

# LIFE PST-SORT: 'To landfill or to monetise? The choice is

### yours

#### Post-Shredding Technology (PST) for the recovery of raw materials from Automotive Shredder Residues and a wide range of municipal and industrial solid wastes

#### Waste and unutilised valuables materials

Some 40 million end-of-life vehicles (ELVs) are being treated worldwide each year, representing around 42 million tons of waste per year, of which approximately one-third corresponds to after-shredding residues (ASR, also known as "automotive shredder residue" or "car fluff"). ASR is a highly heterogeneous mixture of metals, plastics, glass, rubber, textile, foams, wood, fines, etc. In Europe, after the de-pollution and dismantling of end-of-life vehicles, 6 million vehicles are shredded per year, and close to 1.5 million tonnes per year of shredding rejects (ASR) are sent to landfill or incineration.

In addition, without adequate recovery of recyclable material, for instance, rejects from ELV's processes currently account for more than 20% of parts, which is lost in landfills and incineration, missing the opportunity to recycle some of it and emitting greenhouse gases that could be avoided by applying innovative material recovery solutions.

#### An innovative post-shredding solution which recovers high resource-value materials

The LIFE PST SORT project focused on the development and demonstration of an innovative sorting solution aiming to recover recyclable materials from ASR of ELVs, as well as on a range of rejects issued from industrial waste and municipal solid waste, which are mostly landfilled or incinerated.

The project successfully developed the automated sorting technologies which utilise artificial intelligence with deep learning modules for enhanced recovery of valuable material for recycling or for use as alternative fuels. Therefore, in addition to the undeniable positive long-term environmental benefits, the modular solutions can offer the process which admits a wide range of feedstocks composed of granular materials with different particle sizes, the input materials which are conveyed to specific process equipment according to their particle size and density, totally dry and fully automated process which could be replicable to other industries and municipal waste streams.

The LIFE PST SORT project can serve as an example of implementation, with an industrial demonstration plant that can be visited by stakeholders, where material separation and recovery technologies can be tested and optimised.

## Call to action (a message from the entity responsible for the commercialization of the project outcomes – PICVISA)

"Current European recycling rates for industrial and municipal waste are insufficient. European citizens should inform themselves about the technologies available on the market for recycling their own waste."

Learn more

Project acronym: LIFE PST-SORT Reference: LIFE17 ENV/ES/000168 <u>Project website</u> Do you want to benefit as well from support to commercialise your innovative solution?

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