organizing pricing processes that depend on the mode of marketing methods in the supply chain.

Today, there is a need to develop further vectors for the theoretical and cognitive development of global logistics, a more adequate practice-oriented development of logistics research on global value chains, as well as addressing issues of its higher conceptual and applied significance <sup>17</sup>.

The complex of practical problems related to the functioning of supply chains due to the introduction of sanctions restrictions and affecting sustainable development, studied in detail on the basis of the experience of the International Road Transport Union, is divided into two groups:

1. The problem, the reason for which should be considered the effect of sanctions restrictions directly related to the functioning of the economic system of the Russian Federation, which have an indirect impact on business, including subsystems such as transportation, logistics and operation of supply chains.

2. The problem, the reason for which should be considered the effect of sanctions restrictions, directly related to the functioning of the transport complex, the logistics component and the operation of supply chains.

<sup>&</sup>lt;sup>16</sup> Polyunas D.A. Sales management in the supply chain of an industrial enterprise. Abstract of the dissertation for the degree of Candidate of Economic Sciences in the specialty 08.00.05 – "Economics and management of the national economy (economics, organization and management of enterprises, industries, complexes: industry; logistics)". – Chelyabinsk, 2010.

<sup>&</sup>lt;sup>17</sup> Reznikov S.N. Transformation of supply chains in the global commodity exchange system. – Dissertation for the degree of Doctor of Economics in the specialty 08.00.05 – economics and management of the national economy: logistics. Rostov–on-Don, 2015.

A detailed analysis of publicly available sources of information from the field of international road transport operations on issues arising from the imposition of sanctions shows that they can be classified as follows:

1. Problems in the field of logistics and operation of supply chains (updating routes, developing new directions that allow moving material flow, carrying out transshipment operations along such flows to other types of vehicles).

2. Problems of a technical nature.

3. The problems of the safety of the labor collective and vehicles.

4. Problems of a financial nature.

5. Problems of an infrastructural nature (the presence of border crossings, ferry crossings).

6. Problems of a documentary nature (registration of a set of permits, following other formalities in the process of working with new partners).

7. Problems of a different nature (caused by the effect of sanctions restrictions and other issues).

The identified set of problems has a significant negative impact on supply chains formed over the years of globalization, significantly reducing their sustainability. In the next subparagraph, we will consider what a sustainable supply chain is and the key aspects of its functioning.

#### 1.4 Sustainable supply chain: the essence and content

Businesses recognize that supply chains play a crucial role in enhancing business efficiency. Companies are aware of the need to change outdated management methods and are looking for new opportunities to develop their supply chain systems. The goal of these changes is to increase cost efficiency and meet the growing demands of stakeholders regarding quality and safety. One of the key factors in improving supply chain efficiency is the integration of sustainable development principles into the activities of all supply chain participants, which will contribute to the creation of a sustainable supply chain that aids in achieving goals and meeting requirements.

For companies, establishing a supply chain management process turns into an opportunity to significantly reduce the pool of production costs and strengthen relationships with suppliers, customers, investors, and other stakeholders.

With the adoption of the sustainability concept in global business practice, companies began to transform their own business models, focusing on long-term success by managing the economic, social, and environmental impacts associated with their activities. Supply chains are an integral part of the company's sustainability system, hence they receive considerable attention. Previously, the traditional approach to supply chain management was to "deliver the right product to the right place in the shortest possible time," focusing primarily on minimizing the time required, with ultimate profits of the company at the forefront. Today, senior corporate management has realized the limitations of this goal-oriented approach. The boundaries of business responsibility are expanding as risks associated with supplier activities are taken into account. This is also advocated by international organizations that have developed requirements and recommendations for disclosure in the field of supply chain management (GRI, Carbon Disclosure Project). Thus, the concept of sustainable supply chains is becoming more widespread in international business practice.

The issue of supply chain stability is complicated by a number of terminological features characteristic of this field. As of today, there is no unified terminology for the issues of stability and reliability of supply chains, nor a clear distinction between their parameters.

Among other things, the concept of "sustainability" has many definitions, but there is not always a clear distinction between the concepts that fill its essence<sup>18</sup>. In this regard, it seems appropriate to analyze a number of terminological aspects of supply chain sustainability, identify its elements and ways to ensure them.

Under sustainable supply chains<sup>19</sup> The UN Global Compact understands the management of environmental, social and economic impacts that can achieve significant effect, arising as a result of the activities of participants involved in the supply chain. Responsible business practices, including ethical business conduct (for example, human rights protection, environmental conservation, and market competition maintenance) and governmental requirements, must also be upheld throughout the entire product lifecycle of a company.

Despite numerous differences in the definition of the term found in various sources, it becomes possible to identify common characteristics of supply chain stability, which, as follows from the essence of the set of definitions provided, can be defined as the ability of the supply chain to promptly respond to disturbances, develop adaptations to them, and restore its functionality to the previous or an updated, more stable level.

The issue of how to achieve supply chain sustainability is widely discussed in the literature.

Researchers propose various definitions and approaches to determine the elemental composition and methodology of sustainability<sup>20</sup>. One of the most popular concepts of supply

<sup>&</sup>lt;sup>18</sup> Sergeev V.I., Kolchugin D.M. Theoretical aspects of supply chain sustainability / V.I. Sergeev, D.M. Kolchugin // Logistics and supply chain management. – 2015. - No.3 (68) June

<sup>&</sup>lt;sup>19</sup> Supply Chain Sustainability. A Practical Guide for Continuous Improvement. UNGC, BSR, 2010.

<sup>&</sup>lt;sup>20</sup> Jüttner U. & Maklan S. (2011). Supply chain resilience in the global financial crisis: an empirical study. / Jüttner U., Maklan S. // Supply Chain Management: An International Journal. – 2011. - 16 (4). – c. 246 – 259.

chain sustainability is the work of Christopher and Peck<sup>21</sup>. Their study identifies four key opportunities to ensure sustainability: supply chain design (reengineering), collaboration, risk awareness, and flexibility. These elements are also considered in other studies. In general, the following aspects of sustainability are found in the literature:

1) supply chain engineering (re-)engineering) (Blackhurst J., Christopher M., Craighead C.W., Croxton K.L., Dunn K.S., Peck H., Pettit T.J., Fiksel J.);

2) collaboration (Azevedo S.G., Caniato F., Carvalho H., Christopher M., Cruz-Machado V., Lee H., Rice J.B.);

3) awareness of risk factors (risk awareness) (Blackhurst J., Christopher M., Craighead C.W., Dunn K.S., Jüttner U., Maklan S., Peck H.);

4) dynamism (agility) (Christopher M., Holcomb M.C., Lee H., Ponomarov S.Y.);

5) adaptability (Busquets J., Rice J.B. Jr., Rodon J., Sheffi Y., Spring M., Stevenson M., Wareham J.);

6) alignment (Croxton K.L., Fiksel J., Jüttner U., Maklan S., Pettit T.J., Rice J.B. Jr., Sheffi Y.);

7) visibility of the supply chain (Blackhurst J., Christopher M., Craighead C.W., Dunn K.S., Francis V., Lee H.);

8) velocity (Azevedo S.G., Carvalho H., Christopher M., Cruz-Machado V., Jüttner U., Maklan S., Peck H.);

9) robustness, robustness (Blackhurst J., Craighead C.W., Dunn K.S., Koronis E., Ponis S.T., Wallenburg C.M., Wieland A.);

10) flexibility (Holcomb M.C., Moon K.L., Ngai E.W.T., Ponomarov S.Y., Rice J.B. Jr., Sheffi Y., Yi C.Y.);

11) redundancy (Caniato F., Croxton K.L., Fiksel J., Pettit T.J., Rice J.B. Jr., Sheffi Y.);

12) trust (Banwet D.K., Christopher M., Faisal M.N., Lee H., Malzahn D., Shankar R., Sinha P.R., Whitman L.E.);

13) integration (Christopher M., Holcomb M.C., Peck H., Ponomarov S.Y.);

14) coordination (Christopher M., Kumar S., Lee H., Rice J.B. Jr., Sheffi Y., Stecke K.E.);

15) information sharing (Azevedo S., Barroso A.P., Carvalho H., Christopher M., Cruz-

Machado V., Holweg M., Machado V.H., Rice J.B. Jr., Sheffi Y.);

16) risk management (Christopher M., Lee H., Wagner S.M., Yang B., Yang Y., Zsidisin G.A.);

 $<sup>^{21}</sup>$  Christopher M. & Peck H. Building the Resilient Supply Chain. / Christopher M. & Peck H // The International Journal of Logistics Management. – 2004. - 15 (2). – c. 1 – 14.

17) knowledge management (Christopher M., Holcomb M.C., Jüttner U., Maklan S., Peck H., Ponomarov S.Y.).

The basis for ensuring the sustainability of supply chains is the Triple-A approach developed by H. Whether in 2004<sup>22</sup> according to this approach the most successful and sustainable companies are those which supply chains are characterized by agility, adaptability and alignment (Triple-A = agility + adaptability + alignment) (Figure 4).

The success of the supply chain is determined by the ability of all partners to focus on the needs of the end user and effectively direct the response to the transformation of these requirements.

Leading companies in this field demonstrate flexibility by responding quickly to short-term changes in customer requirements and adapting to economic and market changes by reorganizing their supply chains. They also successfully integrate and coordinate business processes and fairly distribute risks, costs, and benefits among all participants.

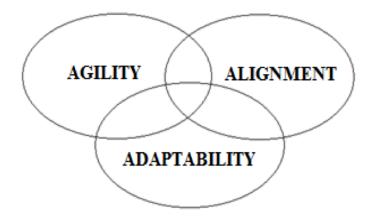


Figure 4. Tripple-A Approach proposed by HAU L. LEE.

As a result, these companies form highly adaptive systems that not only allow them to respond effectively to market changes, but also create a competitive advantage related to meeting the needs of end users within the supply chain.

Clarifying measures aimed at achieving adaptability, dynamism and alignment are presented in Table 3.

<sup>&</sup>lt;sup>22</sup> Lee H.L. The triple-A supply chain. / Lee H.L. // Harvard Business Review. 2004. - 82 (10). - c. 102 - 112.

Agility	Adaptability	Alignment						
1) exchange of	1) ensuring continuous	1) free exchange of						
information flows between	monitoring of the processes	information flows and						
entities involved in the supply	taking place in the global	knowledge between entities						
chain;	economy in order to find new	involved in the supply chain;						
	and potential sources of supply							
	and markets;							
2) development of	2) establishing active	2) transparent						
cooperation with a network of	interaction with intermediaries	distribution of roles, tasks and						
suppliers;	in order to develop the logistics	responsibilities among the actors						
	infrastructure component of the	involved in the supply chain;						
	supply chain;							
3) providing a spare	3) analysis of the needs	3) fair distribution of						
number of inexpensive but	of both end consumers and	risk factors, costs and benefits						
important components;	intermediate buyers;	among the entities involved in						
		the supply chain;						
4) availability of	4) Flexibility is the focus							
dependent logistics systems	of product design;							
consisting of supply chain								
partnerships;								
5) development of a	5) conducting a product							
system that allows you to build a	life cycle analysis to determine							
risk factor management process;	its duration;							
6) creation of virtual								
supply chains, the formation of								
which is based on information,								
not stocks;								
7) setting up work with a								
pool of suppliers who have the								
highest response to								
transformational processes;								
8) mass customization.								

## Table 3 - Building Tripple-A supply chains

In modern literature such key factors of supply chain sustainability as awareness of the presence of risk factors and knowledge management are often subject to discussion. Risk

awareness means that sustainability requires appropriate management policies and action plans that regularly assess risks and coordinate the efforts of all participants in the supply chain. Partners should have a common understanding and awareness of the risks that may arise in the course of their respective activities<sup>23</sup>.

Resilience also includes the ability to learn from past mistakes and increase preparedness for future events. Knowledge and understanding of the physical and information structure of the supply chain is an important element of sustainability<sup>24</sup>.

Training of actors involved in the supply chain on security and risk issues will increase awareness and strengthen the importance of supply chain sustainability.

In general, the field of sustainable supply chains is also insufficiently studied today. For example, the issue of sustainability assessment, the approach to assessment and the set of indicators for assessment remain unexplored. This problem is further complicated by the fact that the overall composition of indicators varies from industry to industry.

The constantly increasing impact of events and disruptions on the normal functioning of enterprises clearly indicates the need to change traditional strategies in corporate management. This fact should serve as an additional incentive for researchers and practitioners to conduct further studies on how companies can overcome the consequences arising from sudden and unforeseen events through sustainable practices.

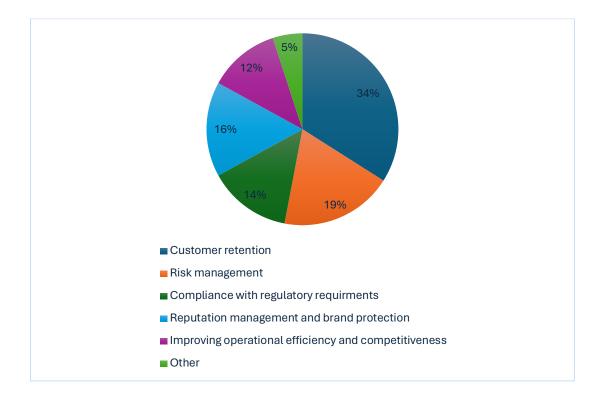
#### **1.5 Practical experience in creating sustainable supply chains**

When companies decide to implement the principles of sustainable development in the activities of their suppliers, they pursue a different set of targets. For some companies, this is an opportunity to improve their economic performance; for others, it is a necessity to manage their reputation and brand.

The entire set of motivational factors contributing to decision-making on creating a sustainable supply chain (Figure 5) and building a stable dialogue with the participants involved should be combined together—this is the need to protect business through timely and flexible response to various kinds of transformations in an external environment.

<sup>&</sup>lt;sup>23</sup> Faisal M.N., Banwet D.K. and Shankar R. Supply chain risk mitigation: modeling the enablers. / Faisal M.N., Banwet D.K. and Shankar R. // Business Process Management. – 2006. - 12 (4). – c. 535-552.

