

SORTING AND RECYCLING

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Abstract

In this present paper we want to initiate a waste sorted campaign to container with a view of recycling them on categories. Because of these we consider that is good like every citizens to know what he has to do and how.

Keywords: sorting, waste, container, campaign, recycling

INTRODUCTION

Recycling implies separating and collecting materials in the purpose of transformation them into new useful products. A great part of aluminum, glass, paper or steel used today in the whole world is already derived from recycling. For example glass and steel can be recycling not just once, but a number of times.

Special programs, recently implemented, lead to a well formed system of collecting and recycling waste, to the creation of a solid market on which every gram of material finds its utility.

Recycling also allows the reduction of waste storage costs.

MATERIAL AND METHOD

Recycling aluminum and steel used at beverage cans, papers and cartons, of glass and of some plastic constitute world wide a blooming industry. From these glass containers, paper carton boxes, roofs, pipes and many others are made of. For example: half of the aluminum from beverage cans, and also with over 25% of the used fiber at manufacture of paper comes from recycling.

From the money obtained benefits the person who led at obtaining the benefit. The power consume is also influenced in a positive way by recycling. For example the quantity of energy necessary for making a bottle from broken glass is smaller because the temperature necessary for this process is lower than that proposed for the manufacture of glass from classic raw materials.

The American people were the first who imposed the binding of recycling in 1988 through law named – Recycling and the reduction of public waste. By 1997 over 9 million of citizens from over 1600 communities participated at the recycling effort. The communities with over 5000 citizens were forced by law to organize themselves in the view of recycling waste. 450 of communities with fewer than 5000 did it voluntary.

That law requires organizing waste deposits and also operations of recovering resources of waste-to-energy. The document created a comprehensive framework which allows all training in the effort of recovering raw materials and energy from waste.

RESULTS AND DISCUSSIONS

We can do some think like this in our country asking to all citizens to organize themselves so that they can assure recovering at least 3 from the next list of materials:

- container from sheer glass;
- container from colored glass;
- quality office paper
- newspaper;
- corrugated carton;
- container from beverage aluminum;
- container from steel or bimetallic beverage;
- plastic.

The most part of community programs focused on 4 or more materials from this list. Also leaves, branches and waste from the garden requires a separate collecting, entering in a composting process (leaves) or in one of storage and producing a large material used in gardening called “mulch”. This wood storage is used at covering soil on which lawn is not planted.

The storage layers maintain the soil’s humidity, detain the dust and give a nice look to the garden. It’s considered that such an utilization is superior to burn in incinerators.

Citizens are forced to recover the used oils and batteries derived from the maintaining operations of their own cars. In communities where recycling is held through local arrangements, all commercial activities must assure at least the recycling of aluminum, office paper and leaves.

In the view of a correct implementation at this mechanism local coordinator work, which form a competent system in advising citizens it what must be recycling.

GLASS – is 100% recyclable, recovering it saves an important volume of energetic resources. Making glass from sherds consumes less energy and making it of raw material. Recycled glass is used at making beverage cans or food cans, and also as insulator in constructions. Normally the clear glass is used at manufacturing products from glass is used at making colored products. From this reason recovering programs ask citizens to separate them by color. Because food scraps remained in glass containers attract bugs we have to wash the bottles before including them in the collecting process. Recovering program asked that among the glass bottles DO NOT mix window glass, ceramics, light bulbs, this component can do damage to equipments that process recovered glass.

NEWSPRINT – recovered is used editing. The last of the destination of newsprint was possible after replacing the ink printing technologies which have in composition heavy-metal, being the fruit of a research in any university. Recycling paper saves an important space in waste ramps. Paper waste is delivered in plastic bags or tied bales. These can contain all types of printed paper.

OTHER PAPER PRODUCTS – Recycled office paper is used at manufacturing writing paper, napkins and paper towel. For example, like something new on the American market catalogues and postal waste are collected separately.

