

Riste Georgiev, MA student
Faculty of Tourism and Business Logistics
University “Goce Delchev” Shtip
ristegeorgiev73@yahoo.com

**CONTEMPORARY CHALLENGES AND REAL OPPORTUNITIES FOR
DEVELOPMENT OF ENTREPRENEURSHIP IN TERMS OF COMMUNAL
WASTE MANAGEMENT IN REPUBLIC OF MACEDONIA**

Abstract

The aim of this paper is to set up an analysis of the real terms for development of the idea of entrepreneurship in accordance with the possibilities of communal waste management on the territory of Republic of Macedonia. It's a question of specifics of communal waste management in the Republic of Macedonia in whose basis is too hard to penetrate. However, through the application of appropriate methodological framework will be made conclusions that are particularly important for principled explanation of the essence of causality that are related to the current conditions of communal waste management in this country.

Communal waste management (control), in all its stages is a matter that affects both the public sector and the private sector. Consequently, the idea of development of contemporary models of management through strategic use of available human resources will enable the setting of solid base of a competitive business in a new area for the private sector in developing countries. The same, especially for Republic of Macedonia, a country with lack of developed opportunities for effective and efficient communal waste management, unlike the developed countries. Therefore, and on the basis of already conducted research framework worldwide, this paper will promote the idea of encouraging the entrepreneurship in order to improve the existing terms, whereas until now the public sector was most affected. By applying qualitative methodological framework, or rather content analysis of theoretical aspects, review of the prepared reports in domain of this problem and comparative analysis

of the opportunities against contemporary challenges, efforts will be made to get a solid basis for the establishment of an appropriate approach of communal waste management within the Republic of Macedonia as initial requisite and incentive for development of entrepreneurship in this area.

Key words: management, communal waste, strategic approach, entrepreneurship, challenges

INTRODUCTION

Communal waste is generating in daily human activities. In the communal waste management important is the collection, transportation and disposal to the city dump. Due to the constant increase of the total quantities of waste product, efficient program is required for collection and transport, which can retain costs in constant growth. The constant increase in the total amount of waste products produced by industry and population require substantial changes in the traditional model of waste management. Waste management includes measures and special regulations which are modulated by international standards and current regulations in our country. These measures and regulations are applied starting from the creation of the waste, its collection, transportation until its delay (dislocation, recycling). In the new integrated industrial ecosystem consumption of energy and raw materials must be optimized and generation of waste minimized. Future activities concerning waste should be directed towards its recycling and reuse, which will achieve significant economic and environmental effects (Črnjar, 2002: 44).

The main objective of the communal waste management points to the need to ensure a high level of protection of life and health by protecting the environment. Consequently, the encouragement of new, contemporary forms of waste management, such as entrepreneurship, should be based on respect of the principles and regulations for protection of the environment or protection of people's life and health in bottom line.

The immediate concern of this paper is to find out optimal conditions for communal waste management by highlighting the potential of the private sector, and by integrating essential ideas that represent innovation for society and found applicability in modern living conditions and action, especially in the field of waste management. To fulfill this interest will be achieved several objectives that lead to achieving the ultimate goal, respectively (Koneczny et al., 2007: 67)

- minimizing the space that could possibly be contaminated by collection and transportation of communal waste;
- achieving some economic impact by achieving savings in communal waste management in the Republic of Macedonia;
- providing an opportunity for development of the entrepreneurship which presents guide for economic growth and development of a country;
- inducement on public-private partnership within the communal waste management.

Communal waste management is process of collection, transport, processing,

recycling and disposal of waste product, especially those produced by human activities, and the object is to reduce their impact on human health, appearance and hygiene on the environment. In the last few decades a growing tendency is to consider as basic objectives of waste management also its impacts on the natural environment and the possibilities of obtaining new sources of raw materials from waste. By promoting new opportunities of inducing private waste management on an individual basis or through cooperation between the public and private sectors in the Republic of Macedonia will be created favorable conditions for setting strategies for managing communal waste at a level that the long-term basically meet the needs of modern lifestyles, primarily to promote sustainable development and protection of human health and environmental protection.