<sup>&</sup>lt;sup>24</sup> Ponomarov S.Y. & Holcomb M.C. (2009). Understanding the concept of supply chain resilience. / Ponomarov S.Y., Holcomb M.C. // International Journal of Logistics Management. – 2009. - 20 (1). – c. 124-143



#### Figure 5. Motivation of companies creating a sustainable supply chain

For companies, integrating the principles of sustainable development in the supply chain has a number of important advantages<sup>25</sup>:

Firstly, improving working conditions can reduce staff turnover, enhance work quality, and boost employee loyalty;

Secondly, responsible implementation of environmental initiatives can enhance operational efficiency, reduce costs, and improve the company's reputation;

Thirdly, increasing awareness of additional supply chain risks and effective management of these risks will minimize potential losses that the company and its stakeholders might incur in the future;

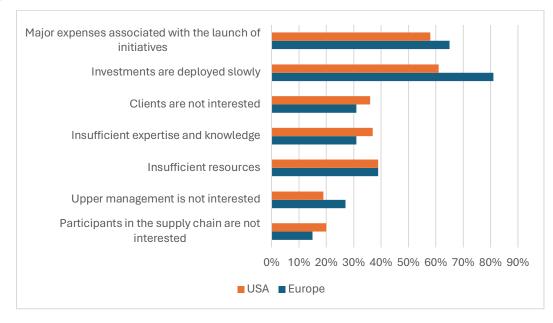
Fourthly, relationships with customers and other stakeholders are strengthened. The procurement system and sustainable development of the company receive external recognition, which positively affects the company's brand reputation and value;

Fifthly, the positive impact of the company's supply chain on the external environment also contributes to the improvement of socio-economic and environmental conditions in the regions where the company operates, which, in turn, has a positive impact on the local community;

<sup>&</sup>lt;sup>25</sup> Unchaining Value: Innovative approaches to sustainable supply, SustainAbility, UNEP and UNGC, 2008

Sixthly, the implementation of such initiatives leads to the protection and strengthening of the company's assets, including human and capital resources, which ultimately increases its shareholder value.

However, it should be noted that the creation of sustainable supply chains faces several serious challenges for companies (see Figure 6), including high costs, lack of interest from customers, suppliers, and investors, as well as a lack of necessary knowledge and experience. All these factors significantly hinder the development of sustainable development management both within the companies themselves and in supply chains. Unlike traditional procurement and logistics management systems, sustainable supply chains focus on analyzing and managing potential negative impacts on the social and environmental environment at all stages of the product lifecycle.



# Figure 6. The main obstacles to the implementation of sustainable development initiatives in relation to the supply chain

By defining a specific list of steps to achieve sustainable development to reduce this impact, companies can create socially and environmentally sustainable supply chains (see Figure 7).

The main stages of value creation	Waste generation	Emissions into the atmosphere	Pollution of water sources	Protection of established ecosystems	Energy consumption	Industrial safety	Working conditions and protection of human rights	Consum er protection	Product Quality	Staff qualifications	After-sales initiatives	Packaging	Interaction with stakeholders	Technical innovations and IT	Ensuring transparency
Extraction of raw materials	*	*	*	*		*	*						*		*
Production of raw materials	*	*	*		*	*	*			*			*		*
Storage area				*	*	*			*	*		*	*	*	*
Transportation		*			*	*			*	*			*	*	
Distribution, consumption and disposal	*				*			*	*		*	*	*		*

## Figure 7. Key aspects of sustainable development related to production that should be taken into account in supply chain management

The company's implementation of the principles of sustainable development significantly affects the efficiency of the supply chain. According to the results obtained, it can be concluded that companies that have achieved leadership in the field of sustainable development have the most efficient supply chains (Figure 8).

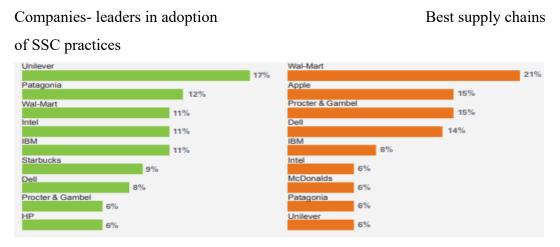


Figure 8. Leading companies in supply chains and sustainable development

When deciding to build a supply chain in accordance with sustainable development principles, it is crucial to determine the current stage of company development and its objectives. Choosing the right approach to achieving the set goal will not only optimize the procurement system and minimize associated risks, but will also positively affect the overall business and company image.

No organization has a completely identical supply chain, management system, or corporate culture, and the process of developing a sustainable supply chain will be unique for each

organization. However, many international guidelines and databases of best practices in this area have been developed to support company management.

## CHAPTER 2: ANALYZING PRACTICAL ASPECTS OF SUSTAINABILITY IN SUPPLY CHAINS

#### 2.1 Methodology development

The first step of my research involves a content analysis of the ESG reports from leading companies to gain a clearer understanding of how a modern sustainable supply chain is structured. Analyzing these ESG reports provides a wealth of information and serves as a basis for more detailed examination, enabling a better understanding of the strategies companies employ to achieve sustainable operations. From a scientific perspective, the thematic analysis of ESG reports has several key benefits. Practically, the experience described in the reports vividly demonstrates how companies implement sustainable development in their processes. The reports also reveal current trends in companies' sustainable practices, such as innovative and corporate initiatives. Additionally, based on the knowledge obtained from the reports, it is possible to identify the link between theoretical and practical components, allowing for comparison with theoretical foundations.

I analyzed 20 ESG reports and decided not to limit the analysis to domestic companies, as the foreign experience is sufficiently indicative and can serve as a good example. I also chose to review reports from the year 2022. As not all companies had compiled their full reports for 2023 at the time of writing this paper, I decided to sample ESG reports from 2022 for greater representativeness.

The next step will be to formulate a proposition based on the factors identified from the ESG reports analysis.

The second stage of my research involves conducting semi-structured interviews with heads of sustainable supply chain departments of major FMCG companies in the Russian market. The main goal of these interviews is to gain a deeper understanding of the actual factors and practices for Russian companies in implementing sustainable initiatives and the potential benefits for them.

Five respondents from large companies responsible for sustainable development and sustainable supply chain departments were selected for the in-depth interviews. The questions for the interviews were open-ended, allowing each company representative to respond in a manner comfortable for them. All questions were crafted based on the objectives of my work and the experience gained from analyzing non-financial reports from other major companies.

Overall, it can be said that combining two research methods, namely thematic analysis of ESG reports from major companies and semi-structured interviews with representatives from

sustainability departments, will provide a broader perspective on how the process of implementing sustainable development is currently unfolding in the Russian market.

The third step will involve developing recommendations for Russian FMCG companies, based on the identified factors, which will serve as a guide for companies towards sustainable development.

## 2.2 Exploring ESG Reporting: An Analysis of Current Non-Financial Reports

In order to delve deeper into the issues of sustainable supply chains, we use the Content Analysis of qualitative data method, obtained on the basis of ESG reports from various companies and various industries from 2022. I have studied 20 reports from various companies, both international and Russian, large corporations and small companies in the FMCG sector. All reports studied by me will be attached to Appendix 1.

Analyzing the effectiveness of the company, we can say that this has allowed us to identify several major initiatives in the field of sustainable supply chains.

- 1) Selection of a business partner:
- Giving preference to small businesses and local suppliers
- Conducting ESG due diligence on suppliers
- Certifying suppliers
- Choosing and assessing suppliers according to ESG standards
- Evaluating buyers according to ESG criteria
- Implementing internal and external certification processes for suppliers
- 2) Monitoring of ESG of suppliers
- Effective systems for breaching ESG standards
- Supplier helpline
- Assessing suppliers for ESG risks
- Inspections of supplier operations
- Code of Ethics for suppliers
- Oversight of Suppliers
- 3) Exchanging information and merging knowledge
- Supplier gatherings and conferences
- Facilitating educational programs and sharing expertise with suppliers
- Cooperative engagement platforms
- Assessment of product lifecycle stages
- Enhancing supply chain transparency/visibility

- Collaborative research projects
- Defining of innovative logistics solutions
- 4) Collaboration with stakeholders
- Following industry ESG standards
- Engaging with supply chain organizations
- Participating in community activities
- Teaming up with competitors
- Joint initiatives with educational organizations or NGOs

Structuring the research helps to make the research more systematic, which will help facilitate the research, and also make it easier to compare the approaches of companies, in which we can quickly track trends and trends in different companies and different industries.



## Figure 9. Implementation of Sustainability Measures in supply chains.

This pie chart highlights the main measures for companies to implement sustainable initiatives in their supply chains, based on the percentage of companies' reports analyzed by ESG. As noted, the largest part of the pie chart is occupied by Selection of a business partner, whose share is 55%, the next largest section is Monitoring of ESG of suppliers – 29%, followed by Exchanging information and merging knowledge, which takes over another 10%, and Collaboration with stakeholders is in fourth place – 5%.

Next, we will discuss each group of sustainable initiatives in more detail.

Selection of a business partner: In the current era, as companies become more globalized, their dependence on external partners increases. The numerous options for external suppliers and determining their integrity and honesty become a critical task in the sustainability of supply chains when choosing them.

There are well-founded reasons for this:

First, a detailed selection of a partner helps to reduce potential risks in supply chains. Recent events have shown how important it is to make the right choice of partner to avoid critical situations due to potential problems with legislation, changes in a country's current position in the world market, climate changes, political instability—all of which can subsequently become significant obstacles in operations. However, again, choosing a reliable partner minimizes further risks.

Second, by choosing a reliable partner, you do not risk the quality of your goods and the reputation of the company. The right partners can guarantee and be responsible for their work; all their production processes are under careful management and observation. Especially now, consumers pay a lot of attention to the partners with whom companies work, as this is an indicator of integrity and responsibility, including the company's attitude towards its own customers.

Third, by choosing a partner who shares the company's mission in sustainable development, the company secures itself a long-term and reliable partner in terms of production, transportation, storage, etc.

Choosing a partner is a criterion found in every company's ESG report. More advanced and larger companies have already integrated the selection of the right supplier into their sustainable supply chain process. One of the important criteria for a company's sustainability is choosing local/small suppliers. Companies that prioritize small businesses contribute to regional economic development, creating many jobs, and supporting small business. This criterion is especially important for developing countries, where there is significant competition from large suppliers/manufacturers that displace small businesses due to economies of scale. The factor of choosing the right supplier is especially important for companies in the manufacturing sector, which can prevent violations of labor rights, environmental standards.

Often, significant attention to this issue is given in the agricultural sector, as it is there that manual labor is used. For example, Unilever, which manufactures everyday goods, writes in its ESG report that "*Empowering smallholder farmers to embrace new agricultural practices is another important part of our nature agenda. Magnum is creating a more resilient supply chain by working with cocoa farmers in Côte d'Ivoire to adopt agroforestry practices – improving soil health, increasing yields, and boosting farmers' incomes<sup>126</sup>. As mentioned earlier, choosing partners who share the mission and values of the company is very important as the environment of partners forms the image of the company in the global market. For example, a company that has* 

<sup>&</sup>lt;sup>26</sup> Unilever annual report and accounts 2023 from

https://www.unilever.com/files/92ui5egz/production/b09c3510ee7cec58440d5f044f02bdefe85aa186.pdf

chosen a conscientious supplier who is engaged in long-term production of biodegradable ingredients increases the company's awareness of environmental pollution. For instance, Unilever continues to implement programs for the rational use of water resources and builds long-term relationships with verified and reliable suppliers to replace ingredients that do not meet biodegradability standards. An essential indicator for companies is interaction with local suppliers, which affects support for the local economy and the creation of additional jobs. This indicator is very important because for large companies that produce their own products, it is important to have their own base of reliable raw material suppliers. This is also important for countries in which companies choose places for their production points, as if a large company chooses a developing country, it provides significant support to small manufacturers who struggle to compete with more massive and cheaper importers. Often, the most attention in these issues is paid to agriculture, as it is there that human manual labor is used, and it is essential to control all aspects of the chain, from quality control of fertilizers used to checking compliance with human rights. For example, BAT in its report notes that "the vast majority of tobacco farms in our supply chain are smallholder family farms"<sup>27</sup>. The company actively promotes the idea of interacting with local small farms, thereby developing the region's economy, and also encourages local suppliers to a high standard level.

Also, an important advantage is the localization of the supplier base from an environmental perspective. In this case, we are talking about reducing carbon miles in delivering products to the end consumer, which can be optimized by reducing the distances of transportation routes. Thus, the company Pepsi Co notes in its report, "*We're developing and supporting solutions designed to decarbonize operations across our value chain*"<sup>28</sup>, which significantly reduces costs and, of course, enhances the company's efficiency, both for its KPIs and for clients.

Another important advantage of localizing its suppliers is a more convenient quality control format, due to greater transparency in the supply chain. For example, BAT in its reports noted the use of a system called "*Farmer Sustainability Management (FSM) digital app by FT (field technicians)*", which is aimed at constant and timely quality control of farm work and compliance with set standards. If the program detects any case of violation, a notification immediately comes into the system, and the case of violation is quickly resolved. Also, for example, this includes supervision over the use of child labor. Due to a more convenient quality control format, the transparency of the company increases, which in turn provides a good level of sustainability of the

<sup>&</sup>lt;sup>27</sup> BAT annual and esg report 2022 from https://www.bat.com/content/dam/batcom/global/mainnav/investors-and-reporting/reporting/combined-annual-and-esg-report/sustainabilityreporting/BAT\_Annual\_Report\_Form\_20-F\_2022.pdf-BAT

<sup>&</sup>lt;sup>28</sup> Pepsi Co ESG summary 2022 from https://www.pepsico.com/docs/default-source/sustainability-and-esg-topics/pepsico-2022-esg-summary.pdf?sfvrsn=6fb3204b\_0-Pepsi Co

company's control over all production processes and compliance with ethical norms due to adequate working conditions. All this undoubtedly gives the company a significant advantage in compliance with legislative norms.

