

## 64. Differentiating waste fee for the juridical persons



### 1. Summary

Country/Geographical Area	Bulgaria / Sofia Municipality
Level implementation	Regional
Scale	Local
Waste fraction / Specific Waste Type	Waste generated by businesses that is similar to household waste, different types of fractions mostly mixed municipal waste, construction waste, etc.
Target Audience	Landfill operators and businesses in Sofia Municipality
Objective	Differentiation of a fee for the juridical persons at the territory of Sofia Municipality
Initiator/coordinator	Sofia Municipality / Sofia Municipality
Other key actors involved	Operators of landfill, businesses, administration of Sofia Municipality
Duration	since 2006 onwards
Number in Mapping report	64
Name of partner(s) having contributed to factsheet & date	Sofia Municipality (SM) 30/04/2011
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## 2. Context

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Sofia Municipality is an urban centre consisting of up of 24 districts with approximately 1.8 million inhabitants (data 2011). The waste generated by businesses is usually included in the figures for mixed household waste and it is estimated around 26,35 % of total weight (485 117 tones, data 2007). On the territory of the municipality, businesses are estimated to generate no less than 127 825 tones of such waste similar waste (incl. construction waste from the offices, etc.) (data 2007).

Centralized collection and treatment of waste generated by businesses (offices, enterprises) is similar to the waste generated by households. The fee on such similar waste was previously calculated proportionally to the surface area of the offices. When the price is calculated in such manner and the office is not generating a big amount of waste, because the systems for separate collection are used and the waste is prevented at the source of generation, payment of such fee provides no incentive for the business. That was the main driver to introduce new ways for the payment of the fee for the juridical persons. The fee is collected by Sofia municipality.



### 3. Strategy

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#### **Objectives**

Promotion of differentiation of fee for the waste generated by juridical persons in Sofia Municipality, through:

- Campaigns for collection of similar household waste by subcontractors
- Information about the possibility to conclude an agreement with a subcontractor based on actual waste quantities generated placed on the premises of Sofia Municipality.

To date there are no targets for prevention of household and similar waste generated on the territory of Sofia Municipality, as there are no such targets in a national legislation. It is possible for such targets to be introduced when such requirements exist at a national level. And also the potential for reducing this type of waste should be studied before setting targets.

#### **Preconditions**

To assess the quantity of waste generated from the business at the territory of Sofia Municipality. Carry out an assessment of the effectiveness of such collection thus to quantify real potential for prevention.

Identify priority actions or changes in legislation in order to maximize the expected results.

Identify indicators to measure the progress of the project.

#### **Procedure**

A new calculation method of the fee for juridical persons - on the basis of waste quantities generated by the business rather than surface area - creates an incentive for prevention of waste generation and was introduced in 2006. The calculation method is regulated by an Ordinance for maintenance and cleanliness and waste management of the territory of Sofia Municipality (Adopted with Decision № 216 on Protocol № 38 by 16.04.2009).

In the territory of Sofia Municipality, different subcontractors are carrying out the collection and transportation of waste. With these subcontractors Sofia Municipality has agreements under the requirements of Public Procurement Act. That creates a possibility for businesses to conclude agreements with one of these subcontractors of their choice and to pay for the actual quantity of waste generated by their offices.

The main purpose of contracts with the businesses for the collection of the waste generated by their activity is to have an incentive for reducing the waste generation and thus for waste prevention. Such contracts have been concluded in all 24 districts of Sofia Municipality. They provide incentives for the use of all the existing systems for separate collection of waste and stimulate the companies to reduce waste generated in their offices in different ways, though not all actors have acted on it.

1. Fixed annual payment for street cleaning and MSW collection and treatment that amounts to 1% of property value - Figure 1

2. Fixed annual payment for street cleaning that amounts to 0.35% of property value, plus fixed annual payment per container (1.1 cubic meter container costs Euro 665/year, and 4.0 cubic meter container is Euro 3,990/year) - Figure 2

3. Fixed payment for street cleaning (0.35% of property value), plus fixed payment for MSW treatment/disposal (0.28% of property value), plus individual contract with private operator for waste collection - Figure 3

Sofia Municipality intends to prolong the implementation of this kind of fee differentiation for waste from businesses, because the results indicate that this practice can involve large numbers of persons in waste prevention.

## ***Instruments***

Information tools - the official site of Sofia municipality

Economic incentives because the businesses only pay only for the real expenses incurred as a result of the quantity of residual waste they generate. The aim of the business is to pay fewer fees, so that creates good conditions to reduce the quantity of waste generated in offices.

