

THE WASTE PAPER RECYCLING PROGRAM IN ATTICA REGION

S.Koroneou¹, E.Z.Stamatopoulou²

¹ΠΕΡΙΦΕΡΕΙΑΚΗ ΣΥΜΒΟΥΛΟΣ

²*Department of Waste Separation at Source, Directorate of Recycling, E.D.S.N.A.,*

6 Andersen St., 115 25 Athens, Greece

Association of Municipalities in the Attica Region –Solid waste management (EDSNA) is a public unit, founded in 1970 and it is the union of all the 66 Municipalities of Attica Region responsible for the solid waste management of the entire Region . E.D.S.N.A owns fully equipped waste management facilities in order to provide a sustainable waste management system for the public . Attica Region includes the capital of Greece, Athens and has a population of 3.8.million people who produce about 2.1 million tons of MSW. The major task for EDSNA is the development & operation of the regional Intergraded Waste Plan, which was approved by the regional council in 2016.

EDSNA has been operating since 1992, a separating- at -source program for waste paper produced in urban areas (households, public factor, private companies). To serve this purpose a network of approximately 1000 metallic bins (1100lt) has been developed around Attica Region (excluded the island area). In 2016, taking account for the weaknesses and the problems identified in the operation and the results of the existing paper collection program, it was decided to redesign this collection network and develop instead a new Paper Recycling Program according to the Greek National Plan for Waste Management ,which sets specific targets of paper/ cardboard collection and in implementation of the Regional Intergraded Waste Plan of Attica .

The planning of the new Paper Collection Program of EDSNA, was based in the fact that nowadays the main waste paper producers are mostly public organizations, schools and hospitals. Therefore, in cooperation with the Municipalities of Attica Region- members of EDSNA, started the installation of metallic bins in schoolyards and public buildings. The participants were also provided with special designed bins (80 lt), made of cupboard, for indoor use. These bins are discharged to the metallic bin located outside the buildings and are collected by special type MSTs-Packer trucks. The collected waste paper is stored in closed containers until its disposal to the Recycling Unit. An online fleet management system is placed on each of the six vehicles, so as to allow monitoring of the collection as weighting each collecting bin, reassuring the recording of quantity data. The mechanical equipment of the Paper Collection Program is operated by the personnel of EDSNA (drivers, workers).

The success of the Waste Paper Collection program depends a lot on the participation of citizens and their environmental awareness. The general idea was to increase participation in paper collection in schools and inform students about how beneficial recycle is to the environment. With regard to dissemination and information activities in schools the “Come in Our Circle” campaign was developed and the main achievements include:

- Creation of the logo “CHARTOFAGOS”, a funny cartoon who loves to eat paper, and appears on the equipment/consumables are requiring for the information/awareness activities (e.g. leaflets, stickers, posters)
- Creation of an educational electronic game (DVD) about recycling of different types of waste (paper, biowaste, plastics) . The DVD is given to children after their participation in awareness activities in schools.

- Promoting waste paper recycling on EDSNA website.
- Presentation of the program at above 150 schools in 25 Municipalities of Attica, five information meetings with environmental education teachers, several events organized by Municipalities and Attica Region (running races, environmental day Festival etc)
- Large number of press releases in local newspapers, news websites.
- Participation in the “Followgreen Project”, a platform about recycling operating in the Municipalities of Vrillissia and Pallini.

The benefits of the Waste Paper Collection and Recycling Program are:

- The increase of the quantity of collected paper
- The significant quality improvement of the collecting material (impurities ~10%) that insures the interest of the market
- The utilization of the mechanical equipment and workforce of an existing structure in a better way, with better results and fuel savings
- The local authorities benefit from an increase in the tonnage of waste paper collected improving their recycling rates and meet the obligations of the Intergraded Waste Plan of Attica Region
- Before the Program has begun, the paper that was produced at schools and government buildings was not sorted and it was disposed with other waste (organics, waste packaging). There was a lack of an organized structure which would ensure that the paper would be recycled, and once EDSNA guaranteed consistently service of collection, the school community and public sector increased the participation in the recycling program.
- The most important is that the Waste Paper Recycling Program in one year managed to educate not only children but also their parents and family by making recycling part of their daily routine.

The plan for 2018 is the extension of the Program to include more hospitals, government buildings and ministries. Currently 40 Municipalities of Attica, 4 Hospitals, the Greek Parliament and all the Office Departments of Attica Region participate in the Program.