



## COMMON APPROACH ON WASTE MANAGEMENT

ANDREESCU Nicoleta Alina<sup>1</sup>, KISS Edit<sup>2</sup>

<sup>1</sup> University of Oradea, Romania, Faculty of Energy Engineering and Industrial Management, Department Textiles-Leatherwork and Industrial Management Str. B. Șt Delavrancea nr.4, 410085, Oradea, Bihor,  
E-Mail: [nandreescu@uoradea.ro](mailto:nandreescu@uoradea.ro)

<sup>2</sup> University of Oradea, Romania, Faculty of Engineering and Technology Management, Doctoral School, Engineering Science, Engineering and Management Str. Universității nr.1, 410333, Oradea, Bihor,  
E-Mail: [editkiss2013@yahoo.hu](mailto:editkiss2013@yahoo.hu)

Corresponding author: Nicoleta Alina, Andreescu, E-mail: [nandreescu@uoradea.ro](mailto:nandreescu@uoradea.ro)

**Abstract:** *The world population has doubled since the 60's, now reaching 7 billion – it is estimated it will continue growing. If in more advanced economies, the population is starting to grow old and even reduce in numbers, in less developed countries, population numbers are registering a fast growth. Across the world, the ecosystems are exposed to critical levels of pollution in more and more complex combinations. Human activities, population growth and shifting patterns in consumer nature are the main factors that are at the base of this ever-growing burden on our environment. Globalization means that the consumer and production patterns from a country or a region contribute to the pressures on the environment in totally different parts of the world. With the rise of environmental problems, the search for solutions also begun, such as methods and actions aimed to protect the environment and to lead to a better correlation between economic growth and the environment. The common goals of these endeavors from participating states was to come up with medium and long term regulations that would lead to successfully solving environmental issues. In this paper, we have analyzed the way in which countries started collaborating in the 1970's at an international level in order to come up with a common policy that would have a positive impact on the environment. The European Union has come up with its own common policy, a policy that each member state must implement. In this context, Romania has developed its National Strategy for Waste Management, a program that Romania wishes to use to reduce the quantity of waste and better dispose of it.*

**Key words:** *environment, regulations, waste, sustainable development, globalization.*

### 1. INTRODUCTION

During the UN Paris Conference in December 2015, the 21<sup>st</sup> session of Conference of Parties and the 12<sup>th</sup> session of the Reunion of Parties of the Kyoto Protocol. All participating countries assumed a common goal: to limit the increase of global temperature to less than 2 degrees and to continue their efforts of reaching their target of 1.5 degrees. The European Union took this target and put into a context, offering concrete courses of action to fulfill their engagement that until 2030, greenhouse gasses emissions will be reduced with 40% compared to the level of 1990.



## 2. ENVIRONMENTAL CONCERNS

### 2.1 Reasons that led to environmental regulations at an international level

Interest in the environment began in the 1970s' with the rise of the first ecologic policies. The United Nations Conference on the Human Environment, was first held in Stockholm, Sweden, in 1972, and marked the emergence of international environmental law. The Declaration on the Human Environment also known as the Stockholm Declaration set out the principles for various international environmental issues, including human rights, natural resource management, pollution prevention and the relationship between the environment and development. The conference also led to the creation of the United Nations Environment Programme. [1]

After the 1980s' pressures meant to increase and improve environmental standards have forced companies to synchronize their social investments with business strategies

The World Commission for Environment and Development, through the Brundland Report (1983), draws attention on the environmental problems and on how to solve them in the long term without harming the economy. The main objective of the Brundland report was to help define common perceptions of long term environmental problems and of the necessary efforts for successfully solving these issues.

After this moment, the legislation has been changed and adapted to the new environmental challenges, some of which were discussed at the Earth Summit in Rio de Janeiro (1992). The Rio Declaration was adopted then, for environment and development, the Convention for biologic diversity and the Agenda 21 were also presented. In these documents, a series of actions that governmental organizations must take to reduce the negative impact on the environment are presented. [2]

In 1997, the UN General Assembly held a special session to appraise the status of Agenda 21 (Rio +5). The Assembly recognized progress as "uneven" and identified key trends, including increasing globalization, widening inequalities in income, and continued deterioration of the global environment. A new General Assembly Resolution (S-19/2) promised further action. [3]

The United Nations Conference on Sustainable Development (UNCSD), also known as Rio 2012, (Rio+20 ), or Earth Summit 2012 was the third international conference on sustainable development aimed at reconciling the economic and environmental goals of the global community. The conference had three major objectives: securing renewed political commitment for sustainable development, assessing the progress and implementation gaps in meeting previous commitments and addressing new and emerging challenges. [4]

