

ASSESSMENT PROFILE OF WASTE MANAGEMENT SYSTEM IN UKRAINE

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With the industrialisation waste emerged in the proper sense. Waste had to become a problem so that waste management could develop. Within industry, commerce as well as households non-renewable resources were used with increasing intensity. Furthermore the economic development of the industrial system took up pace. Products got replaced faster and more frequent and were devaluated to waste. Through the development of new technologies and energies, the large scale use of raw materials that have been rarely used yet as well as the development of new markets a self-reinforcing process came into being. All these factors lead to an increasing economic and social change as well as a so far unknown amount of waste.

The aim of the classification into several stages is to prove that waste management is nothing else but an ongoing innovation process that is driven by a changing environmental awareness of the population on the one hand side and technological steps on the other hand side. Therefore the stage model represents the transition of waste management from the pure disposal management over a more or less controlled waste management to a resource efficient material flow management and consists of 6 stage: "Coverage & Disordered Disposal", "Ordered landfilling", "Collection logistics", "Recycling solutions", "Industrial Cycle", "Raw material sourcing".

The model has been constructed according to the development of various waste management systems. A first validation took place in the form of consecutive case studies analysing the waste management system of different countries. As the model turned out to describe the current situation of waste management in any European country very well, companies and institutions working in the field of waste management can use it as a starting point for further analysis. The model can serve as a means of evaluation and decision tool and therefore as an instrument for deriving a strategic basis for companies wanting to expand their business into the new member states of the European Union or other countries in Southeast Europe.

Based on analysis of 12 indicators we built assessment profile of Ukrainian's waste management (figure 1). An assessment profile allows representing the waste management situation of our country in a graphical form. The vertical list shows the various above introduced indicators. The stages of waste management are listed in the columns.

Indicators		Stage 1	Stage 2	Stage 3	Stage 4	Stage 5	Stage 6
Economy	GDP	●					■
	Inflation rate		●				■
	Industrialisation		●				■
Society	HDI		●			■	
	Unemployment rate			●		■	
	“Green” movements		●			■	
Policy	Data collection		●				■
	Separate collection		●				■
	Reporting duties		●				■
Ecology	Landfilling	●				■	
	Recovery/Recycling	●				■	
	Contaminates sites	●				■	

Figure 1. Assessment profiles (● Ukraine, ■ Austria), (author’s own work)

A point in the specific column and row marks the current development stage in that field. As the development of waste management even within the stages takes time, the point can stand at the beginning, middle or end of each stage.

The development of a country’s waste management system illustrates a sequence of comprehensive innovation projects that apply for appropriate requirements. For those countries that are still in the early stages of waste management, the phenomenon occurred that the ecological field is less well developed than the other areas.

In Ukraine plans and concept of solid waste management were adopted, which includes impossible task and the main reason for their implementation impossibility is the low environmental awareness of the population. Research shows that the majority of European countries implemented a strategy of solid waste management quite successful, and now in some countries is forbidden to place on the landfills the solid waste that have not been processed. New strategies that aim to use alternative energy resources, regarded as an alternative as well the municipal solid waste. It is significant to determine the stage of development what can be attributed to the state of waste management system in Ukraine and define the factors that influence on the system’s development. This will help to develop

realistic plans that include tactical and strategic tasks that correspond to the economic, social, legal and environmental level of development of the country.

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