EXAMPLES OF GOOD PRACTICES OF LARGE ROMANIAN RETAIL CHAINS REGARDING WASTE MANAGEMENT

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ABSTRACT: The concept of waste management is relatively new. At a practical level measures, actions, programmes and policies regarding the management of waste and environmental protection are being undertaken by governments, communities, economic players and environmental agencies. At a theoretical level, the field is relatively new, but the literature reflects the researchers' interest in offering a basic framework regarding its defining and content. The present paper seeks to present, at the level of the retail industry, in a succinct manner, the concern of large retail chains with environmental protection and give some examples of initiatives undertaken by them within waste management.

KEY WORDS: waste, waste management, waste hierarchy, initiatives, retail chains.

JEL CLASSIFICATION: Q53, Q56.

1. INTRODUCTION

In the Explicative Dictionary of the Romanian Language (DEX), the word "waste" has the following definition: "The remainder from a material resulted from a technological process of creating a certain product, which cannot be further directly exploited for the creation of the respective product". In the literature, as well as online, there are a number of definitions of this term, more or less encompassing, but which mainly refer to: "unwanted and unusable materials and is regarded as a substance which is of no use".

Waste can be found in all forms of matter, namely solid, liquid, gaseous and radioactive. Garbage is mainly considered as solid waste that includes wastes from our houses (domestic waste), wastes from schools, offices etc. (municipal waste), and wastes from industries and factories (industrial waste). In this sense, sources of waste

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can broadly be classified into four types: Industrial, Commercial, Domestic, and Agricultural.

The problem of waste is not a new one; what is recent is represented by the concern of governments, communities and environmental agencies with managing in a sustainable manner all that results from human activity, but also especially with avoiding its adverse effects on human and environmental health.

With this in mind, the measures and actions undertaken in order to achieve what has been previously mentioned have received a name: waste management.

2. WASTE MANAGEMENT – CONCEPTUAL APPROACHES

Waste management is the precise name for the collection, transportation, disposal or recycling and monitoring of waste. This definition can be found within Council Directive 91/156/EEC of the 18th of March 1991. Scientist generally agree that this definition brings together activities that entail waste management, but it should be completed because "…sustainable waste management also involves strategic planning and decision making to determine best action; prescribing options and assessing their effects and consequences; and choosing the best treatment option, while taking into consideration legislation; … conservation of resources and prevention of the contamination of environment can be achieved by waste management through applying the proper hierarchy: waste prevention first, followed by recovery and, ultimately, safe disposal" (Pongrácz, 2006).

Of course, the methods for waste management may differ for developed and developing nations. For urban and rural populations, industrial and residential areas it differs as well. The management of waste in metropolitan and rural areas is a general responsibility of the local government, while the waste that is produced by the industries is managed by the industries themselves, in case it is non-hazardous.

Although there are many methods available to dispose of waste, some of them are more commonly used, among which there are:

Landfill - this method involves burying waste and it is the most common practice for the disposal of waste around the Globe. These landfills are quite often conventionally deserted and vacant locations around cities. Landfills must be designed carefully so they can serve as an economical and sanitized method for waste dumping.

Incineration or combustion - is a disposal method in which municipal solid wastes are burned at high temperatures so as to convert them into residue and gaseous products. The biggest advantage of this type of method is that it can reduce the volume of solid waste to 20 to 30 percent of the original volume, decreasing the space it takes up and reducing the stress put on landfills. This process is also known as thermal treatment where solid waste materials are converted by incinerators into heat, gas, steam and ash.

Recovery and Recycling - resource recovery is the process of taking useful discarded items for a specific next use. These discarded items are then processed in order to extract or recover materials and resources or convert them to energy in the form of useable heat, electricity or fuel.

Recycling is the process of converting waste products into new products to prevent excessive energy usage and consumption of fresh raw materials. Recycling is the third component of the Reduce, Reuse and Recycle waste hierarchy. The idea behind recycling is to reduce energy usage, volume of landfills, air and water pollution, and greenhouse gas emissions, and preserve natural resources for future use.

Waste to Energy (Recover Energy) - this process involves converting nonrecyclable waste items into useable heat, electricity, or fuel through a variety of processes. This type of energy source is renewable, as non-recyclable waste can be used over and over again to create new energy. It can also help to reduce carbon emissions by offsetting the need for energy from fossil sources. Waste-to-Energy, also widely recognized by its acronym WtE, is a new generation of energy in the form of heat or electricity from waste.

Avoidance/Waste Minimization - the easiest method of waste management is to reduce the creation of waste materials, thereby reducing the amount of waste going to landfills. Waste reduction can be done through recycling old materials like jar, bags, repairing broken items instead of buying new ones, avoiding the use of disposable products like plastic bags, reusing secondhand items, and buying items that require less designing.