The document entitled "The future we want" is signed by the heads of states from 192 participating countries at the conference. Based on this document, the participating countries strengthen their commitments made in Agenda 21 for promoting a sustainable future. The document also contains a set of measurable targets aimed at promoting sustainable development globally. [4]

### 2.2 Managing waste in Uniunea Europeana

The European Union (EU), as a party to the United Nations Framework Convention on Climate Change (UNFCCC), reports annually on greenhouse gas (GHG) inventories for the year t-2 within the area covered by its Member States (domestic emissions taking place within its territory) [5]. The legal basis for compiling the EU inventory is Council Decision No 280/2004/EC concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol. [6] The Kyoto Protocol is an international environment accord. It was negotiated in 1997 by a total of 160 countries. The accord states that for industrialized countries, a decrease of 5.2% of greenhouse gasses must be done during 2008-2012, as compared to the levels of emissions in 1990.



In the European Union, each member state has organizations in place for such things, as well as national action plans. Most of the strategies of the member states are based on a common instrument, created for reducing greenhouse gas emissions at the level of the whole Union, but also to save up resources. Environmental protection is comprised of improving its quality (the environments'), protection of public health and rational and prudent usage of natural resources.

The EU's approach in managing waste is based on four major points:

- Recycle and reuse;
- Encouraging a high level of recovery of materials from components, preferably through recycling. In this way, several waste fluxes are identified, for which recycling is very important: product wrappings, out-of-use vehicles, batteries, electric and electronic equipment.
- Trying to find how to reuse waste that is not yet recycled;
- Eliminating waste entirely – in case some waste cannot be reused, these need to be eliminated using safe methods for the environment and human health, in a program of strict surveillance. [7]

By analyzing the total waste generated in the EU according to statistics provided by EUROSTAT, we can notice an increase in waste in 2012, as compared to 2010, from 2460 mil. t of waste to 2515 mil t of waste. Although the total waste value of 2012 is higher than in 2010 and in 2008, a decrease can be noted when comparing to the year 2004. Between EU member states there are major differences in the quantity of waste that is generated, as well as between the activities that led to this waste. We consider the value of waste from 2008 and 2010 to be less, due to the economic crisis.

The activities that contributed the most to producing wastes are new construction and demolition of buildings (33%), extracting industry waste (29%), processing industries (11%), households (8%), while the rest 15% was generated by other economic activities. [8]

By analyzing the waste quantity compared to population, we find out that the average quantity of waste generated in the EU was of 4984 kg/capita. We can also note that there are great differences between member states: while in Bulgaria a total of 22.1 tons of waste were generated per capita, in Croatia there have been only 781 kg/capita. [8]

## **2.2 Managing waste in Romania**

By Decree 870 from 2013, which entered into force in 2014, in regards to the National Strategy for Waste Management, Romania committed itself to better take care of waste disposal. With this strategy, Romania aims to prioritize its efforts in managing waste, to develop means through which to encourage waste reduction and waste recycling, increasing the rate of recycling and improving the quality of recycled materials, promoting reuse of containers, reducing the impact of carbon generated by waste, encouraging the production of energy by using non-recyclable waste, implementing the concept of cycle analysis of a product, in the waste management policy. [7]

By analyzing the situation in Romania per data provided by EUROSTAT, we can note that the total quantity of waste generated in Romania in 2010 was of about 219.309 thousand tons, while in 2012 it was about 266. 976 of the total of 2.460.330 and 2.515.110 thousand tons – representing 11.21% from the total waste produced in EU in 2010 and 10,61% of waste produced in 2012.

If we analyze the structure of waste from 2012, we can find that: mining and quarrying represents 83,63% from total of waste, manufacturing 2,25%, energy 3,38%, construction and demolition 0,49%, other economic activities 8,47%, household 1,74%. [8]



### 3. CONCLUSIONS

Globalization and the evolution of global tendencies make the environmental conditions and policies of each country hard to manage accordingly – separated from the global dynamics. The current global megatendencies will affect consumer patterns and influence environment and climate. These megatendencies are related to the demographic evolution, economic growth, means of production and commerce, technological progress, ecosystem degradation and climate changes. Until 2050 the total population of Earth is expected to pass the 9 billion mark, according to UN projections. [9] Nowadays we are 7 billion, while in the 1950's there were less than 3 billion. From 1900 until today, the use of materials has increased tenfold [10] and it could double again until 2030. [11] Global demand of energy and water is projected to grow with 30% and 40% in the next 20 years. [12]

In these conditions, the states of the world need to unite their efforts in order to answer the new challenges. These targets can not be achieved only by engaging governments. Economic actors and civil society have an important role in this process: their role is to apply the measures adopted at global level and implemented nationally.

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