

Area of interest Separate waste collection in the town of Savignano sul Panaro (Modena) Italy.

About the activity The initiative in the town of Savignano sul Panaro, the educational project “Dea Minerva”, originated from the intention to start a project of cooperation and development involving schools, the environment, the surrounding area and the community of this small town of approximately 10,000 inhabitants.

Business requirement and proposed solution The guiding principle of the Dea Minerva project is one of the key aspects of the circular economy: creating greater value for secondary materials by focussing on the quality of separate waste collection, in order to obtain greater economic benefits from the market.

The project started in 2012 with the separate collection of polyethylene terephthalate (PET), and it then expanded with the collection of additional plastic material – High and low density polyethylene (PE-HD, PE-LD) and polypropylene (PP) – paper and cardboard, aluminium cans and containers in tinplate.

The local administration and the school in Savignano sul Panaro brought pupils, parents, citizens and businesses together to implement this environmental and educational project aimed at promoting good practices and improving the quality of separate waste collection, managed non-professionally. The project was developed in accordance with Article 181 c. 6 of Legislative Decree 152/2006: “In order to promote environmental education and to contribute to the separate collection of waste, the systems adopted for separate collection of paper and plastic in schools are exempted from authorisation because they are not associated with high risks and are not managed professionally”.

The project, therefore, provides a further option for waste collection in addition to the “traditional” forms, which are carried out by the Public Service Collection Manager and involve on-street containers or a door-to-door system. Every three weeks, the materials left by the town’s inhabitants at the temporary deposits placed within the various school buildings, are collected and then placed ‘in reserve’ in a single authorised collection point, from where, on a monthly basis they are removed by authorised collection companies, to undergo subsequent recovery processes. The town’s inhabitants can choose freely whether to support the project.

The project enjoyed particular success with the town’s inhabitants and commercial activities, craftspeople, artisans and business people committed to

carrying out an attentive selection of their waste materials, which, seeing as they do not require any costly processes of sorting prior to being traded, constitute a genuine resource that can be directly sold onto the recycling market.

Main benefits

From 2012 to 2016, the quantity of materials collected increased from 6.9 tonnes to 335.7 tonnes. Of this material, 71% was paper and cardboard, 19% PP, 8% PET and 2% aluminium and tinfoil. The main benefit was of an economic nature because, thanks to the Dea Minerva project, the school was assigned 2,800 euros in 2012, a sum which by 2016 had risen to 19,700 euros for a total amount over the four-year period from 2012 to 2016 of 54,400 euros. This amount is forecast to reach 100,000 euros by 2019.

Thanks to this success, in 2017 the local council informed the school that it could implement school redevelopment projects worth 59,100 euros between now and the 2019/20 academic year.

Potential for roll out and development

The model of the Dea Minerva project can be replicated by all of Italy's local governments and in particular by small and medium-sized towns where separate waste collection management can become a feature of collaboration between local citizens.