MANAGEMENT (LEADING) OF COMMUNAL WASTE

Origination of the waste is result of the overall economic activity of each country, so it is in direct connection to the national economy. Due to the large quantities of virulence to the environment, waste is considered one of the most important environmental problems of the modern world. Man with his activities is a decider in the initiated change towards the environment. All those activities are related with the satisfaction of life needs. Large number of them are created artificially, and the main question which arises is whether it is needed so many different products, which after their use will become waste.

The problem of communal waste is expressed in all the cities of our planet, and the price of it's solution is estimated in the billions of dollars. The inadequate treatment of communal solid waste and its uncontrolled and unorganized delay and also disruption of the landscape characteristics of the space, inevitably leads to pollution of ground and surface water, soil, the air, but also a danger to public health. From this perspective, the management of municipal solid waste is a particular social process that affects all generations, present and future (Isoski, 2006: 116).

Communal solid waste by definition includes household waste and other waste which by its nature and composition is similar to household waste: hazardous waste industry, commercial institutions (including hospitals) and industry, administrative institutions, craft cooperation, construction waste (raw, mixed waste from construction site), garden waste, green waste from parks and the oddments of cleaning the streets (Neši, 2010: 45). In a society, the origination of communal solid waste depends on the level of industrial

development, living standards, lifestyles, social environment, consumption and so on. In terms of solid waste management, primary responsibility has the local government. It is a complex task which requires appropriate organizational capacity and cooperation between numerous stakeholders from the public and private sector.

Effective and efficient waste management means promoting opportunities for continuous public participation in making decisions that affect a certain area. In fact, management of waste in all its stages largely depends on the commitment of the currently competent service. Consequently, whether it is public, private company or public-private partnership the established legislative - legal framework should be respected and constantly evaluating of the new (non) satisfaction of the public in order to have real insight into the situation and in activities that in future should be taken further.

Furthermore, the application and implementation of the local planning for waste management shall be in accordance with the National Strategy for Waste Management of the country for which we talk about waste management (in this case the Republic of Macedonia).

Planned management of communal waste – incentive of entrepreneurship

Setting a plan / system for integrated management of municipal waste initially points to the need for drawing up plans for management of communal waste, both at the level of the region and at the level of municipalities covered in individual regions. The planned communal waste management, will greatly contribute to solving particular current problems that occur on the territory of the region (Markovic, 2007: 69-70):

- Waste management is inefficient and environmentally unacceptable;
- Waste Landfill on the territory of the region are mostly landfills that do not fulfill even the minimum measures of protection, which is necessary in the shortest procedure to be repaired and rehabilitated; and
- Rural areas in the territory of the municipalities are mostly omitted of the cycle of waste collection. As a result, especially in the villages, there are local landfills often placed on objectionable locations.

The planned waste management at regional and local level aimed at establishing sustainable management of communal waste, while embracing the formulas for resolving string of tasks and to provide detailed actions that stakeholders should take over in order locally to achieve the vision and goals that are pretend nationwide by setting up strategies for municipal solid waste.

All that has the need to coordinate action on a range of stakeholders - local government, households, enterprises, private sector, NGOs and individuals. The local government has a central role in the planning and creation of a sustainable system for communal solid waste in the municipalities in accordance with the established legislative framework (Blagojević et al., 2005: 54). Consequently, the incentive of the entrepreneurial spirit in managing communal waste is necessary to indicate the need for full coordination between local authority and the company in order to invest effort to solve all occurred problems and challenges.

Through planned communal waste management company acts more effectively in the process of minimizing the negative impact of waste on the environment, and also impacts on improving the efficiency in utilization of the resources.

A key objective of the plan for waste management is to contribute to sustainable development of the region through the establishment and development of the system of waste management that will control the occurrence of waste, will reduce the impact of the production of waste to the environment, improve efficiency of the resources, and will allow proper flow of waste until its final relocation regional landfill, stimulating investment and maximizing the economic opportunities that arise from the waste. For this purpose the company which aims to promote entrepreneurial spirit in the process of managing communal waste, aims to: (Trajkovic, 2006: 13):

- provide a system of waste management, developed according to the most acceptable options for Environment;
- Develop principles and plan activities for waste management on medium and long term, in accordance with the legal requirements;
- provide sufficient flexibility in methodical solutions for incorporation of improved technology to treat waste because of ensuring optimally utilization;
- influence on raising public awareness of the future challenges in the implementation of plans for waste management at local level, and promote the active participation of all interested parties to satisfy the objectives.

