

A SWOT Analysis on the Waste Management Problem in Romania in 2010

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Abstract. *From human activities are resulting huge amounts of waste, with different types of impact: lands changing, visual discomfort, air pollution, surface water pollution, soil fertility changes etc. Romania, a European Union member state, faces in turn with annual generation of significant quantities of waste, which cause problems of storage, recycling, reappraisal or their destruction.*

Romania has to involve - without exception - all institutions and each and every citizen in this action and to spend whatever is needed to get a clean and bright face.

We present below a SWOT analysis on waste management in our country at the beginning of the year 2010.

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Anywhere in the world from human activities are resulting huge amounts of waste, with different types of impact: lands changing, visual discomfort, air pollution, surface water pollution, soil fertility changes etc. Romania, a European Union member state, faces in turn with annual generation of significant quantities of waste, which cause problems of storage, recycling, reappraisal or their destruction, otherwise said the with protection of the environment.

In the context of EU integration, Romania was obliged to organize all the work in this area, to develop strategies aimed at recovering and reusing waste. A proper behavior in this regard is essential because it will ensure the limiting of waste, given fact that resources are insufficient and expensive for the more increasingly, diversified and also sophisticated needs of the Romanians.

Now, Romania gives detectable but not enough intense signals that it joins not only declarative but also factually the global sustainable development initiative. The concept has been launched since 1987 by the Prime Minister of Norway, Gro Harlem Brundtland, during the presentation of the report "Our Common Future". Sustainable development has a simple definition: it is "the development that meets present needs without compromising the ability of future generations to meet their own needs". But theory is one thing and practice is something else, because it depends exclusively on the human race, currently severely viced in any place on earth, devoided of will and education in this regard.

Sustainable development has a decisive component on environmental issues which represents one of the EU horizontal policies. Therefore, in the documents negotiated by Romania with the European Union for accession, Chapter 22: "Environmental Protection" has taken an independently place, in which the position "Waste" was distinguished. Our country is committed to a time of 15 years to substantially reduce the quantities of waste, to create the necessary systems for collection, recycling and reappraisal, but also to protect the future of the environment and population against pollution.

The compliance to the European standards is a priority and a necessity. The heritage due to an industrialization policy that aimed only results, without taking into account the consequences, is very difficult. We will have a short time, from now on, to repair and build an economic and social framework in accordance to the EU rules.

To become a clean country, Romania has to involve – without exception – all institutions and each and every citizen in this action and to spend whatever is needed to get a clean and bright face. This effort finally means human health protection, environmental protection and saving natural resources. It is extremely difficult for a country whose people has not received appropriate

education in this direction, and now responds difficultly enough to the signals transmitted to him to change completely his behavior practically convenient, wasteful and indifferent to the “suffering” of the environment.

Environmental protection has been placed to public interest and major responsibility objective based on fundamental principles of the environmental law: the principle of conservation, the principle of prevention, the principle of precaution in making decisions and the “polluter pays” principle.

We present below a SWOT analysis on waste management in our country at the beginning of the year 2010.

Strengths

- Work in this area has been entrusted since 2004 to a specialized agency of the Central Public Administration: National Environmental Protection Agency, with regional and local structures, with specific powers and duties, subordinated to the Ministry of Environment and Forests. In the establishment of this Ministry there is the Environment Department with responsibility on: Pollution control; Ground. Underground. Contaminated lands; Waste management; Dangerous substances; SOP Environment;

- In parallel, but with other powers the Environment National Guard operates;

- It was developed a National Waste Management Strategy for the period 2003-2013, approved by Law no. 426/2001, and amended by Law no. 27/2007, to be periodically reviewed in accordance to the technological and environmental requirements;

- Based on it, there were developed the National Waste Management Plan and the County Waste Management Plans. They are reviewed every five years or whenever it is necessary based on the annual monitoring report and development methodology. Their goal is to create the necessary frame to achieve the waste management objectives and conditions necessary for the financial support of the European Union;

- It was developed the National Strategy for Sustainable Development for the future years 2013-2020-2030;

- The National Plan for Research-Development and Innovation included some environmental, resources and energy objectives;

- The legislation is aligned with the European standards and the community acquis has been transposed into Romanian legislation;