## **4 .Resources**

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### ***Financial Resources***

The overall amount of collected fees for 2007 - 2010 is 250 407 thousands Euro.

Staff costs: no additional costs staff costs for the municipality to monitor that practice.

External service costs and resources: there is no information about the financial resources used by subcontractor for all the activities related to waste generated by offices.

### ***Human Resources***

Internal paid: 1% of one full time equivalent in Sofia Municipality to supervise and to control all the activities related to collection of waste generated by businesses.

External paid: No additional payment is made by Sofia Municipality to implement that kind of collection of waste.

### ***Communication Tools***

Information on the official site of Sofia Municipality and on the official sites of its subcontractors.

### ***Allocation of resources over time***

No resources had been allocated for the implementation of the collection of waste generated by offices on the territory of Sofia Municipality.



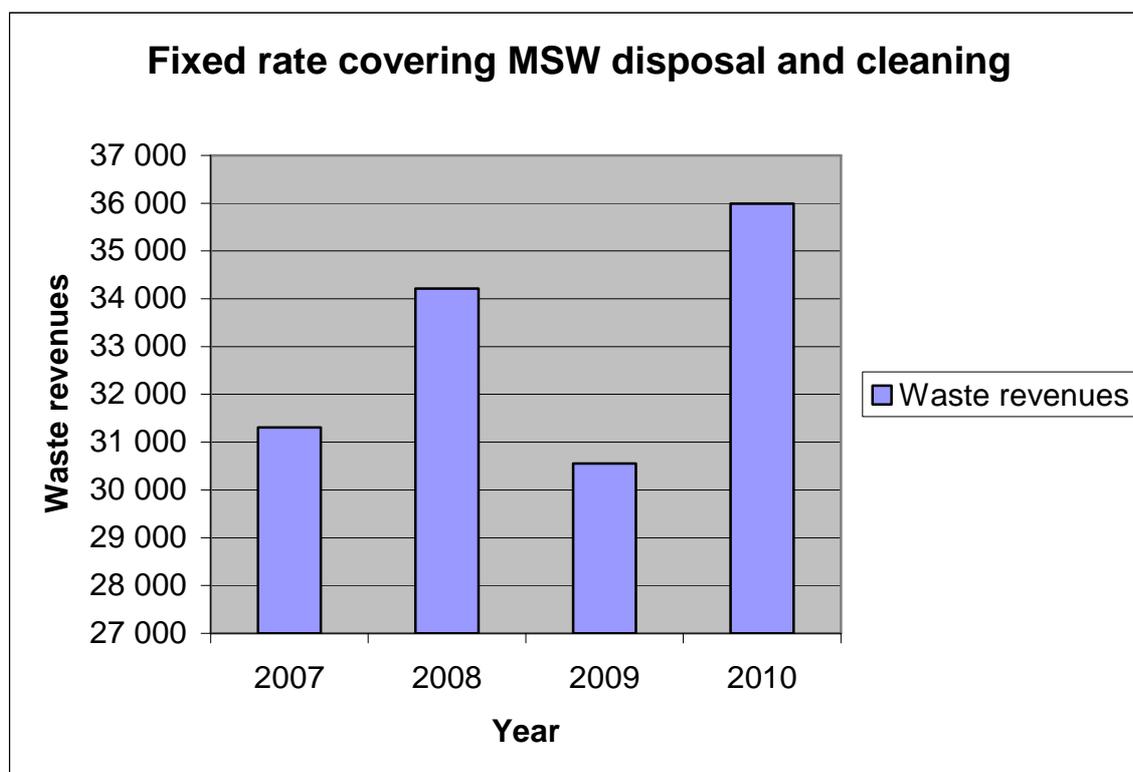
## 5. Evaluation

### Results

#### - Participation

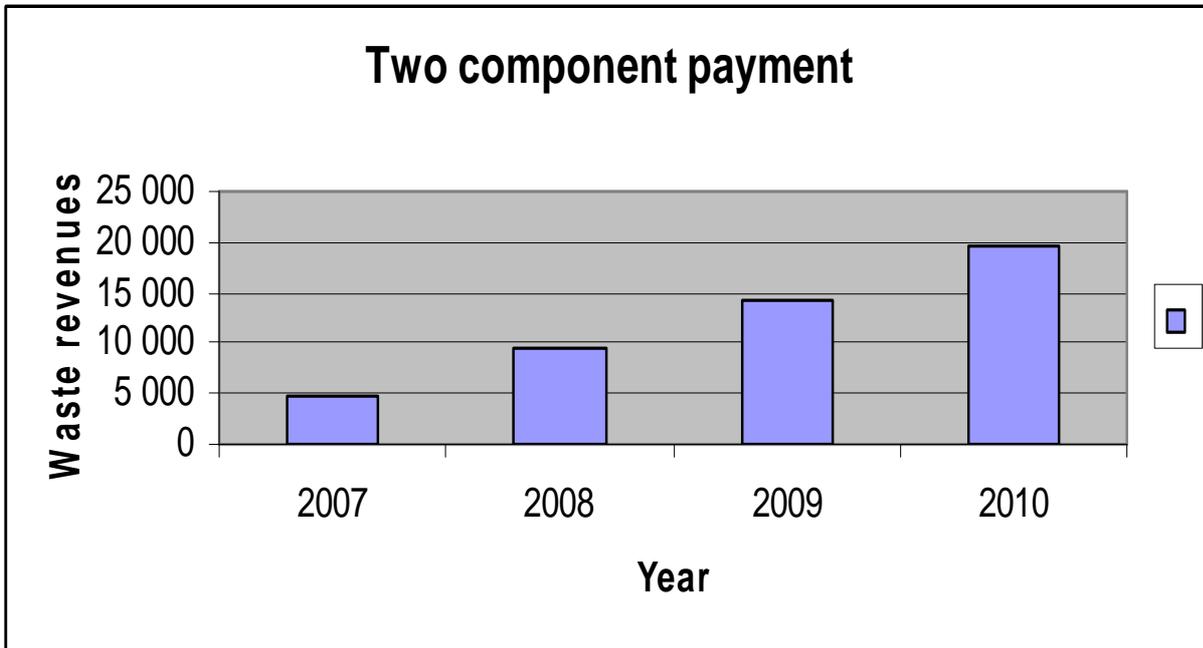
The pilot project was initiated in 2006 and it still on-going. Unfortunately the participation of the interested parties is hard to measure. The main problem is to find a number for all the business working on the territory of Sofia Municipality, which generate waste as to assess the use of such type of differentiating fee. Also the interest from the business in the implementation of such practice could hardly be measured, because no special information campaign dedicated to this separate collection had been implemented from Sofia Municipality.

Figure 1 Fixed rate covering MSW disposal and cleaning



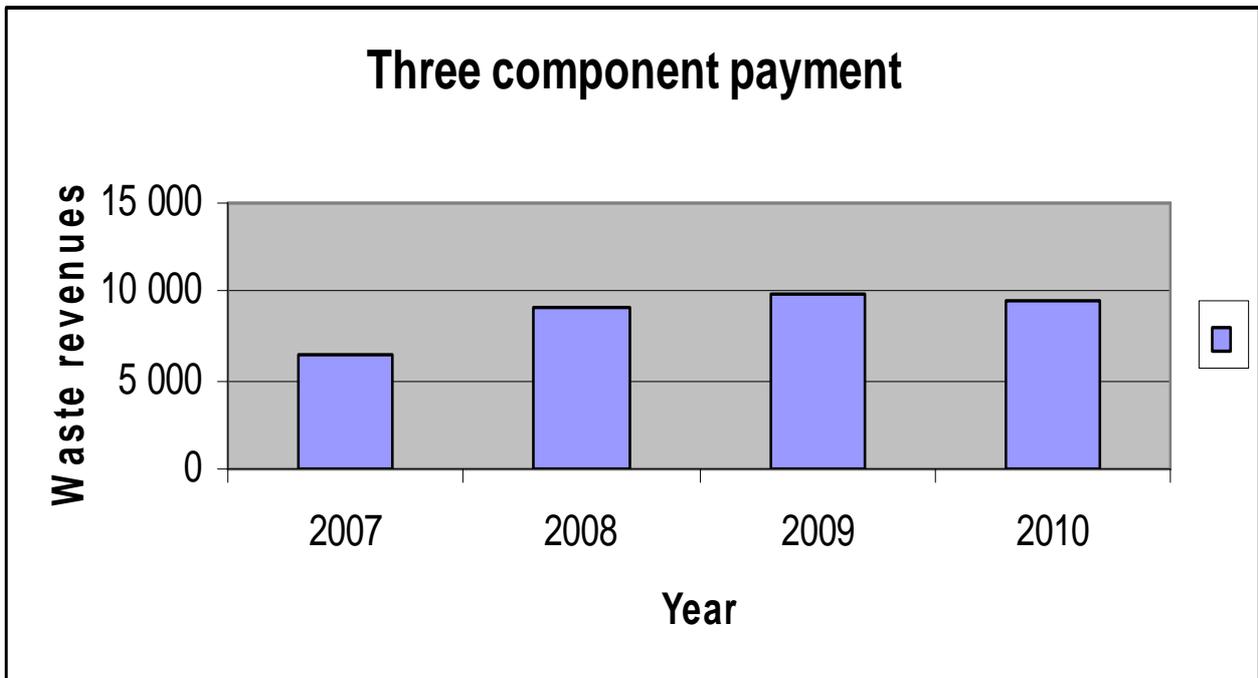
\* All the revenues are in thousands euro.