Recycling and composting are a couple of the best methods of waste management. Composting is so far only possible on a small scale, either by private individuals or in areas where waste can be mixed with farming soil or used for landscaping purposes. Recycling is widely used around the world, with plastic, paper and metal leading the list of the most recyclable items. Most material recycled is reused for its original purpose.

As was previously mentioned, a number of concepts for waste management exist and vary around the world, only a few of them being generally applicable, like the following:

- **Waste hierarchy:** this concept refers to the "3 Rs": Reduce, Reuse and Recycle. This concept has the waste management strategy as its basis in the prestige for waste reduction. This concept stands tall for most waste reduction plans.
- **Extended producer reliability:** this concept refers to the accountability of the producer to the complete life cycle of the products they manufacture.
- **Polluters Pay Principle:** this concept means that the party who has the lion's share in polluting the environment has to pay for doing so. With reference to waste management, the polluter would have to pay the price needed for the waste to be completely disposed of.

3. CONCERN FOR WASTE MANAGEMENT IN THE EUROPEAN UNION

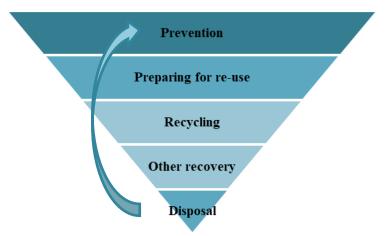
Concern with the problem of waste management at the level of the European Union is concisely presented in a document elaborated by the European Comission titled *Being wise with waste: the EU's approach to waste management.*

Within this document it is specified that "EU waste management policies aim to reduce the environmental and health impacts of waste and improve Europe's resource efficiency. The long-term goal is to turn Europe into a recycling society, avoiding waste and using unavoidable waste as a resource wherever possible. The aim is to achieve much higher levels of recycling and to minimise the extraction of additional natural resources. Proper waste management is a key element in ensuring resource efficiency and the sustainable growth of European economies".

It is important to remember that the EU's waste policy has evolved over the last 30 years through a series of environmental action plans and a legislative framework that aims to reduce negative environmental and health impacts and create an energy and resource-efficient economy.

The EU's Seventh Environment Action Programme (2014-2020) identified waste prevention and management as one of four top priorities. Its primary objective is to ensure that economic growth does not lead to more and more waste. This led to the development of a long-term strategy on waste.

The 2005 Thematic Strategy on Waste Prevention and Recycling resulted in the revision of the Waste Framework Directive, the cornerstone of EU waste policy. The revision brings a modernised approach to waste management. The Directive focuses on waste prevention and puts in place new targets which will help the EU move towards its goal of becoming a recycling society. It includes targets for EU Member States to recycle 50% of their municipal waste and 70% of construction waste by 2020. The Directive introduces a five-step waste hierarchy where prevention is the best option, followed by re-use, recycling and other forms of recovery, with disposal such as through landfills as a last resort. EU waste legislation aims to move waste management up the waste hierarchy.



Source: https://ec.europa.eu/environment/waste/pdf/WASTE%20BROCHURE.pdf

Figure 1. Moving up the waste hierarchy

4. WASTE MANAGEMENT IN ROMANIA

Romania, as an EU member state, is concerned with transposing to its national legislation the European directives regarding waste management, but also "...to develop a general framework propitious for waste management at a national level and with minimal negative effects for the environment", as is specified in the National Plan for Waste Management, elaborated within the Administrative Capacity Operational Programme 2014-2020.

The ACOP's provisions complete the provisions of the National Waste Management Strategy as a main approach, namely steering Romania towards a recycling society where the hierarchy of waste is applied to all types of waste which comprise the plan's object. The National Waste Management Strategy (NWMS), revised in 2013 and approved through HG 870/2013, establishes Romania's policy and strategic objectives in the field of waste management for 2014-2020.

Romania's established priorities regarding waste management and prevention are the following:

- prioritizing efforts in the field of waste management in line with the hierarchy of waste;
- developing measures to encourage the prevention and reuse of waste, promoting the stable use of resources;
- rising the rate of recycling and improving the quality of recycle materials, closely working with the business sector and with organizations and enterprises that exploit waste;
- promoting the exploitation of waste from packaging, as well as other types of waste;
- lowering the impact of carbon generated by waste;
- encouraging the production of energy from waste for non-recyclable types of waste;
- organizing a national database and making the monitoring process more efficient;
- implementing the concept of "life-cycle analysis" in waste management policy.