Speaking of human rights, companies are increasingly talking about equal treatment of representatives of various minority groups. For example, BAT in its reports notes the growth in the percentage of women involved in managerial positions and mentions the importance of maintaining balance on the national issue "*the number of Management Board members that have at least a 50% spread of nationalities*", which speaks of a diverse inclusive work environment. Undoubtedly, this increases the level of loyalty to the company from consumers who see the correct attitude of the corporation to its team, accordingly increasing its reliability among consumers.

Analyzing in more depth the report of the company Unilever, a very positive trend was noted, within which the company promotes the expansion of the boundaries of its cooperation with representatives of minorities. Company representatives write, "*A diverse and inclusive workplace is a priority for the Board and Committee, and it underpins the appointment and recruitment processes at all levels in Unilever*". The development of companies in this direction is not just compliance with trends, but a strategically important step towards sustainable development and social responsibility, as creating an inclusive environment promotes the enrichment of creativity, brings innovation, and also contributes to the development of products and services for a broader range of consumers due to the diversity of views. Also, this significantly strengthens trust in the brand from both employees and clients and even potential or current investors, who constantly observe the company's development.

Monitoring of ESG of suppliers - assessing supplier risks and ESG due diligence is a key measure that companies must use to advance their sustainability strategy and should be performed before signing an agreement/contract with a supplier. These measures aim to examine the activities of partner companies for violations and company reliability. ESG risk assessment of suppliers is necessary primarily to identify potential violations to prevent possible risks such as improper resource use or emissions and waste management, labor violations, discrimination, unethical company standards, etc. Essentially, this involves a general approach to analyzing a company's activity, particularly its supply chain. Many companies decide to transition to sustainability due to potential economic benefits, as many investors and creditors pay attention to a company's efficiency indicators and commitment to ESG standards, assessing the company's suitability for investment. From the reviewed company reports, it can be concluded that all, to varying degrees, try to comply with ESG norms, possibly with different emphases on certain aspects, which is normal given the different directions of FMCG activities.

For example, from Unilever's report, we can see that analyzing the sustainability of their partners is very important to avoid potential risks: "We initiated a large-scale transformation programme within our supply chain to reach this milestone, including independently verifying our suppliers through audits". The company regularly conducts checks on its current and especially potential suppliers not only through internal audits but also through the media. The importance of monitoring the sustainability of suppliers lies primarily in reducing environmental risks, for example, Unilever is particularly concerned with reducing its carbon footprint, therefore it needs to carefully select suppliers who are involved in material production. Also, risk monitoring and its transparency favorably affect the trust from investors, clients, and stakeholders. Moreover, given current realities, companies that follow sustainable development principles have more opportunities to enter new markets, as these companies are given preference. Moreover, companies that demonstrate their inclination for sustainability in supply chains receive more attention in government and international tenders, as well as when attracting additional financing. Procter and Gamble also noted the importance of auditing their suppliers: "we hold our suppliers to high standards"<sup>29</sup>. Of course, in the FMCG sector, it is crucial to comply with quality standards, not only internal company standards but also international laws that suppliers must meet. Responsible supplier selection not only affects the quality of the product but also preemptively protects the company from possible legal problems and fines for product quality control. Accordingly, a high level of product quality encourages compliance with regulatory requirements, which makes the company's market position and customer trust more reliable and robust. Also, supplier audits in Procter and Gamble are aimed at checking compliance with sustainability principles, such as proper resource use, the possibility of ethical disposal, and ethical working conditions for their employees. Of course, in addition to this matching P&G's corporate values, it also affects how the brand is perceived by its consumers, who increasingly want to consume products that meet ecological standards. Also, do not forget about another aspect of a sustainable supply chain, namely its reliability. Indeed, verified suppliers reduce the risks of operational delays, the entry of substandard goods, or ensuring a continuous supply chain. This aspect is important in maintaining the sustainability of the company, the ability to quickly respond to market changes, and rapid adaptation. Of course, to build a sustainable supply chain with proper working conditions, suppliers must first independently build systems to control their activities. Today, given the unstable political situation, the issue of protecting migrant rights becomes more acute, as safe working conditions must be maintained not only in the agricultural sector but in areas with a high level of migrants. Due to the constant shortage of jobs, problems with obtaining education, and

<sup>&</sup>lt;sup>29</sup> Procter and Gamble citizenship report 2022 from https://us.pg.com/citizenship-report-2022/environmental-sustainability/

illiteracy among some of the population, risks arise for people and labor violations, namely: restriction of movements, retention of personal documents, wage delays, unregulated working hours. That is why the issue of human rights in risks is given more time, as tracking environmental standards violations is often much easier.

The last but one of the most critical criteria for evaluating suppliers is the internal and external certification of suppliers according to ESG standards. Internal certification involves a series of measures set by the company based on its type of activity, the necessity of applied measures. Suppliers undergo internal accreditation of the company taking into account the addition of sustainability measures. For example, Nestle established its own control over child labor violations: "*We were the first company in the cocoa sector to introduce a Child Labor Monitoring and Remediation System (CLMRS) in our supply chain*"<sup>30</sup> and became an example for other companies implementing similar measures.

Thus, external certification no longer relates to a company's personal initiatives; they are carried out externally by independent third-party organizations. Companies are obliged to request the necessary information from their suppliers during operations or when signing a contract with a supplier. Currently, there is a certain scope of standards at the global level that is applicable everywhere on a voluntary basis. In Russia, these standards are also not mandatory, but it should be considered that if any company wants to go global and interact with various partners and investors, compliance with these standards should be a priority, which undoubtedly will also increase market competitiveness. The most frequently mentioned standards include the following:

• UN PRI (United Nations Principles for Responsible Investment) - this initiative is aimed at encouraging companies to include ESG factors in their financial analyses

• UN Global Compact (United Nations Global Compact for Sustainable Development) - the initiative is aimed at implementing business social responsibility in human rights, environmental care, and anti-corruption

• GRI Standards (Global Reporting Initiative) - contain a classification of 6 universal indicators or principles that companies can apply to achieve sustainability

• SASB (Sustainability Accounting Standards Board) - these standards are designed to help companies determine which ESG aspects are most relevant for their industry

• TCFD (Task Force on Climate-related Financial Disclosures) - this standard is aimed at providing information for investors about a company's activities in sustainability and how they promote it

<sup>&</sup>lt;sup>30</sup> Nestle Sustainability report 2022 from https://www.nestle.com/sites/default/files/2023-03/creating-shared-value-sustainability-report-2022-en.pdf

• ISO Standards: ISO 45001 - a standard for occupational safety and management system, ISO 14001 - a standard aimed at reducing the harmful impact of business on the environment, ISO 22000 - this standard is especially important for the FMCG sector as it is aimed at managing food safety from suppliers (farmers) to retail trade.

Exchanging information and merging knowledge Plays a key role in creating a sustainable supply chain, as nothing enhances efficiency like the exchange of relevant information and useful knowledge, which in turn increases the transparency of the company. Most companies mention the importance of training in their ESG reports. We will consider two directions of training: the first is internal training of its employees, and the second is the exchange of information and open conferences outside the company. Let's first address the former. Given the conditions of modern business, which constantly faces the need to adapt to new environmental conditions, consumer demands, and legislative requirements in the field of ESG, increasing the awareness of its employees is a crucial stage in the company's transition to sustainable operations. In general, companies have two paths, the first is to create a sustainable business from scratch, a path many modern companies are taking, or to build an understanding of sustainability at the stage the company is already at. In such a case, it is the training of employees that begins the transition to sustainable operations and it is the management's task to convey to their colleagues the importance of this action, as some employees may not fully realize how their tasks affect or can beneficially impact the environment in the future. For example, Heineken has stated, "appreciate a continuation of the internal and external education, including on topics such as sustainability<sup>31</sup>. The company has repeatedly emphasized the importance of training and attracts employees to lectures on health and corporate responsibility at its conferences.

In the second direction, the exchange of information not only has strategic importance for a specific company, as in the first, but also carries a general benefit. For large companies, sharing experience and knowledge is a good opportunity to increase their awareness in the field of sustainable supply chains, and most importantly, it contributes to global sustainable development. Studying ESG reports of companies, several main motives for participating in knowledge sharing were identified. The first is, of course, facilitating the acceleration of innovations, as knowledge sharing allows companies to implement new technologies or solutions that have previously been implemented by larger enterprises, thereby reducing the time and costs of developing their own solutions. The second is when large companies or research centers demonstrate on their example successful implementation of their established practices. This in turn allows others to quickly pick

<sup>&</sup>lt;sup>31</sup> Heineken N. V. annual report 20222 from

https://www.theheinekencompany.com/newsroom/download/b51e7816-6035-4a1c-ab89-82a4310e1eed/heinekennvannualreport202223-02-2023.pdf

up the trend and, if necessary, respond to difficulties in the supply chain, leading to the standardization of approaches at the international level. The third factor is increasing transparency, for example, companies participating in open conferences can present themselves from a good position, which in turn strengthens trust among consumers and partners. Companies such as Nescafe, which "*launched a consumer education campaign to promote recycling*" belong to this category. The fourth motive is the social effect, that is, by sharing their experience and knowledge on improving supply chains, companies contribute to improving the quality of life of many people, including in developing regions. And last but not least, the constant incentive to comply with a certain level, as the agenda is regularly updated, new norms and laws are often introduced, and to stay on trend, it is necessary to be in the circle of companies also interested in the sustainability of their supply chains.

**Collaboration with stakeholders** promotes greater social responsibility of companies and promotes ideas of sustainable development in the global market, also being an important point in improving competitiveness and innovative approach in supply chains.

In the ESG reports of FMCG companies I reviewed, collaboration with various stakeholders is mentioned multiple times. Especially now, it is very important for large companies to actively participate in collaborations and joint work with various interested parties. Taking Unilever as an example, they actively partner with global and local NGOs that audit their suppliers, partners, and production sites. All this is necessary to achieve greater and better transparency in the supply chain. Partnership with NGOs implies a constant and timely commitment to providing reports on key sustainability metrics. Also, Unilever, having a fairly high position and authority in its sector, actively participates in its development, for example, participating in the development of international initiatives such as the Roundtable on Sustainable Palm Oil (RSPO), thereby declaring their support and involvement in sustainable production and setting the global standard for other companies. Following this methodology, the company increases loyalty among its consumers, as well as partners and investors. Similarly, companies like Nestle actively participate in initiatives such as the Global Food Safety Initiative (GFSI) – a platform aimed at improving the quality and safety of food products throughout the supply chain. GFSI is engaged in developing standards for food safety, which Nestle applies at its production sites. This includes, among other things, the selection of reliable suppliers and quality control of packaging and raw materials. Compliance with such standards allows Nestle to strengthen its reputation as a sustainable and responsible company. Meanwhile, Coca-Cola actively participates in a coalition with the Ellen MacArthur Foundation, which advocates a circular economy. By 2025, Coca-Cola plans to develop fully recyclable packaging and is constantly working to reduce the amount of packaging materials and waste, as well as to reduce the overall volume of plastic use thanks to recycling.

Participating in the Ellen MacArthur Foundation, the company raises consumer awareness by participating in various conferences and other educational programs within this initiative. The company also tries to spread the idea among its consumers about responsible consumption and the importance of collecting plastic and its further recycling. Another major FMCG company actively participates on the platform Supplier Ethical Data Exchange (Sedex) – Procter & Gamble. This organization deals with issues of responsibility in trade, working conditions, safety, and ethical trade. P&G uses this platform precisely to check its suppliers for integrity in this matter, convenient monitoring of its suppliers for compliance with global standards allows achieving greater transparency in its supply chain, which of course increases the level of trust among its consumers as a sustainable and socially responsible company. This platform also helps the company fight potential risks in its business, such as human rights violations, environmental violations, and social problems. Also, on the example of the H&M Group, we can see active participation in environmental issues. The company joined the Sustainable Apparel Coalition (SAC), which unites a large number of brands involved in the development and standardization of sustainable initiatives. H&M Group uses tools developed by SAC to assess the impact of the entire supply chain on the environment, from design to disposal. The company also frequently conducts audits of its suppliers to promptly detect social or environmental violations. And for greater awareness of its employees, it regularly organizes training sessions for its staff on sustainability topics. Also, at the stage of developing its products, the company tries to adhere to environmental norms, using recycled materials that reduce the negative impact on the environment.

So, in this part of the practical work, the **first question** "What factors influence the formation of a sustainable supply chain and which of them are of priority importance?" was addressed. As the study of ESG reports of companies showed, the most important factor for companies is the choice of partners, as this affects the entire subsequent supply chain. But not only the right choice of these suppliers is important, but also their constant monitoring and control. Large companies are particularly concerned about the sustainability of their supply chain, as they primarily set standards for smaller companies, and for them the company's image is important, as the main impetus for sustainability comes from consumer concerns as well. Supplier monitoring is the second highest priority factor, as it is equally important not only to choose a reliable partner but also to monitor these suppliers throughout the term of their cooperation. Studying reports, it can be concluded that most companies prefer to choose local suppliers. This has benefits for both parties, for example, for a large company, choosing a local supplier also affects the quality of the supply chain not only in terms of sustainability but also in terms of concentrating its resources in one place. For the selected regions, this is a good economic support due to the creation of more jobs and maintaining good working conditions. Companies also pay great attention to audits of the

selected companies for signing contracts. Risk assessment should be carried out at the early stages of working with a supplier to prevent further problems. Supplier auditing represents ongoing control of compliance with social and environmental standards, detection of violations, quality control of processing operations, and continuous verification of suppliers. Also, quite often practice has been the verification of their suppliers for compliance with certifications, for example, certifications of the ISO format are quite well known in Russia. Also, companies, understanding the importance that all changes start from within the company, have increasingly been conducting various training within the company, as well as other open conferences. Moreover, many large companies participate in various platforms, are members of sustainable development alliances, thereby setting the quality standard for less massive companies. As the research of reports shows, the exchange of information has become a fast-growing sector, as compared to 2021, in 2022 companies began to join such associations more often.