Figure 2 Two component payment = payment for street cleaning + payment for container



\* All the revenues are in thousands euro.

Figure 3 Three component payment = payment for street cleaning + payment for MSW disposal + ordering collection from private company



\* All the revenues are in thousands euro.

The figures above indicate progress made. However, the information about implementation of that practice has still not reached all of the businesses in Sofia Municipality.

#### **- *Avoided waste quantities (or toxicity)***

##### Current situation

The number of businesses involved in the practice is increasing. But the waste collected in this way or the waste prevented in this way couldn't be assessed.

Quantities of different types of waste generated, collected and disposed from businesses in 2007 was estimated at 127 825 tones/tonnes/year, based on data from the morphological analysis. That is the most recent morphological analysis made for the Sofia Municipality.

Encouraging implementation of this practice should reduce the quantities of waste generated from the businesses.

##### Further reduction target

It is possible to set targets for prevention of waste generated at the territory of Sofia Municipality by the businesses after assessment of the potential for prevention of the waste and when the changes in a national legislation on waste management are approved.

## ***Impacts***

#### **- *Avoided Costs***

Some costs are avoided due to prevention of waste generated from the businesses working at the territory of Sofia Municipality. Businesses who are participating in that practice for collection of household waste generated in their offices can reduce the fee they pay on waste, because they pay only for the quantities which are generated from their offices. At some places it is not possible to use that practice, because is not possible to separate the waste collected from the different businesses.

#### **- *Avoided CO<sub>2</sub> equivalents***

Prevention of waste generated is reducing the CO<sub>2</sub> equivalents and it is possible to be calculated by applying ratios to the avoided waste quantities, also in relation with all the treatment activities with household waste. Depending of the scheme for collection of generated waste from the offices also the emissions can be highly reduced, because of optimizing the transport schemes. Assumptions of net impacts could vary greatly from positive to negative depending of the quantities of collected waste, the way of treatment operations and the transport scheme.

Other environmental benefit: greater resource efficiency compared to the recycling, recovery and especially incineration.

#### **- *Social Benefits***

That activity creates additional working places for the subcontractors in order to satisfy the need of different activities with waste.

#### ***Continuation over time***

Differentiating of a fee for the juridical persons will be continued over time as one of the successful practices implemented at the territory of Sofia Municipality. More information about this practice needs to be published on the official site of Sofia Municipality.

## ***Difficulties encountered***

The main problem was that the quantities prevented could not easily be assessed, because of technical reasons. Also not so many businesses are not yet involved even though that practices has been in place for some years and the reason is lack of information about this possibility.

Some businesses are still not interested in the proposed actions and in incentives for reducing the amount of waste they generate. It is not easy to find a way to monitor all the process and there are not indicators put in place.

This action does not require substantial and sustained financial support from Sofia Municipality or from another financial instrument.

## ***Monitoring System***

Collected waste from business similar to household waste should be monitored, in order to create statistical data and to assess the effects of the practice on the prevention of waste. To date, no related public awareness activity was carried out by Sofia Municipality. The public awareness campaigns are organized by the subcontractors of the municipality in order to reach more clients and to create sustainable system for collection of this kind of waste.

It could be very useful to have monitoring systems in place and reasonable indicators which can justify the continuation of the project.

General issues with data (uncertainties, lack...): uncertainties on prevention of waste, as a result of implemented prevention practices in the business or of the financial and economic crisis, fluctuations over the type and quantity of this waste.

## 6. Lesson learnt & recommendations

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### *Opportunities & Challenges*

Applying such practice differentiating the fee for the juridical persons gave a possibility for businesses to prevent waste generation in order to reduce waste generated. It is challenging to involve many businesses and to establish indicators to assess the results of its implementation. Informational campaigns and to the choice of indicators play an important role.

Participants are the key in this practice and it is very important to motivate them through incentives such as paying different fees and to organize public awareness campaign. Sofia Municipality could prolong the implementation of practice for differentiation of a fee using the same indicators to report the achieved results.