Entrepreneurship, as a process of continuous innovation, creating new ideas within the organization, taking responsibilities for proper actions as well, is in constant evolution which still follows a certain continuity. In times of transition, which is still felt in certain regions of the world, the owners of small and medium enterprises, besides being entrepreneurs also are managers or involved in the process of creating policy of the enterprise. In a new area of creation entrepreneurial potential, such as communal waste management,

planning and the mutual coordination with the already-existing institutions, as well as respect for established strategies and regulations, are the first steps that need to be taken (Strubler, 2010: 178).

DEVELOPMENT OF ENTREPRENEURIAL POTENTIAL IN COMMUNAL WASTE MANAGEMENT: STANDINGS AND OPPORTUNITIES IN THE REPUBLIC OF MACEDONIA

Entrepreneurship represents inspiring guide on improvement of the process of communal waste management, locally, regionally and nationally. That's the only way to expect creating of new ideas and designs in the process of the waste management which are beneficial to all citizens in order to improve their living and promoting sustainable development and environmental protection.

The best way to promote entrepreneurship in communal waste management is by encouraging cooperation between public and private institutions in this domain. Consequently, in that way waste management will be more efficient and economical to the citizens of the municipality and the company. In that respect, crucial importance has improvement of the infrastructure, which is one of the main tasks of the municipal sector (JLY – Finnish Solid Waste Association, 2015).

In Macedonia, currently, the services of waste collection primarily are supplied by municipal public communal utilities (JKP). Entirely, about 70% of the population in Macedonia is beneficiary of regular waste collection (in rural areas the percentage is about 10%). The practice of waste disposal does not comply with any technical or environmental standards. The majority of public utilities are faced with a shortage of funds due to the low rate of receivables and / or low prices for services related to the waste. Consequently, it is necessary to actualize the additional, entrepreneurial ventures in this area in order to improve the real situation.

Table 1. Received and deposited quantities of communal waste JP Communal Sanitation – Skopje

JP Communal sanitation - Skopje			
Month	Transported waste in tons		Index
	2013	2014	
January	9.411	10.082	1,07
February	8.794	9.772	1,11
March	10.156	11.433	1,13
April	11.810	11.562	0,98
May	11.605	12.854	1,11
June	10.772	12.152	1,13
July	12.575	12.996	1,03
August	11.777	13.314	1,13
September	11.831	13.579	1,15
October	12.818	13.011	1,02
November	11.580	11.682	1,01
December	10.142	10.947	1,08
Total:	133.271	143.384	1,08

Source: Veljanoska GD (2004) Report on the overall operation of DRISLA - SKOPJE LTD. Batinci, Studenicani, p.7.

Based on the enclosed information in the table num.1 is conceived that in the capital of the Republic of Macedonia there is a real opportunity to engage additional company form the private sector in order to improve the situation with the communal waste management.

The first step in promoting the entrepreneurial aspect of communal waste management, which is realistically feasible in the Republic of Macedonia, is to promote the concept of public-private partnership. It covers the use of a common policy between the company and public (local) authority, concerning the different phases of managing with the waste. For this purpose it is necessary to make an agreement that will be based on the current strategy for waste management. That agreement can be terminable, in order to allow analysis of the new upcoming situation through continuous evaluation to ensure improvement of the existing conditions in this domain.

Clients of the company which operates based on promotion of the entrepreneurial aspects will be the citizens of the region, public institutions and waste companies.

The company realizes the following operations:

- Waste Management
- Organization
- Counseling about waste management
- Full service for industrial capacity and companies.