Having identified the most prevalent factors in the FMCG sector, a proposition can be formulated, which I will then observe by conducting interviews with sustainability experts and representatives of FMCG companies. The proposition is as follows: "Are the identified ESG factors applicable and significant to the Russian FMCG sector?". The importance of this proposition lies in the fact that it incorporates analyzed material and aims to determine the applicability and significance of the identified factors in Russian FMCG companies. The Russian FMCG sector differs significantly from foreign counterparts and has its own specific features. Business conditions, consumer preferences, and the regulatory environment in Russia are quite different from those observed in other countries. The research results may contribute to the development of sustainable development strategies tailored to Russian conditions.

To confirm that the sustainability of supply chains and the factors influencing them differ between Russia and other countries, let's refer to Figure 10 which represents the supply chain of large international FMCG companies and shows which stages of this supply chain are influenced by sustainability factors and practices.

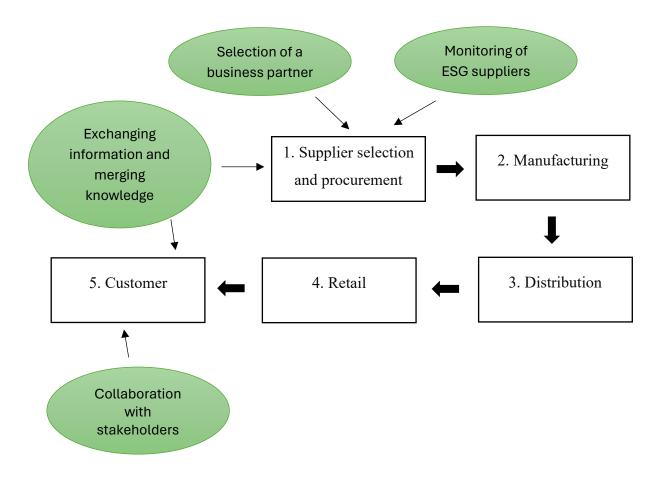


Figure 10. International supply chain with sustainable factors influencing it.

In the "supplier selection and procurement' stage of a sustainable supply chain, especially in regions like Europe where the sustainability agenda is well-developed, FMCG companies are adopting an array of practices aimed at enhancing their environmental, social, and governance (ESG) commitments. These practices not only help in maintaining the company's reputation but also align with stringent legislative requirements, which together result in better product quality, reduced risks, and an enhanced competitive edge.

One crucial practice is the thorough **selection of business partners**. FMCG companies in Europe, for instance, carefully choose their suppliers based on harsh standards of sustainability. This includes detailed evaluations of potential suppliers' environmental policies, ethical management practices and social responsibility initiatives. Companies might ask from their suppliers to adhere to international standards such as the Global Reporting Initiative (GRI) or follow practices that reduce water usage or carbon emissions. Such rigorous diligence is essential not only for maintaining the company's reputation but also for ensuring compliance with the EU's comprehensive sustainability regulations. The consequence of this selection process is the

improvement of overall quality of the product, a decrease in the risk of reputational damage and the assurance that the products supplied are sustainably sourced. Also a crucial factor while choosing a partner for your company is supporting local farmers and small industries, which is very important for large companies because by doing so they develop business in the regions, improve working conditions and open more jobs with a high level of labor.

Another important factor is the ongoing **monitoring of ESG performance of suppliers**. This involves continuous control and estimation of how well suppliers adhere to established sustainability standards. The reliable reporting system that many companies are implementing uses advanced technology to track any changes in the ESG field. This might include third-party reviews , regular sustainability audits and the use indices of sustainability performance. Practices like this are very important for supporting transparent work across the supply chain and maintaining high standards of sustainability. The outcome strengthened trust between the company and its customers and also enhanced overall sustainability of the supply chain, as well as other stakeholders who esteem corporate responsibility.

At the innovation and product development phase, **the sharing of information** and expertise with partners and customers is important for FMCG companies which goal is to integrate sustainable practices into their products and processes. These companies always make seminars, host joint research projects, or establish innovation labs where specialists from different spheres unite to overcome sustainability challenges. For example, in order to minimize environmental harm, FMCG companies can start collaborating with packaging suppliers to develop new recyclable or biodegradable packaging materials.

These practices are essential as they not only promote a sustainability practices within the company but also throughout its entire supply chain and among its customers. By proactively communicating with stakeholders and exchanging insights, FMCG companies can harness collective knowledge and resources to implement substantial changes. These changes are vital to satisfy growing regulatory requirements and consumer demands for sustainable products and practices. In the long run, these strategies foster a more adaptable business model that can effectively respond to evolving environmental and market dynamics, ensuring long-term viability and a leadership position in sustainability.

An equally important and often mentioned factor was **the integration of clean technologies** into production processes is also a widespread practice among forward-thinking FMCG companies. Companies are investing in advanced manufacturing technologies that significantly reduce environmental impact. These may include emissions-reducing technologies, waste minimization processes, and sustainable packaging solutions. For example, a leading beverage company might employ advanced water recycling technologies to minimize water waste

and significantly reduce its environmental footprint. Additionally, many companies are adopting manufacturing processes that reduce energy consumption and lower greenhouse gas emissions, aligning their operations with global sustainability goals.

Moreover, the **shift towards renewable energy sources** in manufacturing facilities is becoming increasingly common. This move not only helps in reducing carbon footprints but also aligns with global shifts towards sustainable energy consumption. Companies are installing solar panels, investing in wind energy, and sometimes using bioenergy to power their operations. This significantly cuts down on their reliance on fossil fuels and enhances their energy efficiency. For instance, a prominent snacks manufacturer might power its production lines using solar energy, which not only reduces costs over the long term but also demonstrates a commitment to renewable energy.

At the "manufacturing stage", implementing product redesigns to incorporate sustainable practices represents a pivotal shift in how companies approach production and product development. This initiative primarily focuses on minimizing environmental impact and enhancing resource use efficiency, which aligns with broader global sustainability goals. One notable practice in the realm of sustainable manufacturing is the redesign of products to use fewer materials or switch to materials that are more sustainable and easier to recycle. For example, a beverage company might redesign its plastic bottles to be lighter. This not only uses less plastic but also reduces shipping weight and, consequently, transportation emissions. Similarly, an electronics company might redesign its devices to be easily disassembled, facilitating recycling and reducing electronic waste. Implementing these redesigns at the manufacturing stage is crucial for several reasons. Firstly, it directly contributes to resource conservation by reducing material usage, which lessens the need for raw material extraction, typically involving significant environmental disruption and energy consumption. Secondly, utilizing materials that are biodegradable or easier to recycle helps in minimizing the waste footprint of products. When products are designed to be more sustainable, they are more likely to be recycled at the end of their lifecycle, thus preventing waste from ending up in landfills.

Initially, redesigning products for sustainability might seem costly, but in the long run, it can lead to substantial cost savings. These savings may come from using less expensive recycled materials, reducing waste management costs, or avoiding fees associated with non-compliance with environmental regulations. Moreover, today's consumers are increasingly environmentally conscious, often making purchasing decisions based on the sustainability credentials of a product. Companies that proactively redesign products to be more sustainable can enhance their brand reputation and attract a larger customer base, which is crucial for long-term profitability. Many regions are implementing stricter environmental regulations that require products to meet certain

sustainability standards. By redesigning products at the manufacturing stage, companies ensure compliance and avoid potential penalties or legal issues. Additionally, companies that lead in sustainable product design often set industry standards and pave the way for new innovations. This leadership position can provide a competitive advantage in the marketplace, positioning the company as a leader in sustainability.

The "distribution" or "logistics" stage of the supply chain is remarkably advanced in terms of environmental considerations. All companies from observer ESG-reports are making significant strides to ensure that their logistics operations contribute to their sustainability goals. One of the key strategies is the use of alternative energy sources for transportation. Many companies have begun replacing their fleets with vehicles powered by cleaner alternatives, such as electric or hydrogen fuel cells. For instance, a large retail chain in Europe might implement a fleet of electric delivery trucks for urban areas where charging infrastructure is more readily available. This switch not only reduces the carbon footprint associated with diesel or gasolinepowered vehicles but also significantly cuts down on air pollution. Additionally, the optimization of delivery routes plays a crucial role in reducing overall CO2 emissions. Advanced logistics software is increasingly used to plan the most efficient routes, minimizing the distance traveled and thereby reducing fuel consumption. For example, a logistics company may use sophisticated GPS tracking and real-time traffic analysis to update routes dynamically, avoiding congested areas and thus saving fuel. This technology not only helps in reducing environmental impact but also enhances the efficiency of deliveries, ensuring products are transported in the quickest, most energy-efficient manner possible. Another sustainable practice in logistics is the consolidation of shipments. By ensuring that vehicles are fully loaded before dispatch, companies can reduce the number of trips required to transport the same amount of goods. This practice, often enhanced by collaboration between different companies through shared logistics platforms, maximizes the use of transport capacity and decreases the total emissions per product delivered. Moreover, in response to increasing regulatory pressures and consumer demand for sustainability, companies are also investing in sustainable packaging solutions for transportation. This involves using recycled materials for packaging and reducing the overall amount of packaging used. For example, a manufacturer might opt for lighter, stronger materials that require less volume and weight, thereby optimizing the transportation process further.

The "retail" stage now is increasingly integrating eco-friendly practices into their operations to meet both consumer expectations and regulatory requirements. One prominent strategy is the implementation of **loyalty programs that promote eco-friendly products**. These programs are designed to encourage consumers to make sustainable choices by offering rewards for purchasing environmentally friendly products. For example, a supermarket chain might offer

points for buying organic or locally sourced products, which can be redeemed for discounts on future purchases or donated to environmental causes. This not only incentivizes customers to choose greener products but also enhances brand loyalty and customer engagement. Another key initiative is the **reduction of waste**, particularly plastic waste, in retail environments. Many retailers have started implementing policies to eliminate single-use plastics and replace them with biodegradable or recyclable alternatives. For example, a clothing retailer may eliminate plastic bags, offering customers reusable fabric bags instead. Additionally, some grocery stores have introduced zero-waste zones where customers can buy bulk products without packaging, using their own containers. Moreover, **enhancing the supply chain transparency** is a crucial step taken by many retailers. They provide detailed information about the origins and manufacturing processes of the products they sell. This transparency allows consumers to make informed decisions based on the sustainability of products. For instance, a retailer might use QR codes on product labels that customers can scan to learn about the product's lifecycle, including information on sourcing, manufacturing, and the company's social responsibility practices.

The "customer" stage of the supply chain is significantly evolving to become more sustainable. This evolution is largely due to proactive collaboration with stakeholders and an exchange of information and merging of knowledge, which both play crucial roles in enhancing sustainability practices. These approaches are integral to the marketing, distribution, and product development phases.

During the marketing and distribution phase, businesses engage in robust **interactions with various stakeholders**, including customers, non-governmental organizations (NGOs), regulators, and the general public. This collaboration aims to develop and implement sustainable practices that are widely beneficial. For instance, a company might partner with an environmental NGO to create a campaign that educates consumers about the benefits of sustainable products. Such partnerships can help to deepen trust and transparency with consumers, enhancing the brand's image and reputation.

An example of this is a large supermarket chain collaborating with local environmental groups to promote local and organic food products. This initiative not only supports local farmers but also reduces carbon footprints associated with long-distance transportation of goods, thereby enhancing the sustainability of the supply chain. The result of such collaborations is often increased customer loyalty, market expansion, and an improved social impact of the company's activities, as customers feel more connected to the brand's values and more likely to support its objectives. Also equally important for European countries is constant communication with their customers, which is necessary for continuous improvement of both the product and production.

At the product development and innovation stage, the **exchange of information and knowledge with suppliers** and partners is vital. This collaborative work focuses on integrating cutting-edge sustainable practices into products and processes. Companies often organize workshops, joint research initiatives, or innovation labs where experts from various fields come together to solve sustainability challenges. For example, a fashion retailer might work with fabric suppliers to develop new eco-friendly fabrics that reduce water usage and chemical dyes in the production process. These practices are critical as they not only foster a culture of sustainability within companies but also across their entire supply chain and customer base. By actively engaging with stakeholders and sharing knowledge, companies can leverage collective expertise and resources to drive more significant changes, which are necessary to meet the increasing regulatory demands and consumer expectations for sustainable products and practices. Ultimately, these strategies lead to a more resilient business model that can adapt to changing environmental and market conditions, securing long-term success and leadership in sustainability.

Analyzing the text that describes the structure of sustainable supply chains in Europe, Asia, and America, which is distinct from those in Russia, it's evident that sustainable supply chain management is highly advanced overseas. These regions have adopted a comprehensive approach, integrating sustainability into every stage, from supplier selection and procurement to customer engagement and product innovation.

In developed countries, particularly in Europe, sustainable supply chains are not just a choice but a strategic necessity. Companies in these regions use a complete set of practices aimed at enhancing their Environmental, Social, and Governance (ESG) commitments, which are crucial for maintaining their reputations and complying with strict legislative standards. This thorough approach results in improved product quality, reduced risks, and a competitive edge in the global market. In Europe, FMCG companies place significant emphasis on selecting business partners who meet their sustainability standards. This involves rigorous assessments of potential suppliers' environmental policies, social responsibility initiatives, and ethical management practices. Compliance with international standards like the Global Reporting Initiative (GRI) is often required. This careful selection process ensures that products are sustainably sourced, which enhances the overall product quality and significantly reduces reputational risks. The text underscores the continuous monitoring of ESG performance of suppliers as a standard practice. Companies utilize advanced software and robust reporting systems to ensure transparency and uphold high sustainability standards throughout the supply chain. This not only enhances the sustainability of the supply chain but also strengthens trust among customers and other stakeholders. The commitment to sustainability is also evident in the product development and innovation phase. Companies frequently collaborate with suppliers and partners to integrate

sustainable practices into their products. Workshops, joint research projects, and innovation labs are common, fostering a culture of sustainability that permeates the entire supply chain and reaches the customer base. Furthermore, the integration of clean technologies and the shift towards renewable energy sources in manufacturing highlight the advanced stage of sustainable practices in these regions. Companies invest in technologies that reduce environmental impact, such as emissions-reducing technologies and sustainable packaging solutions. The use of solar, wind, and bioenergy to power operations illustrates a profound commitment to reducing carbon footprints and aligning with global sustainability goals.