Furthermore, the improvement of services towards the population and business sector is sought after, through:

- encouraging green investments;
- supporting initiatives that reward and recompense the population that reduces, reuses and recycles household waste;
- collaborating with local public administration authorities in order to increase the efficiency and quality of collected waste, making them easier to recycle;
- collaborating with local public administration authorities and the business sector in order to improve the waste collecting systems.

5. WASTE MANAGEMENT INITIATIVES OF LARGE RETAIL CHAINS

As we could see, the concerns, measures, policies and legislation regarding waste management, at the level of the European Union, as well as in Romania, covers all aspects of socio-economic activity. A very important field, which makes possible the transition of products from the sphere of the circulation of goods into that of consumption, is that of retail. It has continuously evolved, arriving today, in the era of globalization, to a form of commerce largely done through large retail chains.

In Romania, the retail industry has taken the initiative to create, in 2013, the Association of Large Romanian Commercial Chains (ALRCC). This is a professional association which represents the interests of its members, namely: Auchan, Brico Depot, Carrefour, Columbus, Cora, Decathlon, Dedeman, Flanco, Hornbach, Ikea, Lidl, Kaufland, Mega Image, Metro Cash & Carry, Mobexpert, Penny Market, Profi, Selgros.

At the European level, the ALRCC is a member of EuroCommerce, becoming in 2017 a member of its directing committee, which groups national federations and retail and international commercial companies from 31 nations. EuroCommerce has helped the members develop voluntary initiatives by setting up the Retailers' Environmental Action Programme (REAP) under the EU Retail Forum for Sustainability. The joint Retail-EU Commission forum is a platform to foster dialogue with stakeholders along the supply chain to take the sustainability agenda forward.

One of these initiatives is the Retail Agreement on Waste, established in 2012. It merely called on companies to carry out at least two awareness-raising initiatives on waste reduction by the end of June 2014. It further stipulated that the projects should involve members' main product ranges - whether food, textiles, WEEE etc. - and that they should target consumers. However, many of the initiatives developed went far beyond these simple requirements, producing ideas which engaged with school-children, employees, suppliers, other stakeholders, and the community at large.

The initiatives taken by those that signed this commitment were then presented in the document titled *Retail Agreement on Waste Report*. The presentation contained the title and type of initiative, the date or period when it unfolded, the geographical level of implementations, the target group, key message, and tools used.

While for a lot of retailers the initiatives focused geographically on a single country, there were exceptions. Therefore, Carrefour extended its three initiatives from 2013 to France, Belgium, Spain, Italy, Poland, Brazil, Argentina, China, Taiwan, Turkey, and Romania. The initiatives are succinctly presented in the following table.

In concordance with the information from the Report, within the *Internal "Anti-gaspi"* initiative, in Romania Carrefour organised a waste-reduction week, with a competition for the best ideas. The week included a car-free day and a "Much More Green" challenge day.

In the last few years several large retail chains have appeared on the Romanian market. Those that offer food products, as well as those that do not, are concerned with fulfilling their clients' demands with quality goods and services. But for many this was not sufficient. Being involved in the communities' lives, fighting for a cleaner

environment, sustainable waste management etc. are elements that are turned into current initiatives.

Initiative 01		
Title of the initiative		
Title of the initiative	Internal "Anti-gaspi"	
Type of initiative	Awareness-raising campaign	
Target audience	All employees	
Key message	An internal awareness campaign has been launched in the	
	Group, using a bee as its symbol. It was implemented locally	
	in a variety of ways. The aim is to encourage all employees	
	to take steps to tackle waste in their day-to-day work. It is an	
	opportunity to rally all employees, in embodying Carrefour's	
	CSR approach	
Tools used in the initiative	Internal communication	
Initiative 02		
Title of the initiative	"Anti-gaspi" consumer programme	
Type of initiative	Awareness-raising campaign	
Target audience	Consumers	
Key message	Carrefour worked to promote solutions for consumers to	
	reduce waste at home by creating promotional schemes	
	suited to all customers. It gave consumers information on	
	how to cook with leftovers and manage the content of their	
	fridges; it also offered help in shopping according to	
	consumption	
Tools used in the initiative	Website, commercial catalogue, video	
Initiative 03		
Title of the initiative	"Anti-gaspi" suppliers project	
Type of initiative	Awareness-raising campaign	
Target audience	Suppliers	
Key message	Thanks to the sustainability self-assessment tool available to	
	its suppliers, Carrefour can share its convictions about the	
	issue of waste with its suppliers. The framework, designed in	
	conjunction with the WWF and the French Environment and	
	Energy Management Agency, is based on the ISO 26000	
	standard and is translated into 15 languages	
Tools used in the initiative	Web-tools, expert visit, press release, awards ceremony	

Table 1. Initiatives taken	n by Carrefour within t	the Retail Agreement on Waste

Source: EuroCommerce (2015) Retail Agreement on Waste Report, pp. 12-13

We wish to present some of them in the following paragraphs:

✤ Lidl - "Cu Apele Curate" ("With Clean Waters")

The programme unfolded with the initiative of Lidl Romania and MaiMultVerde, in a partnership with the Resource Centre for Public Participation (ReCe), One World Romania at School and the Association from Community Relations (ACR). Within the programme the MaiMultVerde association bought and would use for the first time in Romania a Waste Shark drone in order to clean the waters of plastic waste, it being one of the most advanced floating waste management

solutions. The drone flies over the waters' surface and collects up to 500 kg of waste every day.