- It was implemented the management and audit system for companies. This involved identifying risks and dangers that, through their activity, firms can provide to the environment; finding the means to eliminate them; establish

responsibilities; contracting for specific insurances, all in order to create a positive final image;

- Since 2005 measures to prevent waste producing from vehicles, out of use electrical and electronic equipments, including reuse, recycling or other forms of recovery of their components began to be implemented. Thus, Romania entered in the age of the car catalysts, the pollution tax, the “Jalopy” program etc.;

- Companies that introduce packaging on the market began to be engaged also in their recovery. Manufacturers are required to recycle 20% and to reappraise 30% of the quantity of packages resulting from their work. The percentage will increase to 50%, 66% respectively and if the companies will not observe it they will pay compensation amounts per kg of waste to the Romanian state. There are associations such as ECOROM Packaging, to which producers may become members by a fee, they guarantee that when the packaging they produce became waste it is collected and recycled by specialized firms;

- There has been made environmental balances Level I and II and risk assessments for more than 90% of the 450 waste storages, over 200 of them have already been closed. The number of organic deposits permanently rises, but it is still insufficient. Some wastes, such as the medical ones, require the destruction by burning in special, conform incinerators or dry sterilization at 150 Celsius degrees. Entrepreneurs interest on deposits and incinerators is growing, supported by the possibility of accessing European funds and the price of one euro/kg which hospitals pay for full-services;

- In schools of all grades there are more and more activities for enhancing and recovery the waste, but also for education, awareness of children and young people in the concept of selective collection etc. In the same purpose there are carried out various environmental campaigns. Some of the most recent and well known are: “SORT - Each waste in its place” or “Clean Romania”, in which initiators followed to attract not only the social environment but also the political one;

- The National Laboratory for Waste Management was founded, located in Bucharest, Galați, Bacău;

- In Romania there are cities with pilot projects in the area. For example, Piatra Neamț has, from December 2005, an ecological system of waste integrated management. Sorting is done from home and then at the sorting stations. The price of such a project is around 16 million euros paid from three sources: local government, central government and external partner. Now there are over 15 counties with such projects, which have been achieved by attracting European funds (ISPA);

- Romania obtained a transition period of two years after accession and which expired in late 2008 to implement the selective collection system through which to reach a minimum of 4 kg of waste recycled per capita. In all major towns of the country there were identified special storage spaces for paper, plastic and glass, recovery solutions, recycling, reusing, and monitoring of these processes;

- Increase interest in “green” business, which will become the most profitable in the future. There are already models of such business;

- Since 2007, the electrical or electronic buyer pays a green fee, a visible tax, which varies from one product to another, which is returned by the retailer to the manufacturer to give it to a collective management organizations responsible for transport and waste processing;

- For introducing on the market non-compliant packaging, with toxic content over the acceptable limits there are applied penalties;

- The composting organic waste and its use in organic farming, in the specialized agriculture (viticulture, forestry, fruit growing), in the maintenance of the green spaces, in the rehabilitation of roads and quarries or in the resorts where there are practiced winter sports.

Weaknesses

- The European Commission warned at that time that the environment is to Romania one of the “seven stones which hangs by its neck”;

- Romania's pet food imported annually worthes 80-100 million euros;

- There is no a recycler capable to obtain pet-food from waste. Recyclers have not yet invested in Romania because PET has to be collected on selective color and the necessary infrastructure is lacking. Now, PET is collected, compacted and converted into flakes, which then are exported to Southeast Asia. The only company recycling PET in Romania is in Buzău and it is a Taiwanese investment. It is forced to use also the raw material from outside because the waste collection in Romania is not enough. In the first years of operation, the company delivered pellets and flakes of PET plastic to producers in the country and abroad. Since 2004, however, Taiwanese investors have established a synthetic fiber factory, GreenFiber International, with a capital of nearly 7 million euros, fully using the product resulting from PET recycling;

- There is intention to introduce the “buy-back” system of buying plastic bottles, which would ensure internal production of materials for recyclers, but without a clear time horizon for the effective application;