In conclusion, the development of sustainable supply chains in countries with a welldeveloped sustainability agenda is impressively advanced. These regions demonstrate a proactive approach in integrating sustainability at every stage of the supply chain, driven by both regulatory frameworks and a strong ethical commitment to environmental stewardship and social responsibility. This not only meets increasing regulatory demands and consumer expectations but also positions these companies for long-term success and leadership in sustainability.

#### 2.3 Analysis of SSC Practices in the Russian FMCG Sector

1. To answer the second research question of my study "What are the key SSC practices adopted by organizations in the FMCG sector?", I will employ the method of semistructured interviews with experts in the field of sustainable supply chains, as well as with representatives of Russian FMCG companies that are interested in sustainability. The selection of company representatives was based on the nature of their companies' activities and the positions these representatives hold, to gather more useful information about their companies' supply chains.

Accordingly, all the companies involved in the interviews operate exclusively in the FMCG sector. Additionally, the fifth interview was conducted with an expert in sustainable supply chains who is not affiliated with any specific company. In total, 4 companies participate in the interview, two of which have a rather large position in the Russian market and are also engaged in activities abroad. The other two companies are smaller, but also at their level interested in sustainability. It was important to look at companies of this format in order to see the differences in approaches to building sustainable supply chains at different levels.

#### Table 4. Sample overview.

Company type	Company size	Position of interviewee
Russian, FMCG	Medium	Logistics director

Russian, FMCG	Medium	Sustainability manager
Russian, FMCG	Large	Chief supply chain officer
Russian, FMCG	Large	Head of sustainability

All interviews were conducted on an anonymous basis. There are several key reasons for this. Firstly, some company representatives wished to remain anonymous, as the interviews might disclose confidential company information. Since some companies are private and do not disclose their information publicly, anonymizing the interviewees simplifies the interview process. The second reason is to allow representatives and experts to freely express their personal opinions about the company's activities and sustainability in Russia as a whole. By not mentioning their names and specific experiences, the interviewees have more freedom for reflection. Based on the five interviews conducted, their transcription, and the collection of qualitative data, topics were identified that are of utmost importance in the context of my research focus.

Topics	Codes	
Definition of Sustainable Supply Chain in	Environmental, social, and economic aspects	
FMCG Sector	Reducing resource consumption	
	Using renewable materials	
	Optimizing costs	
	Fair and equal working conditions	
	Respecting workers' rights	
	Long-term development	
	Collaboration with international suppliers	
Factors Impacting Sustainability in FMCG	Compliance with environmental regulations	
Supply Chains	Social standards	
	Economic challenges	
	Minimizing waste	
	Reusing recycled materials	
	Decent and equal working conditions	
	Transparency and ethics	
	Building trust	
Sustainable Supply Chain Practices	Recycled and biodegradable packaging	
Implemented	materials	
	Reducing waste	
	Optimizing logistics routes	
	Advanced vehicle management systems	
	Reducing CO2 emissions	
	Regular audits	
	Supplier certifications	

Table 5. Topics and codes identified through open-coding procedure.

	High environmental and social standards
Challenges in Implementing Sustainable	High initial costs
Practices	Eco-friendly packaging materials
	Investment in new equipment and technology
	Engaging employees
	Lack of experts
	Resistance to change
	Regular training and seminars
	Monitoring suppliers
	Auditing international suppliers
Collaboration with Suppliers and Stakeholders	Regular audits
	Training programs on sustainability
	Online conferences
	Best practices sharing
	Customer feedback
	Improving worker conditions
	Reducing carbon footprint
	Anonymous employee surveys
	Measuring effectiveness

### How Companies Define the Significance of a Sustainable Supply Chain

In Russian companies engaged in sustainable development, the ESG agenda embodies a comprehensive integration that brings together the most critical aspects of sustainability. This holistic approach encompasses a wide range of practices that a company can implement in its operations: "*In the context of the FMCG sector, this means integrating environmental, social, and of course, economic aspects that impact the entire supply chain. For us, this is critically important as we directly work with food products*". Although the ESG agenda in Russia is not as advanced as in other countries, more and more companies are striving to recognize its importance. Considering these diverse aspects helps align the company's operations with global sustainability trends and improve its long-term viability and competitiveness.

Most companies primarily highlight the environmental aspect of sustainability, increasingly focusing on the environment: "*When it comes to environmental sustainability, this includes, of course, reducing resource consumption and using renewable materials, which is very important to us*". By implementing measures to reduce resource use and incorporate renewable materials, they not only help protect the environment but also align with global environmental standards. This demonstrates that companies in the Russian FMCG sector are taking active steps to reduce their environmental impact, which also positively affects the company's image.

Another very important aspect is social sustainability. Companies are concerned with both the internal aspect of their team and the external aspect, namely, consumers: "*We are noticing* 

growing interest in sustainability, like increased demand for eco-friendly products, which led us to switch to biodegradable packaging materials. Surveys showed that 17% of our customers are willing to pay more for sustainably produced goods, which was a significant revelation for us". In all the companies considered, metrics are used to assess consumer loyalty to the brand. Additionally, company representatives noted that they understand the importance of maintaining employee well-being: "When we talk about social sustainability, for us, it means providing fair and equitable working conditions and, of course, ensuring the rights of our employees". Ensuring fair labor practices and upholding employee rights are seen as fundamental to the company's longterm success. By focusing on social sustainability, these companies demonstrate a commitment to ethical practices and employee welfare, which is integral to their overall sustainability strategy. This reflects a deep understanding that it is essential to pay attention to sustainability not "for the sake of a beautiful picture for consumers, as companies often use sustainability as marketing" but for internal changes within the company, where transparency in reporting is crucial. A fairly large company involved in international supply chains noted the importance of non-financial reporting: "Since our business extends far beyond Russia, our reputation is important to us. We have long implemented GRI standards in our work".

Many Russian companies, despite the unstable political situation, continue to maintain their operations abroad. While there are no legal regulations within the country yet, many neighboring countries require companies to comply with numerous standards. A representative of a company whose supply chain extends beyond Russia noted: "*Overall, this creates opportunities for long-term development and collaboration with international suppliers who also pay attention to our company's sustainability*". This integrated approach, which involves the key aspects of company sustainability, opens up many opportunities for business development and fruitful cooperation with international suppliers. It also attracts investors who value sustainability. By collaborating with like-minded suppliers, Russian FMCG companies can ensure sustainability at all stages of the supply chain, from sourcing raw materials to delivering the final product.

#### What sustainable practices does the company use

Russian FMCG companies understand that to build a sustainable supply chain, they must follow environmental and social standards and be ready to face economic challenges. Minimizing waste and reusing recycled materials are key factors. These actions help companies reduce their negative impact on the environment and meet global environmental standards. For example, one quite large company uses recycled and biodegradable packaging materials, which has significantly reduced waste. This shows the company's commitment to environmental principles and improves its reputation among consumers and partners: *"the main factors for us are compliance with*  environmental regulations, social standards, and addressing economic challenges. We pay particular attention to minimizing waste and reusing recycled materials". To minimize waste companies use recycling systems that allow the use of secondary raw materials in the production process. This reduces waste and decreases the consumption of natural resources. For instance, recycled plastic bottles are used to make new packaging, making the company more eco-friendly. Such practices are becoming more common among Russian FMCG companies aiming for sustainable development.

Companies that focus on these aspects not only help protect the environment but also save on energy costs, which positively affects their financial results.

Social sustainability is also crucial for Russian FMCG companies: "we pay great attention to fair and equal working conditions for our employees and suppliers. It is important for us to maintain transparency and ethics throughout the supply chain. Naturally, this builds trust among our clients and partners". Ensuring fair and equal working conditions for employees and suppliers helps create a sustainable supply chain. Companies strive to maintain transparency and ethics at all stages of the supply chain, which helps build trust among clients and partners. For example, regular audits and inspections of suppliers help the company ensure compliance with social standards. This not only improves working conditions but also strengthens business relationships with partners, ensuring long-term cooperation.

Most companies have also implemented **training and development programs for the employees**, allowing them to improve their skills and qualifications. This not only contributes to employees' professional growth but also enhances the company's productivity. For instance, regular safety and health training helps create safe working conditions, reducing the risk of injuries and illnesses.

Moreover, companies actively promote equality and inclusivity in their workforce. They strive to create a working environment where every employee feels valued and respected. Implementing such programs not only improves employee morale but also attracts talent, ultimately contributing to the company's success. Environmental sustainability in Russian some FMCG companies is achieved through innovative practices, such as using **recycled and biodegradable packaging materials**: *"we have already implemented include recycled and biodegradable packaging materials used in our supply chain. Naturally, this has significantly reduced waste volumes"*. These measures significantly reduce waste volumes, positively impacting the environment and meeting sustainable development requirements. Implementing such practices also enhances the company's competitiveness in the market, as consumers increasingly pay attention to the environmental friendliness of products.

In addition to using eco-friendly materials, some companies have implemented a waste **management system** that allows for more efficient recycling and disposal of waste. This includes on-site waste sorting, installation of recycling stations, and partnerships with waste recycling companies. These measures have significantly reduced the volume of waste sent to landfills and increased the recycling rate. They all also actively participate in environmental initiatives and projects aimed at protecting the environment. For example, they mentioned that they support programs for reforestation and cleaning water bodies, helping to offset the impact of our activities on nature. Participation in such projects not only improves the environmental situation but also strengthens the company's image as a socially responsible business. "Collaboration with suppliers who regularly undergo our audits and inspections is an integral part of our process. If our suppliers have the necessary certification, it significantly simplifies our work. If they do not have such documents, we conduct annual audits of all our suppliers. Most of them adhere to high environmental and social standards without our involvement. However, there are cases when we have to work separately with companies and set our conditions, which they may or may not comply with for various reasons. This is a very important aspect for us". Working with suppliers who meet high environmental and social standards is a key part of a sustainable supply chain. Regular audits and inspections help Russian FMCG companies ensure that suppliers meet established requirements. When suppliers do not have the necessary certification, companies conduct additional audits and set specific conditions for compliance. This collaboration strengthens the entire supply chain's sustainability and supports the company's long-term development. We also focus on building long-term partnerships with suppliers to ensure the supply chain's stability and reliability. This includes joint efforts to improve environmental and social standards, sharing experiences and knowledge, and supporting suppliers in their pursuit of sustainable development. Furthermore, we actively participate in international initiatives and standards, such as the Global Reporting Initiative (GRI), which keeps us ahead in sustainable development and aligns with international requirements. This not only improves our reputation in the global market but also helps attract new partners and investors.

Several companies also highlighted that they **collaborate with local farms** and often even situate their production facilities near clusters of farmers: "*we actively sign contracts with local farmers and producers to supply raw materials for our production lines. For instance, for our dairy product manufacturing, we purchase milk from local farms. This allows us to cut transportation costs and reduce our carbon footprint*". Increasing the share of local suppliers offers numerous benefits. This also strengthens community relationships and can enhance consumer loyalty, as customers tend to value local and environmentally responsible products. For FMCG companies, integrating local suppliers is a strategic move that aligns with sustainability

goals. By reducing transportation distances, companies not only save money but also contribute to a cleaner environment, reflecting their commitment to both economic and environmental sustainability. Utilizing local resources helps reduce greenhouse gas emissions associated with long-haul transportation, thus mitigating climate change impacts. Moreover, sourcing locally can lead to fresher and higher-quality products, which can improve customer satisfaction and brand reputation. Building strong partnerships with local farmers and producers also creates a sense of community and mutual support. It fosters trust and collaboration, which can lead to more resilient supply chains and better crisis management. During times of global supply chain disruptions, having reliable local partners can ensure continuous production and delivery of goods, thus maintaining business stability.

One quite large company mentioned that they implement the principles of a circular economy which is aim to minimize waste and maximize the reuse of resources. Implementing such models helps companies not only reduce waste volumes but also create new business opportunities. Products made from recycled materials and reusable packaging attract eco-conscious consumers, which in turn strengthens the company's market position and competitiveness: "our company is integrating circular economy principles into our production processes and business models. For example, we have developed a line of packaging made from recycled materials and released products in reusable packaging, which our customers can return for reuse. This allows us to minimize waste and continuously use materials, reducing the negative impact on the environment". For Russian FMCG companies, adopting circular economy practices is a forward-thinking strategy that meets the growing demand for sustainable products. This approach ensures efficient resource use and enhances the company's reputation as an innovator in sustainability. By focusing on sustainability, companies can tap into new markets and foster loyalty among consumers who prioritize environmental responsibility. Implementing circular economy principles also drives innovation and efficiency within the company. By designing products for reuse and recycling, companies can reduce material costs and create more durable and sustainable goods. This not only lowers production expenses but also reduces the environmental footprint of the company. Circular business models encourage companies to rethink their processes and find creative solutions to sustainability challenges, leading to a more resilient and adaptable business. Furthermore, the shift towards a circular economy can stimulate broader industry changes and inspire other businesses to follow suit. By demonstrating the viability and benefits of sustainable practices, companies can set a positive example and contribute to a larger movement towards sustainability in the economy. This can lead to increased collaboration and partnerships within the industry, promoting shared goals and collective progress towards environmental sustainability. Adopting circular economy practices also aligns with global sustainability trends and regulatory pressures. As governments

and international organizations increasingly emphasize the importance of sustainable development, companies that proactively implement these practices can stay ahead of regulatory requirements and avoid potential fines or sanctions. This proactive approach not only ensures compliance but also positions the company as a leader in sustainability, attracting investors and stakeholders who prioritize environmental responsibility.

In several interviews, it was mentioned that sustainability in supply chains was largely implemented for **brand reputation and customer loyalty**: "at the very beginning of our shifting toward sustainability building a positive public image and reputation was a primary driver for adopting sustainable supply chains. This is especially true for consumer brands that can promote their sustainability efforts to gain consumer trust and loyalty". This quotation highlights a critical aspect of why some companies prioritize sustainability: the influence of public image and brand reputation. For companies that engage directly with consumers, promoting sustainable practices can be a powerful tool for building trust and loyalty. Consumers are increasingly conscious of the environmental and social impacts of their purchases, and they are more likely to support brands that align with their values. This makes sustainability a valuable component of a company's marketing strategy.

