

R&D on urban bulky waste recovery will allow to obtain a benefit of more than 2,000 annual million euros in Europe

AIMPLAS coordinates the European project URBANREC, where 20 other entities from seven different countries take part, including public organisms in Spain, Belgium, Turkey and Poland.

The project's aim is to improve logistics and treatment of waste, such as furniture, mattresses, upholstery, textiles and plastic garden products by means of innovative and patented separating techniques that will generate a net profit of 225 euros per ton.

Valencia (26-05-2016).- In spite of the development carried out on urban waste management in favour of a circular economy, bulky waste represents a challenge for being recovered. More than a 60 % of the 19 million tonnes of furniture, mattresses, upholstery, textiles and plastic garden products, among others, are thrown away each year in the European countries end in landfills.

AIMPLAS, the Plastics Technology Centre, coordinates the European project URBANREC (agreement no 690103), within the 2020 programme's framework. In this project, lasting 42 months, other 20 partners participate. They are developing effective management solutions promoting prevention and reusing, but also applying innovations on logistics and waste treatment to make possible bulky waste recovery for obtaining high-added value recycled products, such as adhesives; solvents or additives; foams; composites reinforced with fibre and felt and reinforced plastics, such as Wood Plastic Compounds, etc. by means of innovative solutions on mechanical and chemical recycling. In particular, the aim is to achieve an 82 % recovery of bulky waste across Europe with an economic net profit of 225.6 euros per ton, what represents 2,127 annual million euros.

Variable recovery rates

Urban waste recovery rates in the European Union vary very much from country to country, since there is no a specific global legislation. Logistic systems also vary from regions to regions and no economic recovery methods have been defined to be globally used. The percentages go from a 70 % in Belgium to a 5 % in Turkey, while in Spain represent a 25-30 %. By means of this project we aim to set the foundations to define and boost the development of a future European legislation on bulky waste, as well to give logistic and technological solutions to the problem.

Polyurethane or latex foams, other plastic mixes, different textiles or even wood are the most commonly materials urban bulky materials are made of. After being picked up, classified, reused and divided by advanced and patented techniques, such as 3D-cutting fragmentation, different recovering routes and processes will be developed, allowing to obtain added-value products.

The consortium of URBANREC project is coordinated by AIMPLAS and other Spanish local entities take part, such as the Provincial Council of Valencia and the Consorcio Valencia Interior and the companies ECOFRAG, COLCHONES DELAX and BLUE PLASMA POWER (Valencia). Other technology centres involved are Fraunhofer-ICT (Germany), CENTEXBEL (Belgium), IOS-PIB (Poland) and IYTE (Izmir, Turkey).

Some other entities take part, such as the Association of Cities and Regions for Recycling and Sustainable Resource Management (ACR+), located in Belgium. The European companies that form the consortium are IZNAB (Poland), RAMPF (Germany), RESCOLL (France), EUROSPUMA (Portugal) and PROCOTEX and VANHEEDE (Belgium), as well as the Public Waste Agency of Flanders (Belgium) and IMOG (Belgium), Waste Management department of the City Council of Warsaw (Poland) and the City Council of Bornova (Turkey).

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About AIMPLAS

AIMPLAS, the Plastics Technology Centre is located in Valencia, Spain and is recorded at the Register of Technological Centres of the Spanish Ministry of Economy and Competitiveness. The institute is member of FEDIT (Spanish Federation of Innovation and Technology Entities) and REDIT (Network of Technological Institutes of the Valencia Region).

AIMPLAS is a non-profit research association with the object to operate as a technological partner for enterprises from the plastics industry and thus offering them integral and customized solutions by coordinating research, development and innovation projects as well as technology services (analysis and testing, technical assistance, formation as well as competitive and strategic intelligence).

URBANREC



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