

## **Plastic waste recovery: the project PLASMARE**

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The main objective of the project PLASMARE is the management of household waste, as it is not about dealing with, eliminating the elements under discussion, reducing the impact on the environment and promoting the ecodesign of new products. Your interests, your negative impacts, you get the disposal of the undifferentiated waste in landfill, at the end of an investment management, encouraging the reuse of plastics consumption for the production of new products. The present project therefore aims at: development and recycling of hard plastic waste management to date undifferentiated to minimize the data disposed of in landfills; to encourage the reuse of secondary raw materials deriving from raw materials under consumption in new production cycles to replace virgin raw materials, promoting the development of a dedicated supply chain; study and develop innovative eco-sustainable technologies and tackled on an industrial scale on the income statement; to stimulate the ecodesign of products in order to extend the life cycle of medical materials and promote an eco-sustainable use of resources.

The project includes the following activities:

- Study of the availability and type of plastic materials to be used are not available for the life cycle: study of the state of the art, identification of the collection centers and evaluation of the cost of the material
- Identification of treatment strategies and tests for the production of secondary raw materials (SRM, for example flakes and plastic granules)
- Characterization of the SRMs obtained and analysis of the efficiency of the process
- Optimization of separation techniques and implementation of a laboratory-scale prototype system for the production of SRMs
- Strategy for using SRMs and building a prototype (eg a model of goggles)
- Environmental life cycle assessment and efficiency of the transformation process
- Market analysis and economic potential of the products

Reference: [www.progettoplasmare.it/](http://www.progettoplasmare.it/)