However, the motivation to adopt sustainable supply chains can differ significantly depending on the market focus. Consumer-facing companies, especially those in the FMCG sector, have a direct line to end users who are concerned about the ethical and environmental implications of their purchases. This creates a strong incentive for these companies to adopt and advertise sustainable practices, enhancing their brand image and differentiating themselves from competitors.

In contrast, companies that primarily operate in the B2B market may not feel the same pressure from end consumers. Their focus is more on efficiency, cost-effectiveness, and meeting the specific needs of business clients. As a result, the drive to develop sustainable supply chains might be less pronounced. These companies might adopt sustainable practices if they align with their business objectives or if there is significant demand from their business clients, but the primary motivation is often less about public image and more about operational benefits.

Ultimately, while the reputational benefits of sustainability are clear for consumer-facing companies, it is important to recognize that the incentives for adopting sustainable practices can vary widely across different sectors. For those in direct contact with environmentally conscious consumers, sustainability becomes a key part of their brand identity. For others, it may be driven more by regulatory requirements, cost savings, or client demands. Understanding these nuances is crucial for effectively promoting and implementing sustainable supply chain practices across diverse industries.

In today's business environment, especially in the FMCG sector, where the market is saturated with various brands, it is crucial to have a unique **competitive advantage**. And some interviews confirmed it: *"developing sustainable practices gives us a significant competitive edge in the market"*. This quote highlights that implementing sustainable practices indeed helps a company stand out in a competitive market. Sustainability is becoming such an advantage because consumers are increasingly aware of the importance of environmental and social responsibility. Companies that adopt sustainable practices not only meet consumer expectations but also build a reputation as responsible and forward-thinking businesses. This helps attract new customers and retain existing ones.

Furthermore, the emphasis on sustainability demonstrates a company's commitment to long-term success and resilience. It indicates that the company is not only focused on immediate profits but also on the future impact of its operations. This long-term vision can attract investors and partners who are interested in supporting businesses with sustainable growth plans. Additionally, being a leader in sustainability can improve employee morale and attract talent who want to work for a company that aligns with their values. Competition in the market drives companies to continuously improve and innovate. By developing sustainable practices, a company can gain a competitive edge over others who may not prioritize sustainability. This edge can be crucial in markets where consumers are highly conscious of environmental and social issues. Companies that lead in sustainability are often perceived as more trustworthy and reliable, which can enhance brand loyalty and market share. Moreover, sustainable practices can lead to cost savings and operational efficiencies. For example, reducing energy consumption and waste can lower production costs, while sustainable sourcing can create more stable and reliable supply chains. These efficiencies not only improve the bottom line but also make the company more competitive.

"By prioritizing sustainability, we can stand out from other companies and attract more customers. It also opens up new opportunities for growth and access to international markets. For example, 'There is a lot of competition in the market, and companies want to distinguish themselves and show their competitiveness. By taking the initiative in sustainability, we show our resilience and commitment to responsible practices". This quote reflects the strategic vision of a company that seeks to use sustainability as a means to stand out in a competitive market. Prioritizing sustainable practices allows a company to attract customers who value environmental and social responsibility. This is increasingly important as consumers become more informed and selective about the brands they support. By showcasing their commitment to sustainability, companies can enhance their brand image and differentiate themselves from competitors. In addition to attracting customers, focusing on sustainability opens up new growth opportunities and access to international markets. Many global markets have stringent sustainability requirements, and companies that meet these standards can gain a competitive advantage. This is particularly relevant for companies looking to expand internationally. By adopting sustainable practices, they can comply with international regulations and appeal to a broader customer base.

Competition in the market is fierce, and companies are constantly seeking ways to differentiate themselves. Taking the initiative in sustainability not only demonstrates resilience but also a commitment to responsible practices. This can be a powerful marketing tool, showcasing the company's dedication to making a positive impact on society and the environment. Such a commitment can resonate strongly with consumers and business partners who prioritize sustainability. Moreover, prioritizing sustainability can enhance operational efficiencies and reduce costs. For example, sustainable sourcing practices can lead to more reliable and ethical supply chains, while energy-efficient technologies can lower operational expenses. These efficiencies can improve the company's overall competitiveness and profitability. Building a reputation for sustainability can also foster long-term relationships with customers and partners. Companies that demonstrate a commitment to sustainable practices are more likely to attract and retain business from organizations that value stability and reliability. This can lead to long-term contracts and consistent orders, providing a stable revenue stream and fostering strong business partnerships.

It's also important to understand that when operating in Russia, there are numerous factors that can negatively impact the development of a sustainable supply chain. These factors range from economic volatility, regulatory changes, and logistical challenges to broader geopolitical tensions that can disrupt market stability. Additionally, environmental considerations are increasingly vital, as businesses must adapt to new sustainability standards to remain competitive globally. Understanding and mitigating these risks is crucial for building a robust and resilient supply chain in the Russian market. This involves not only adapting to current conditions but also anticipating future changes in the economic and political landscape.

The lack of unified standards significantly hampers the development of sustainable supply chains. Firms find it challenging to identify, prioritize, and effectively communicate appropriate sustainability criteria to their suppliers. An FMCG company spokesperson stated: *"currently, we lack a universally accessible tool for independently evaluating suppliers, which opens the door for inconsistent treatment across the board"*. These obstacles lead to drawn-out and costly processes that frequently delay the progress of sustainable practices. Furthermore, the

absence of common standards can result in uneven implementation of sustainability efforts among different suppliers.

Suppliers may be unaware of the necessary sustainability standards, resulting in potential non-compliance and the rejection of their products. This uncertainty also adds confusion among suppliers, making it difficult for them to adopt sustainable methods in their own operations. The representative further remarked: *"we need to establish some standard practices within our company because, without them, it's very challenging for suppliers to navigate the varying demands from different companies"*. As a result, suppliers might deprioritize sustainability, undermining their commitment to developing sustainable supply chains, which ultimately obstructs the achievement of corporate sustainability goals.

Adopting universal standards could ease compliance for companies and their suppliers, streamline the development of sustainable supply chains, and ensure consistency in practices. It is promising to see that companies recognize the challenges of standardization and are collaborating within their sectors to create common guidelines. However, the entity responsible for implementing these standards must command sufficient authority to ensure adherence by principal companies.

Moreover, there is a noticeable lack of digital solutions to support sustainable supply chain initiatives, with much of the verification and accreditation still being carried out manually—a method that requires substantial time and effort. Advanced technologies, such as **blockchain**, **have been employed in more developed markets** to improve transparency and traceability within supply chains, facilitating secure and efficient data exchanges. For instance, IBM Food Trust leverages blockchain technology to aid food companies in tracing the origins of their products and ensuring food safety. Tools like Trucost are valuable for monitoring and managing the environmental impacts of supply chain operations.

The interviewee comments highlight the vital necessity for standardized tools and procedures within organizations to manage relationships with suppliers more effectively. Emphasizing the lack of these tools sheds light on the significant challenges businesses face in maintaining consistency and accountability throughout their supply chains. The call to establish uniform practices within the company is particularly insightful as it underscores the importance of clarity and consistency in helping suppliers meet varying demands from different companies. This initiative is not only about compliance; it is about fostering a culture of sustainability that can permeate all levels of the supply chain.

Developing standard practices would serve multiple purposes: it would simplify the process for suppliers to adhere to sustainability standards and help align the operations of various suppliers with broader environmental objectives. This alignment is crucial as it directly impacts

the ability to achieve global sustainability goals while also enhancing operational efficiency and ensuring compliance. The drive towards standardization, as discussed in the commentary, is essential for widespread adoption of sustainability across industries. It reflects a proactive and strategic approach to corporate responsibility, indicating a deep understanding of the complexities involved in integrating sustainable practices across diverse business operations.

Furthermore, the introduction of digital tools and technologies like blockchain can revolutionize supply chain management by enhancing data integrity, providing transparency, and improving the traceability of goods. These advancements are critical as they offer practical solutions to the manual processes that currently dominate the industry, which are not only laborintensive but also prone to errors. By implementing such technologies, companies can achieve greater efficiency and accuracy in their sustainability efforts, which in turn fosters a more resilient and responsible supply chain ecosystem. This technological shift is indicative of a broader trend towards digital transformation in supply chain management, reflecting an adaptative response to contemporary challenges and an investment in future capabilities.

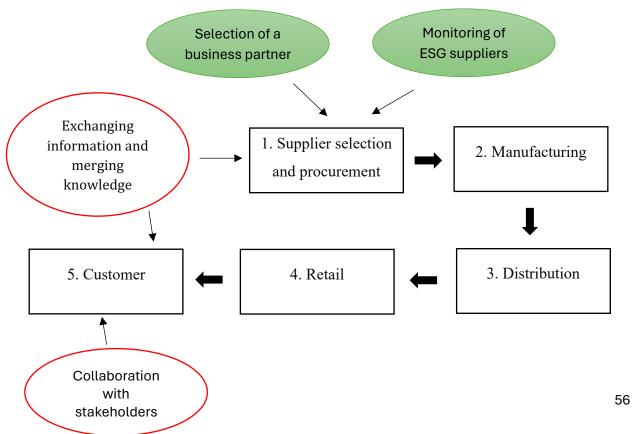
The Russian market has been severely affected by political instability and sanctions, which are the primary external influences hindering the advancement of sustainable supply chain initiatives. It is widely recognized among experts that the repercussions of these disruptions are profound. Sanctions have led to a downturn in economic activities, compelling companies to prioritize immediate survival over the enhancement of sustainable supply chains. A spokesperson from an FMCG company remarked: "Undoubtedly, our procurement team has had to pivot towards sourcing alternative imports and identifying new partners, which has considerably slowed our progress in sustainable supply chain enhancements". There is a common agreement among stakeholders that pursuits of more sustainable supply chains have taken a backseat. Another interviewee mentioned: "primarily, the emphasis has shifted towards maintaining operations rather than advancing our previous sustainability efforts." The urgency to adapt supply chains swiftly to meet legal standards and secure new, compliant suppliers has rendered the prospect of deeper collaborative efforts towards sustainability impractical. The statement by the interviewees encapsulates a critical challenge faced by companies operating under the strain of political and economic disruptions. The shift in focus from enhancing sustainable practices to simply surviving underlines the severe impact of external pressures on strategic business operations. This shift is significant because it not only stalls progress in sustainability but also forces businesses to realign their priorities and resources away from long-term environmental goals towards short-term operational continuity. The transition to finding new suppliers and alternatives to imports is not merely a logistical challenge; it represents a substantial diversion of resources that could otherwise be invested in improving sustainability. This reallocation highlights a reactive rather than proactive

approach to supply chain management, dictated by immediate needs rather than strategic sustainability objectives.

Furthermore, the comments from the interviewees reflect a broader industry sentiment that sustainability is no longer a priority in times of crisis. This perspective is particularly troubling as it suggests a setback in the collective efforts aimed at enhancing environmental responsibility within supply chains. The necessity to quickly reconfigure supply structures in response to sanctions and legal constraints underscores the fragile nature of sustainability initiatives that lack robust support systems and flexible strategies capable of withstanding such disruptions. Moreover, The ability to collaborate and share resources could potentially buffer companies against the impacts of such external shocks and provide a framework for sustaining momentum towards environmental goals even during periods of instability.

This scenario underscores the importance of resilience and adaptability in the design of supply chains. Companies need to develop strategies that not only respond to immediate crises but also sustain core commitments to sustainability. Investing in robust partnerships, flexible sourcing strategies, and technological innovations can provide the agility needed to navigate both current and future challenges. Such strategic foresight could enable businesses to balance survival with sustainable development, thereby securing both operational viability and long-term environmental integrity.

Now, after analyzing the interviews, we can conclude how similar or different the sustainability practices are in Russian supply chains compared to international ones. Let's refer to Figure 11.



#### Figure 11. Russian supply chain with sustainable factors influencing it.

One of the main similarities highlighted is the selection of business partners and the monitoring of ESG compliance among suppliers. All companies mentioned that they regularly conduct audits of their suppliers to ensure adherence to ESG standards.

These audits are crucial as they help maintain a consistent level of compliance with sustainability standards across the supply chain. Companies are vigilant in checking that their suppliers meet specific environmental, social, and governance criteria which align with their corporate sustainability goals. This practice is not only prevalent in international contexts but also increasingly adopted by Russian companies as they seek to align more closely with global standards.

In Russia, companies often adhere to several key ESG standards when evaluating their suppliers. These standards typically include measures related to environmental protection, such as waste management and emission controls (optimizing routes), social criteria like labor rights and working conditions, and governance aspects such as corporate ethics and transparency. Russian companies might also ensure that their suppliers comply with local environmental regulations, such as those pertaining to pollution and resource usage, as well as international standards like ISO 14001, which focuses on effective environmental management systems.

This approach to selecting business partners and monitoring their compliance helps companies mitigate risks associated with non-compliance and enhance their overall sustainability. By ensuring that their suppliers uphold high ESG standards, both Russian and international companies can maintain a more sustainable supply chain, which not only benefits their business operations but also contributes positively to their corporate reputation and stakeholder trust. This alignment with rigorous sustainability standards is indicative of a broader trend towards more responsible and sustainable business practices globally.

Among the key factors identified, practices such as "collaboration with stakeholders" and "exchanging information and merging knowledge" are not consistently used in Russian companies. Only two large companies that are active in international markets mentioned these practices. They frequently engage with stakeholders in various ways, such as through regular stakeholder meetings to discuss sustainability goals, collaborative projects aimed at improving environmental impacts, or through partnerships with local communities to support social initiatives. In contrast, mid-level companies in Russia often do not engage in these practices, and there are several reasons for this. Firstly, there is a lack of awareness about the benefits of such engagement. Many mid-level companies might not fully understand how working closely with stakeholders and openly sharing information can lead to improved sustainability outcomes and potentially benefit their operations and market image. Secondly, there is often a perceived cost barrier. Engaging with stakeholders and setting up systems for sharing information can be seen as costly, and without clear immediate benefits, these costs can deter companies from implementing such practices. Additionally, there might be a lack of infrastructure and expertise to effectively manage these processes. Mid-level companies may not have the necessary tools or trained personnel to engage stakeholders effectively or to manage the complexities of merging information for innovation but all interviewees mentioned that they train their staff on sustainable practices as they are implemented in the company. Lastly, the regulatory environment in Russia might not sufficiently encourage or require such practices, unlike in some international settings where there is more pressure from governments and consumers for companies to operate sustainably. These factors combine to create a situation where only the larger, more internationally connected Russian FMCG companies are adopting advanced sustainability practices, while the mid-level companies lag behind due to constraints in awareness, costs, expertise, and regulatory support. This disparity highlights the need for more robust support systems and incentives for sustainability practices within the Russian FMCG sector to bring it closer to global standards.