Regarding the function that the municipalities have about management with the solid waste, they have the right to make decisions but also to act as operator-proprietor. However, compared to other functions or management of facilities for collection and treatment of waste, practical work, daily evaluation and improvement of the situation, for all this responsible is the enterprise that is actually a private partner.

Entrepreneurship in this domain is observed by promoting advanced, top technology which the company should apply in waste management, and which will also allow (Trajkovic, 2006: 115-122):

- Exploitation energy from the burned waste
- Heat utilization
- Biogas utilization from waste disposal
- Composting of sludge from sewage.

This is the only way to promote sustainability in the management of communal waste which also will improve the actual conditions in terms of health, environment and proper use of the available resources. All of this permits the company to have a financial benefit and turnover of the entire procedure of quality or efficient and effective management of communal solid waste, which is actually the main purpose to begin any entrepreneurial venture.

Regarding the possible obstacles that the company could confront while managing the communal waste, it usually means appearance of competition or new enterprises in this area which leads to minor quantity of received waste. Furthermore, the quantity of waste in the region declines, so additional future perceptions of modernization and sustainability of the company should be taken. All this is reflected in the additional conceived projects of the company that are not always found understanding among investors and the banking sector. This is related to the real situation in Republic of Macedonia, where we don't have enough waste for the emergence of potential competition. However, by proper communal waste management, or by applying a strategic approach in achieving these procedures, entrepreneurship is a particularly attractive tool for promotion and implementation of waste management in the Republic of Macedonia by engaging the private sector.

CONCLUSION

Inadequate treatment of communal waste and its uncontrolled and unorganized disposal violates the landscape characteristics of the space, inevitably leads to pollution of groundwater and the surface water as well, to the soil, the air but also represents a danger to public health. By that point of view, waste management is particularly important process in terms of environmental protection and represents a special social interest. This is particularly related to the countries that still do not have enough good implementation of the Strategy for waste management at national level.

In this paper were presented excellent indicators that can be useful for the future experience of the Republic of Macedonia within the communal waste management. It's a question of promoting aspects that point to the importance of expanding the branch of entrepreneurship in this domain, especially through the expression of public-private partnership promoted at local, regional and national level.

In Republic of Macedonia there are terms for development of entrepreneurship, either of aspect of the waste quantities available in the municipalities or of aspect of insufficient efficiency and effectiveness of the public communal utility. Consequently, it is necessary to promote further strategic framework that will cover the entire process of communal waste management to a higher level by involving the public integrity, as well as maximum exploitation of the available resources offered by the society, in order to stimulate long-term benefit for all involved parties.

References

Blagojević B, Trajković S, Potić O and Prohaska S (2005) *Hydrologic analysis and calculations for landfill complex in the light of the EU Directive on the landfill of waste*. Science + Practice 8.

Črnjar M (2002) *Economics and Environmental Policy*. Rijeka: Faculty of Economics, University of Rijeka.

Isoski D Todi (2006) *Creating a local plan of waste management by implementation of the Aarhus Convention*. Sokobanja: Ekoist '06, Proceedings.

JLY - Finnish Solid Waste Association. Available at:

http://jly.fi/jly0_eng.php?treeviewid=tree1_eng&nodeid=0 (accessed 9 August 2015).

Koneczny KV, Dragusanu R, Bersani D and Pennington (2007) *Environmental Assessment of Municipal Waste Management Scenarios, Part I*. European Commission. Joint Research Centre. Institute for Environment and Sustainability.

Markovic N (2007) *Communal solid waste management*. Bor: Technique School.

Neši B (2010) *The basic model (concept) of the regional municipal waste management in the region Prokuplje*. Niš: PWW Serbia.

Shane S and Venkataraman S (2000) The Promise of Entrepreneurship as a Field of Research. *Academy of Management Review*, 25 (1).

Strubler DC Redekop (2010) *BW human resource Entrepreneurial Leadership: A conversation with Dwight*. Carlson Human Resource Management. 49 (4).

Trajkovic S (2006) *Sustainable management of construction waste*. Proceedings of the Constructive- Architectural Faculty 21

Veljanoska GD (2014) *Report on the overall operation of DRISLA - SKOPJE LTD*. Batinci: Studenic.