- Neither paper is not collected selectively in our country, though there are identified the 12 large existing paper categories. From what is recycled it can be produced only toilet paper, tissues and newsprint;
- If the urban area have made major steps for the collection, selection and recycling, in the rural areas we can not talk about it. The waste generators from the 2686 villages don't have solutions and they must manage as they can this situation;
- Businesses in the area can be considered only pioneering actions, firms being ISO certified are just a few;
- Lack of investors is connected to the lack of infrastructure and difficulties in legislation application. The lack of a coherent system of information can be added;
- The required investment are up to 8 billion euros, double to the 2004 estimates;
- The Ministry of Environment and Forests does not fully master the waste problem and know all the data about how and how much is annually recycled;
- There can not really be said that there is a generalized system of waste management, because many firms meet only what the law requires and if it is not very clear or explicit, they do nothing;
- The architecture of garbage girdles in urban areas is almost impossible to rebuilt and refurbish, and the problem worsens because the waste is mixed throw;
- The insufficient knowledge of measures and possibilities, the population and businesses have to "get rid" of waste and ignorance of the concept of sustainable development.

Opportunities

- The obligations that Romania has to meet in the context of integration manage to take action in the battle against waste;
- Because of integration, environmental protection also becomes from a simple concern one of the most prolific areas for future business. For example, we are required to replace the existing landfills, which are sources of diseases and infections, with organic deposits, which are environmentally friendly and comply with the European legislation;
- Any business in the analyzed domain may help to create the integrated waste management system. Waste is at first sight a great inconvenient and undesirable result of human activity, but behind it, it is a great opportunity for those who know how improve it, create jobs, revenue and profit or resources;

- Waste management and marketing means their economic recovery and are, in the specialists opinion, more profitable than those of water, air and soil;
- Waste export can help to improve the commercial balance of our country, we mean even the composite waste, for example Tetra Packs packaging which have plastic, paper and aluminum in their composition;
- Non-recyclable waste could be burned as a fuel in cement factories or power plants;
- Foreign companies are increasingly interested in the recovery of waste in Romania. For example, aluminum beer cans is a very appreciated material, but we don't have yet such a collection system, which delayed potential investment;
- There can be accessed funds for waste management, biodiversity, ecological reconstruction, refurbishment, pollution prevention etc. Pre-accession funds totaled about 10 billion euros, and other three billion are available now from the Structural Funds;
- Cohesion Funds, available after 2007, are initially focusing on waste management and water, amounts in the early years being about 350-450 million euros, and will increase to 400-500 million annually;
- The access to the funds is possible both for public and private organizations, the interest of the last one becoming increasingly obvious;
- There are concerns to develop alternative solutions. Thus, to Lehliu Gară, a local countryside in Călărași county, the first refinery of biodiesel (biofuels from vegetable oils) was built. The location in the lowland area was chosen because it allows culture of rape and sunflower, the best material; such investments will continue, they are for the future. Following the Kyoto agreement to reduce emissions, the European Union urged member countries for at least 2% of total fuels by the end of 2005 and 20% by the end of 2020 be cleaned.

Threats

- Up until 2007 Romania was asked to close all non-compliant landfills. Instead there must be constructed 50 large organic stores and 15 smaller for isolated areas. Today this requirement is not covered and therefore the pressure on existing ones is very high and risks of large penalties against our country are also possible;
- Penalties will be paid according to the severity, time and importance of political and economic fault committed;

▪ The cost of a plastic recycling plant with a capacity of 7 kiloton is between 1.12 and 1.68 million euros. Due to the large amounts the project implementation should be closely monitored;

▪ In this field, everything depends on “selective collection at source”, ie on the will of every citizen to separate household garbage into different containers. In Romania this skill is just in forming or it doesn't exist yet, as does it no exist the reason to wash the glass or PET packaging;

▪ The present initiatives are only partially supported and promoted, which discourage others to consider an example of good practice. The lack of interest shown by the authorities risks to deep the gap between Romanian population and the responsible attitude over waste and the environment.

Environmental protection has become a worldwide priority. The failure in taking early necessary measures determined the occurrence of major environmental risks that threatens the entire planet, our country being a piece of this world puzzle. Greenhouse effect, the ozone layer alteration, water crisis, the desert expansion, flood, hurricanes, landslides, nuclear risks, everything imposes with great urgency to take action.

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