Also, the interviewed companies mentioned that they leverage important aspects such as minimizing waste and reusing recycled materials, ensuring fair and equal working conditions, implementing training and development programs for employees, and using recycled and biodegradable packaging materials. By minimizing waste and utilizing recycled materials, these companies are not only reducing their environmental impact but also cutting down on costs associated with raw material procurement and waste disposal. This practice is widely recognized globally as essential for sustainable business operations. For instance, an FMCG company might use scrap material from one part of its production process as input for another, or it could repurpose defective products instead of discarding them, thus contributing to a circular economy. Ensuring fair and equal working conditions is another crucial aspect that all the surveyed companies mentioned. This practice aligns with global norms and is often mandated by international labor laws. It involves providing safe working environments, fair wages, and respecting workers' rights, which help in maintaining high morale and productivity among employees. Training and development programs are also a common thread, focusing on enhancing employees' skills and knowledge related to sustainability. This could include training on energyefficient practices, waste reduction techniques, or even broader educational programs about the environmental impacts of various business activities. Such initiatives not only empower employees

but also drive innovation and efficiency within the company. Finally, the use of recycled and biodegradable packaging materials is a direct response to the growing global demand for sustainable products. Companies are increasingly turning to materials that can either be recycled or composted, reducing the volume of waste that ends up in landfills and the pollution associated with traditional packaging materials.

These practices show a strong alignment with international sustainability practices, demonstrating that the companies are not only committed to improving their local environments and communities but are also keen on aligning with global trends and expectations in sustainability. This approach not only enhances their reputations but also strengthens their competitiveness in the global market.

#### **DISCUSSION OF RESULTS**

Making supply chains sustainable has become one of the most important concepts of recent years, which is reinforced by the need to take into account such aspects as environmental, social and economic aspects. The main goal of sustainable supply chains is to achieve such a level of sustainable development that all stakeholders are coordinated among themselves. These include both customers, employees, partners, and the environment itself.

The importance of forming a sustainable supply chain lies in the fact that 80% of the entire business is tied to supply chains and having a huge potential for growth and constant involvement of this element of the business, it is important to create such a holistic approach that will ensure that, while meeting our needs now, we do not jeopardize the well-being of future generations. By also applying sustainable development methods, companies are opening the way to a more viable and sustainable business model in the long term. This includes adopting strategies that minimize adverse environmental impacts, develop social responsibility and ensure economic efficiency.

A sustainable supply chain guarantees its customers the quality of products that are produced with minimal damage to the environment and include the principles of fair work. This is important for the company's employees, as they are guaranteed safe working conditions, equal and fair treatment. This is of great importance for suppliers, as it contributes to the establishment of strong and long-term relationships that are backed by trust and competitiveness, while shareholders in this case receive stable profits and discover new opportunities. Of course, the most important impact is on the environment, which gets rid of constant pollution and resource consumption.

To answer to **the first research question** of this article was made a content analysis of qualitative data. To evaluate the current factors which influences on sustainability of supply chains, we analyzed 20 ESG reports from companies operating in the international market in order to compare which of these practices can be applicable and useful in the Russian market. It was found that the selection of a business partner, monitoring of ESG of suppliers, exchanging information and merging knowledge, collaboration with stakeholders being in fourth place.

This order highlights the priorities and focus areas for companies regarding sustainable practices. Here's why this order is significant and important:

The selection of business partners comes first because it forms the basis of any supply chain. Companies prioritize choosing partners who share their values and standards, especially concerning sustainability and ethical practices. This ensures that the entire supply chain adheres to consistent principles, minimizing risks related to unethical behavior and enhancing overall resilience. This step is crucial for building a reliable and sustainable supply chain. Monitoring the ESG performance of suppliers is the next priority. After choosing the right partners, continuous monitoring is essential to ensure suppliers maintain the required standards over time and adhere to ESG commitments. Regular monitoring helps identify and address potential issues early, preventing long-term negative impacts on the company's reputation and operations. It also promotes accountability and continuous improvement among suppliers. Exchanging information and merging knowledge comes third. Once strong partnerships are established and monitored, companies focus on collaboration through sharing best practices, innovations, and insights. This practice enhances overall supply chain efficiency and sustainability by leveraging collective expertise, leading to better decision-making and innovation. Collaboration with stakeholders is in fourth place, indicating that while it is crucial, it follows the establishment of internal and partner practices. Engaging with external stakeholders, such as customers, NGOs, and regulatory bodies, helps companies align their practices with broader societal expectations and standards. This collaboration builds trust, enhances transparency, and strengthens the company's social license to operate, ensuring that sustainability efforts are comprehensive and address the concerns of all relevant parties.

In summary, the order of these practices reflects a logical progression from building and maintaining strong internal and partner relationships to broader external engagement. Each step builds on the previous one, creating a robust framework for sustainable supply chain management. This structured approach is essential for achieving long-term sustainability goals and ensuring that all aspects of the supply chain contribute positively to the company's overall ESG performance.

By conducting five semi-structured interviews with four company representatives and one supply chain expert was found the answer to **the second research question**. Based on the interviews with representatives of Russian FMCG companies and supply chain experts, we can conclude the similarities and differences between sustainability practices in Russian and international companies. Key practices, such as the selection of business partners and monitoring ESG compliance, were highlighted as similar. In Russia, as abroad, companies carefully select suppliers, focusing on environmental, social, and governance standards. Russian companies strive to follow key international and local standards, including waste management, emission control, route optimization, workers' rights, and corporate ethics. This approach not only helps maintain the company's reputation but also reduces risks associated with non-compliance with sustainability norms. However, there are differences in some aspects. Specifically, practices like "collaboration with stakeholders" and "information sharing and knowledge merging" are not as actively applied in Russia. Only two large international companies mentioned regular stakeholder engagement, which includes joint events and projects aimed at improving environmental impact. Medium-sized companies often face barriers such as a lack of awareness about the benefits of such engagement,

high costs, and the absence of necessary infrastructure and expertise to manage these processes effectively. Moreover, the regulatory environment in Russia does not always encourage the active implementation of such practices, unlike in many foreign countries where there is greater pressure from governments and the public to adhere to sustainability principles. Therefore, despite the common trends in the application of sustainable practices, Russian companies often struggle to fully implement them compared to their international counterparts. This underscores the need for more active support and encouragement of sustainable practices within the Russian FMCG sector to meet global sustainability standards.

#### Recommendations

The development of sustainable supply chains in the FMCG (consumer goods) sector is becoming a key factor in the competitiveness and long-term stability of the business. The final section examines the most important practices and strategies that can help Russian FMCG companies improve the sustainability of their supply chains. We will focus on the selection of business partners and monitoring compliance with ESG (Environmental, Social and Governance) standards, as well as measures such as cooperation with stakeholders, information exchange and knowledge integration.

1. The journey towards sustainability should begin with leadership. The commitment of the management team to sustainable development sets the tone for the entire organization. Leaders must fully understand the importance of sustainability, not just as a compliance requirement, but as a strategic advantage that can drive growth, innovation, and long-term success. This understanding should be clearly articulated in the company's mission, vision, and strategic goals.

2. Once the company's leadership adopts the principles of sustainability, the next step is to embed these values into the corporate culture. This can be achieved through comprehensive training programs and continuous education that highlight the benefits and necessity of sustainable practices. Employees at all levels should be aware of how their roles contribute to the overall sustainability goals. Regular workshops, seminars, and informational sessions can help build this awareness.

3. First and foremost, for more effective management of sustainable development initiatives, Russian companies should integrate their Environmental, Social, and Governance (ESG) departments into a single unit. Combining ESG practices in one department will improve the coordination and management of sustainability projects. A unified department will enhance internal communication, increasing employee awareness and engagement in sustainability initiatives. Integrating ESG aspects within a single

department helps form and implement a cohesive sustainability strategy, preventing duplicated efforts and ensuring consistent actions.

4. Also, it is important to convey to employees that sustainable development is not a burden but an opportunity for growth and development. Sustainable methods help avoid fines and sanctions related to non-compliance with environmental and social norms. Implementing sustainable technologies and processes reduces resource costs and increases productivity. Commitment to sustainable development strengthens the company's image as a responsible and reliable partner. To raise awareness and educate employees, companies can organize regular training sessions and seminars on various aspects of sustainable development, including waste management, energy efficiency, and social responsibility. It is also important to conduct informational campaigns highlighting the benefits of sustainable practices. Creating a culture of sustainable development within the company is crucial, and encouraging employee initiatives plays a key role in this. Implementing programs that encourage employees to propose and implement sustainable initiatives will activate the company's internal resources. Regular training events and informing employees about the importance of sustainable development will foster their engagement and understanding of these issues. Establishing working groups to develop and implement sustainable projects within the company will combine efforts and achieve more significant results.

5. The next steps recommended for companies to implement to make their supply chain more sustainable are exchanging information and merging knowledge and collaboration with stakeholders. In order to take advantage of these practices, companies need to better understand the specific steps required to implement these practices. In continuation of the theme of knowledge and information sharing, it is important to mention that working with stakeholders is a critical aspect of sustainable development actively practiced by international companies. Russian FMCG companies should strive for a similar approach. They can start by identifying key stakeholders such as suppliers, distributors, NGOs, and local communities. Organizing regular meetings and roundtable discussions with these groups will help establish open dialogue and collaboration. For example, companies can hold joint events aimed at improving environmental impact. Partnering with NGOs that have expertise in sustainable development can help in developing and implementing projects to address environmental issues. Improving information interaction and knowledge sharing can be achieved by creating internal and external communication channels. Internally, companies can implement corporate portals or platforms where employees can share their ideas and best practices. Externally, this can include partnerships

with other companies and participation in industry associations and forums on sustainable development. Creating joint databases and platforms for knowledge and experience sharing will allow companies to access current information and best practices in sustainable development. For example, they can organize webinars with experts, share examples of successful projects, and conduct joint research with universities and research institutes.

6. Choosing the right business partners is fundamental to building a sustainable supply chain. Companies striving for sustainable development should pay attention to the reputation, sustainability and reliability of their partners. This approach helps to minimize the risks associated with supply disruptions, improve product quality and increase the efficiency of the supply chain as a whole. To achieve this goal, companies should conduct a thorough legal review of potential partners, assessing their financial condition, production capabilities and compliance with environmental standards. It is also important to establish sustainability criteria that partners must meet, including environmental and social standards. Regular audits and evaluations should be conducted to ensure that partners meet these established criteria. Monitoring compliance with ESG standards not only ensures compliance with regulatory requirements, but also strengthens the company's reputation among consumers and investors. This practice increases transparency, reduces risks and creates long-term value. Companies should implement monitoring systems that use technology to automatically collect and analyze data on ESG partner activities. It is also useful to create training and professional development programs to familiarize employees and partners with the requirements of sustainable development and ESG. In addition, the publication of regular ESG compliance reports demonstrates transparency and accountability. Russian companies, like their international counterparts, carefully select suppliers based on environmental, social, and governance standards. Signing a supplier code of conduct is crucial for maintaining high standards of environmental, social, and corporate governance (ESG). This step ensures that all participants in the supply chain adhere to the same principles and norms, thereby helping the company maintain its reputation. In the context of globalization and increasing focus on sustainable development, adhering to such standards becomes a competitive advantage in the international market. A supplier code of conduct includes commitments to comply with environmental regulations, protect workers' rights, and uphold high standards of corporate governance. By signing and adhering to such a code, Russian companies can minimize risks associated with labor rights violations, environmental disasters, and corruption. This reduces the likelihood of situations that could negatively impact the company's reputation and result in legal consequences. Companies that sign a supplier code of conduct

demonstrate their commitment to high ESG standards, which can strengthen relationships with partners and investors. These stakeholders increasingly pay attention to how companies manage their supply chains and whether they adhere to sustainable development principles. Commitment to responsible sourcing can attract more investments and improve collaboration conditions with international partners.

7. However, to better implement sustainable practices, they need to actively support their suppliers. Companies can organize training sessions and workshops for their suppliers, educating them on waste management, emission control, route optimization, workers' rights, and corporate ethics. This will help suppliers understand the importance of sustainability and adopt relevant practices. Offering discounts or long-term contracts to suppliers that actively implement sustainable practices can be a powerful incentive for improvement. Additionally, initiating projects with suppliers aimed at reducing environmental impact and improving social conditions can strengthen partnerships and achieve common sustainability goals. Many small and medium-sized businesses (SMEs) in Russia lack awareness of large companies' sustainability requirements. To address this issue, it is recommended to develop detailed instructions and guidelines on meeting sustainability requirements, accessible to all suppliers, which will improve their understanding and awareness. Regular seminars and webinars for suppliers to explain requirements and discuss best practices in sustainability will enhance communication and knowledge sharing. Creating online platforms for exchanging information and experiences between large companies and their suppliers will improve interaction and support.

8. Positioning the company on ESG and showcasing achievements on the official website is a crucial factor for increasing competitiveness. Transparency in sustainable development increases customer trust and strengthens the company's reputation. Investors increasingly consider ESG factors in their decisions, so highlighting achievements can attract additional funding. Publishing reports and achievements on the website promotes transparency and accountability to all stakeholders.

Understanding that companies aiming for sustainable development and seeking to make their supply chains more sustainable must start with awareness. The foundation of sustainable practices is the conscious decision to embrace these values and integrate them into the company's core activities. Therefore, it is essential to implement these methods gradually, starting from within the company.