ALUMINIUM – is the most valuable of recycled household products. From beverage cans of aluminum new products with the same destination and a power consume smaller are realized. It’s recommended that before depositing containers in the collecting tank to be verified if the material is aluminum with magnet. The containers must be washed before storage for not leading at insects’ multiplication. Other aluminum products that can be

recycled are aluminum foil, clean cookies trays, replacement components from the kitchen furniture.

CONTAINERS OF STEEL FOR BEVERAGE – Steel cans are useful in steel industry and can be recovered and recycled. Verifying ferrous characters is made with a magnet. Boxes can be crashed for saving space. They must be washed before handing over.

PLASTIC – plastic industry created a coding system which allows consumers identifying different types of plastic used in package industry. The code can be found on the bottom of the most part of the containers. Of most types plastic used in package field, two are usually recycled: bottles of mineral water/soda. The code that can be found on the bottom of these bottles is “1”. 30% of these bottles sold on the market are recovered, recycled and found then in a multitude of products; beds, clothing industrial containers or for alimentation, spare parts. The bottles are delivered without the plug and ring. The bottles of different colors are separated. The clear ones will lead to obtained granules which can be useful at everything. The colored ones are mixed and colored in the process of melting with different colors based on the attribution they’ll have (for. Example dark brown for chocolate syrup containers or black for motor oil containers).

MILK BOTTLES MADE OF HDPE – are the white ones, non-transparent codified with “2”. The raw material roused serves at making containers, plastic pipes and flowerpots. They must be delivered washed for saving space. Recycling other types of plastic is a process in full expansion on the occidental market.

LEAVES AND GARDEN WASTE – leaves, brunches and other garden waste are big which lead at occupying an important space in waste ramps. Fortunately there are special programs for reusing these valuable organic materials. These programs have at the bases composting leaves and brunches and transform them in a valuable fertilization product. At the same time chopping bigger brunches has a series of advantages which have been described previously. This is the reason why garden waste is delivered sorted. Beside, lot of citizens has their own arrangements for realizing leaves composting.

MOTOR OILS – In other country there are collected from special units over 20000 tones every year. If these oils would be throw on the channel, the results would be a serious pollution that might lead to a diminution of drinkable water. Fortunately oils can be reused in central heating or after reconditioning, or again as motor oil. Recycling oils is made very easy; they are collected in a container and deposited at a center or auto shop which recovers used oils.

AUTO BATTERIES – In almost all country from E.U. depositing auto batteries (plumb - acid) along with household waste is banned. The auto batteries are deposited in centrals of recycling batteries or at batteries dealers in return for a new one.

CONCLUSIONS

All information about recycling should be distributed by Environmental Protection Agency through local coordinators. A phone line should be available to everyone who is interested in information about recycling 24 hours a day.

Although recycling programs are different from town to town, a few things show the citizen what he must do regardless of the program’s peculiarity:

- Arrange a space for recyclable waste from your household. This can not be inside, but must be clean and covered because water and dust negatively influences the quality of recycled materials;
- If you do not have a special container, use a container you recovered, such as, a strong box of carton, a case or a basket. Usually, workers who take over waste, will rebuilt the container;
- Rinse the recycled containers before depositing them for not attracting insects;
- If you collect a large quantity of recycled products; squash the plastic bottles, aluminum cans for occupying less space. This operation is in your best interest;
- Do not break the glass containers. At the firm where they are received, they are sorted by hand and broken if it is the case;
- Buy only products packed in containers accepted by the recycling centers.
The most important thing is to try to produce less waste. Here are a few ways:
- buy products made on packed in recyclable materials. They are marked with the symbol of recycling. The same meaning is in the grey colored interior of a can;
- buy containers which have a larger quantity of product;
- avoid unique use products such time the reuse products can serve you in the same way.

Many of the waste management systems contain also an incinerator system which has for effect reducing the quantities of deposited waste. In the past, incinerators used to burn waste. Modern day incinerators are called, “resources recovery” or “containments of transformation energy waste” and follow to recover the energy from burned waste, producing steam or electric power.

“We recycling for an environment clean for us and for our children”

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