Within the first stage of the "*Cu Apele Curate*" programme there were cleaning actions in the Danube Delta, Giurgiu, Drobeta-Turnu Severin, Cernavodă, Zimnicea, Turnu Măgurele, Oltenița, Brăila, Galați, Tulcea and Călărași, to which 550 volunteers participated which collected 6,5 tonnes of plastic. Waste collection infrastructure improvement and development followed, through which 90 tonnes of plastic have been presently collected, as well as educational, information and community organization activities, to which over 350 people have participated. The project continued with advocacy campaign undertaken by initiative groups from the 10 cities on the Danube, and with the evaluation and revision of public policies regarding plastic waste management, protection of waters, and environmental education, with the involvement of relevant Romanian authorities.

Decathlon - Rolling out environmental management

As is presented on its website, www.decathlon.ro, the company is committed to continuously reducing the environmental impact of their business activities, particularly the impact of manufacturing Decathlon brand products. Their priorities in connecting with the utilisation of resources, industrial water, soil and air pollution, and the impact of waste generated, as well as energy consumption and CO_2 emissions, must be shared with their suppliers' production sites. The goal is to limit the local populations' and sports users' exposure to pollution and to continue promoting active lifestyles at their production sites.

Since 2017, Decathlon has conducted environmental audits focusing on these issues at their suppliers' facilities. The company has identified and prioritised the suppliers for whom industrial wastewater production, air pollution and wasteful energy use may be an issue. A special set of specifications has been drawn up to help bring them in line with the company's requirements, with audits being performed regularly.

✤ Ikea – Eliminating disposable plastic

The company wishes to contribute towards a world without waste and to help people make more sustainable choices. Furthermore, it has the ambition to have, by 2030, all of the plastic in Ikea products come from renewable or recycled materials. This is an important part of its sustainability strategy, People and Planet Positive.

This is the reason why the company has eliminated disposable plastic from its home products, as well as from its restaurants, cafés and bistros. It is one of its numerous steps taken to reduce plastic pollution from disposable products. In practice this will mean replacing plastic cutlery with recyclable forks, spoons and knives, and making wooden products from reasonably procured wood.

Another disposable product used on a large scale is the straw. Ikea aims to have the straws from its restaurants, bistros and cafés produced from paper that came from sustainably managed forests. Furthermore, through its stores Ikea gives its clients the possibility to buy bamboo and stainless steel straws.

✤ Kaufland – Recicleta (Recyclette)

In a partnership with the ViitorPlus Sustainable Development Association, Kaufland implemented the Recyclette programme, which offers free collection and recycling of paper to housing flats in Bucharest. Due to its success, the programme was extended, covering a larger network of flats, which permitted the development of the programme through:

- ✓ the purchase of new electric tricycles;
- \checkmark the placement of specially designed collection boxes;
- ✓ creating and distributing informative materials to residents about the necessity of recycling waste.

Also, in order to motivate new owners' associations in the program to get involved in recycling as much paper as possible, they were invited to compete in a contest with 10.000 lei worth of prizes. The money was invested to maintain and/or renovate the buildings' entrances. The 8 associations that collected the largest quantity of paper during the 3 months were designated as winners.

6. CONCLUSIONS

Our day-to-day social and economic life creates waste. Due to the large quantity of such materials, but also due to the wide diversity of forms under which it appears, especially because of the evolution of the technologies through which some new processes and products are created, the problem of effective management has come up.

From a practical point of view, governments have involved themselves in this problem, creating the bases for legislative frameworks which regulate this field, and continue to implement at a national and local level waste management policies and measures.

However, the role of other players from all fields of activity is equally important. The initiatives that they are taking within their activities, as well as for the communities among which they act, seek to protect the environment and reduce the wasting of resources. The retail industry is no exception. Permanently being a link between suppliers and their clients, large retail chains have taken the responsibility regarding the environment through a variety of waste management initiatives. Existing within the Romanian economic environment for less than three decades, large retail chains, local or foreign, alimentary and not, are proving through ideas, actions, measures, programmes and campaigns their capacity for innovation in waste management.

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