Theoretical Contribution: This research significantly enhances the current understanding of Sustainable Supply Chain (SSC) by identifying gaps in existing research, paving the way for recommendations for companies. By critically analyzing the literature and integrating various perspectives, this study contributes to the advancement of SSC theory. Moreover, it offers recommendations for SSC development by synthesizing previous research, shedding light on buyer-supplier relationships within SSC and their impact on sustainable practices. The proposed theoretical framework not only consolidates existing knowledge but also provides a foundation for future research in the field of Sustainable Supply Chain Management.

Practical Contribution: This study goes beyond theoretical implications and delves into practical insights, showcasing the current state of SSC in the evolving Russian market. By pinpointing factors that can encourage sustainable practices, it serves as a roadmap for large enterprises in emerging markets and SMEs looking to foster sustainability in their supply chains. The detailed analysis elucidates the nuances of sustainable development cooperation, offering actionable recommendations that can be implemented by organizations to enhance their SSC practices. Furthermore, the findings provide insights into initiatives that can promote collaboration across the supply chain, offering practical guidance for SSC development in emerging markets and contributing to the overall advancement of sustainable business practices.

Involving employees in the sustainability process is crucial. Encouraging them to participate in the development and implementation of sustainable initiatives fosters a sense of ownership and responsibility. Internal incentive programs can motivate employees to propose and execute projects that align with the company's sustainability objectives. Creating dedicated working groups or committees focused on various aspects of sustainability can also help drive these initiatives forward.

Communication plays a key role in this process. It is vital to maintain transparent and open channels of communication within the organization. This ensures that everyone has a shared understanding of the sustainability goals and progress. Utilizing internal communication platforms, such as corporate portals or newsletters, can keep employees informed and engaged.

Once a strong foundation of awareness and practice is established within the company, it can then begin to extend its sustainability efforts externally. This involves engaging with suppliers, stakeholders, and the broader community. Companies should collaborate with their suppliers to ensure they also adhere to sustainable practices. Providing training and support to suppliers can help build a more sustainable supply chain. Regular dialogue and partnerships with stakeholders, including NGOs, local communities, and industry associations, can further reinforce these efforts.

Transparency and accountability are also essential when moving towards higher levels of sustainable development. Companies should regularly report their progress on sustainability initiatives, both internally and externally. Publishing sustainability reports and updates on the company's website can enhance credibility and build trust with customers, investors, and other stakeholders.

In conclusion, making a supply chain more sustainable is a gradual and phased process that begins with a strong foundation of awareness within the company. It requires the commitment of leadership, the involvement of employees, and the collaboration of external partners. By integrating sustainable practices at every level, from the internal culture to the wider supply chain, companies can achieve long-term sustainability goals, enhance their competitiveness, and positively contribute to the environment and society.

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## APPENDIX

Appendix 1. List of ESG Reports of Companies.

Industry	Companies
FMCG	Danone
	Nestle
	Unilever
	Procter and Gamble
	An InBev
	BAT
	Pepsi Co
	Heineken
	Nescafe
	Sysco
	Altria Group
	Brown-Forman Corporation
	Japan Tobacco
	Johnson & Johnson
	Coca-Cola
	Mars
	Philip Morris International
	Henkel
	Kimberly-Clark
	Colgate-Palmolive

Appendix 2. Interview transcript.

1. Can you describe your role and experience in managing supply chains in the FMCG sector?

In my company, I hold the position of Supply Chain Management Director. My primary tasks include ensuring a continuous flow of goods from our suppliers to the end consumer. My responsibilities cover procurement management, all production processes, inventory planning, and logistics. An integral part of my work is interacting and communicating with our international partners, which involves thorough auditing and selection of our suppliers, as well as implementing new practices to optimize supply chain stages. We aim to achieve high product quality while maintaining sustainability and environmental friendliness throughout all processes and stages of the supply chain.

How do you define a sustainable supply chain in the context of the FMCG sector? What are the main components that you believe constitute sustainability in supply chains?

In the context of our FMCG sector, a sustainable supply chain means integrating environmental, social, and economic aspects that impact the supply chain. Environmental sustainability includes reducing resource consumption and using renewable materials, which is very important to us. Economic sustainability means optimizing all costs, allowing us to offer competitive market prices. Social sustainability involves ensuring fair and equal working conditions and respecting workers' rights. Together, these elements create opportunities for long-term development and collaboration with international suppliers who also value our company's sustainability.

What factors do you think have the most significant impact on the sustainability of supply chains in the FMCG sector, or are there any specific sustainability factors that your organization focuses on?

As mentioned earlier, the main factors for us are compliance with environmental regulations, social standards, and overcoming economic challenges. We pay special attention to minimizing waste and reusing recycled materials. Moreover, we emphasize decent and equal working conditions for our employees and suppliers, maintaining transparency and ethics throughout the supply chain. This builds trust with our clients and partners.

Can you describe some of the sustainable supply chain practices your company has implemented?

Examples of sustainable practices we have implemented include using recycled and biodegradable packaging materials, significantly reducing waste. We have also optimized our logistics routes using advanced vehicle management systems, reducing CO2 emissions. Collaboration with suppliers involves regular audits and checks. Suppliers with the necessary

certifications simplify our work, while those without them undergo annual audits. Most of our suppliers adhere to high environmental and social standards independently, but we work closely with those who need assistance to meet our requirements.

What are the biggest challenges you face when implementing sustainable supply chain practices, and how does your company address these challenges?

One of the main challenges we faced was the high initial costs of implementing sustainable practices. For example, using eco-friendly packaging materials required significant investment in new equipment and technology. Another challenge was engaging employees, as there are not many experts in this field in Russia. Many long-term employees were resistant to the new sustainable practices. We addressed these issues by conducting regular training and seminars to raise awareness and motivate employees. Additionally, monitoring suppliers, especially those abroad, posed a challenge. For instance, a supplier in Egypt did not meet our labor standards. We sent a team to conduct an audit and help them align their operations with our standards, resulting in improved transparency and stronger relationships.

How have technologies impacted the sustainability of your supply chain? Are there any innovative practices or technologies that you believe could change supply chain sustainability?

Technologies and innovations play a crucial role in our company, despite the high initial costs. For example, eco-friendly packaging required new technologies and equipment. We use ERP systems to optimize processes and improve efficiency, reducing order processing time and human errors. We are also incorporating big data analytics to better predict demand, optimize inventory, and reduce overproduction. Blockchain technology, although not yet implemented, is another area we are considering for enhancing supply chain transparency.

How do you collaborate with suppliers and other stakeholders to promote supply chain sustainability and how does your company measure the effectiveness of its sustainable supply chain practices?

Collaboration with suppliers is essential. We conduct regular audits and offer training programs on sustainability. Online conferences are held to discuss the importance of sustainable practices and share best practices. For example, during an audit at a packaging factory in India, we identified issues with ventilation and lighting. We worked with the supplier to improve their equipment, enhancing worker conditions and efficiency. We also gather customer feedback through surveys, showing that 30% of our clients are willing to pay more for sustainably produced goods.

To measure the effectiveness of our sustainable practices, we track reductions in carbon emissions and landfill waste. After optimizing delivery routes and upgrading our vehicle fleet, we significantly reduced our carbon footprint. The use of recycled materials for packaging reduced landfill waste by 12%, with a goal to reach 20% next year. Regular audits and anonymous employee surveys help monitor labor conditions and satisfaction, showing improvements in job satisfaction and reduced turnover.

Based on your experience, what recommendations would you give to improve the sustainability of supply chains in the FMCG sector?

For the Russian market, I recommend a few key steps. First, invest in new technologies, such as automated inventory and logistics management systems like ERP, to improve efficiency and reduce environmental impact. Training and educating employees is crucial for achieving sustainability. Companies should invest in their employees' education and participate in industry conferences. For example, the "Supply Chain School" in Russia offers regular training and meetings. Open interaction with suppliers, especially international ones, is essential. Building strong partnerships and helping suppliers adopt sustainable practices is key.

How have global events (e.g., the COVID-19 pandemic, economic fluctuations) affected your approach to supply chain sustainability?

Global events like the COVID-19 pandemic highlighted the importance of flexibility and adaptability in supply chain management. We enhanced our risk management strategies and diversified our suppliers, particularly from China. Economic fluctuations and changes in tax legislation also impacted costs, leading us to implement stricter financial controls and renegotiate supplier contracts.

What personal advice would you give to those looking to improve the sustainability of supply chains in the FMCG sector?

For companies with smaller budgets, start with small steps. Implement changes in areas that can have a significant impact, like using recycled office paper and gradually moving to larger projects like eco-friendly materials and packaging. Invest in management training, stay updated on global trends, and participate in conferences. The "Supply Chain School" in Russia is an excellent resource for training and industry updates. Engaging with suppliers and helping them adopt sustainable practices can also make a significant difference.

Can you comment on the significance of the following factors for the sustainability of supply chains in Russia: selection of business partners, monitoring of supplier ESG, information and knowledge sharing, collaboration with stakeholders?

Each company, despite adhering to the UN Global Compact and GRI standards, has its own specific requirements. Sustainability is defined not only by technical parameters, as you correctly mentioned, but also by the fact that this supply chain should focus on environmental, social, and corporate governance aspects. We observed that 80% of business processes are related to supply chains, and interacting with partners is also a very important aspect. Consequently, it is essential for a company to display on its website that it has signed the Global Compact and has a responsible supplier code. However, not all Russian companies follow this practice. While our large companies engage in international economic activities, they might not sign the agreement or display it on their websites, missing out on a significant opportunity to become more competitive.

You mentioned that some suppliers do not meet the standards of the responsible supplier code. How can they be encouraged to comply?

It's important not only to demand compliance but also to offer support. For many SMEs, such requirements can be challenging to meet, and they may not know where to start. In this case, the company can offer very favorable deals, such as guaranteed contract extensions, or provide assistance in implementing sustainability practices. Those who agree to these stringent requirements, which are considered normal by company standards but tough by SME standards, often grow with the company. For example, small private farmers have developed into serious agricultural enterprises by complying with these standards.

# Appendix 3. Qualitative coding system of interviews.

List of codes	Frequency
Continuous flow of goods	3
Procurement management	1
Production processes	e
Inventory planning	7
Logistics International partners	11
Supplier selection	9
Implementing new practices	3
High product quality	4
Sustainability and environmental friendliness	1
Environmental, social, and economic aspects	1
Reducing resource consumption	2
Using renewable materials	4
Optimizing costs	2
Fair and equal working conditions	4
Respecting workers' rights	1
Long-term development	1
Collaboration with international suppliers	2
Compliance with environmental regulations Social standards	1
Economic challenges	3
Minimizing waste	
Reusing recycled materials	5
Decent and equal working conditions	1
Transparency and ethics	3
Building trust	2
Recycled and biodegradable packaging materials	3
Reducing waste	3
Optimizing logistics routes	4
Advanced vehicle management systems	1
Reducing CO2 emissions	3
Regular audits	e
Supplier certifications	5
High environmental and social standards	2
High initial costs Eco-friendly packaging materials	
Investment in new equipment and technology	1
Engaging employees	2
Lack of experts	1
Resistance to change	2
Regular training and seminars	4
Monitoring suppliers	7
Auditing international suppliers	e
Eco-friendly packaging technologies	3
ERP systems	4
Process optimization	3
Reducing order processing time	2
Reducing human errors	:
Big data analytics	1
Predicting demand Blockchain technology	
Training programs on sustainability	
Online conferences	
Best practices sharing	2
Customer feedback	
Improving worker conditions	
Reducing carbon footprint	
Anonymous employee surveys	
Sanctions	
Measuring effectiveness	:
Supplier training	
Supplier audits	1
Investment in new technologies	
Automated inventory and logistics management systems	
Code of Conduct Industry conferences	
Industry conferences Interaction with suppliers	
Building strong partnerships	
Adopt sustainable practices	
Flexibility and adaptability	
KPI	
Economic fluctuations	
Stricter financial controls	
Renegotiating supplier contracts	
Using recycled office paper	
Eco-friendly materials and packaging	:
Management training	
SME	

Appendix 4: Interview questions (semi-structured approach).

- 1. Can you describe your role and experience in supply chain management in the Consumer Goods sector (FMCG)?
- 2. How do you define a sustainable supply chain in the context of the FMCG sector?
- 3. What are the main components, in your opinion, that make up sustainability in supply chains?
- 4. What factors do you think have the greatest impact on the sustainability of supply chains in the FMCG sector?
- 5. Are there any specific sustainability factors that are emphasized in your organization?
- 6. Can you describe some of the sustainable supply chain practices that your company has implemented?
- 7. What are the biggest challenges you face when implementing sustainable supply chain practices?
- 8. How does your company solve these problems?
- 9. How has technology affected the sustainability of your supply chain?
- 10. Are there any innovative practices or technologies that you think can change the sustainability of the supply chain?
- 11. How do you interact with suppliers and other stakeholders to promote sustainability in the supply chain?
- 12. What role do customers play in shaping your supply chain practices?
- 13. How does your company measure the effectiveness of its sustainable supply chain practices?
- 14. Are there specific metrics or metrics that you consider most valuable?
- 15. What trends do you foresee that will affect sustainable supply chains in the FMCG sector in the next five years?
- 16. How is your company preparing to adapt to these trends?
- 17. Can you share examples of successful collaborations or partnerships that have improved the sustainability of your supply chain?
- 18. Based on your experience, what recommendations would you make to improve the sustainability of supply chains in the FMCG sector?
- 19. How have global events (e.g. the COVID-19 pandemic, economic fluctuations) affected your approach to supply chain sustainability?
- 20. What personal advice would you give to those who seek to improve the sustainability of supply chains in the FMCG sector?

- 21. Can you comment on the importance of the following factors for the sustainability of supply chains in Russia: choosing a business partner, monitoring ESG suppliers, sharing information and knowledge, and cooperating with stakeholders?
- 22. As a result of interviews with representatives of Russian FMCG companies, it was revealed that such factors as: choosing a business partner, monitoring ESG suppliers are most involved what are the reasons for the introduction of these practices?