tExtended



Project acronym: tExtended

Call: HORIZON-CL4-2022-TWIN-TRANSITION-01-10

Promoting entity: ERT TÊXTIL PORTUGAL S.A.

Investment: 439.176,00 €

About:

tExtended is an EU-funded project with the overall objective of reduction of textile waste by developing and demonstrating effective textile recovery, waste valorization and recycling processes combined with digital tools, sensing systems and data-driven solutions to support sustainable circularity of textiles. The project will develop a Conceptual Framework to determine the optimized utilization of textile flows, which aims for the retention of value of materials in a safe and sustainable way. The Framework will be the basis for the development of a knowledge-based Blueprint, a master plan for a sustainable textile ecosystem. This will allow the project to implement a real scale demonstrator: the project will verify its replicability and the potential to reduce textile waste by 80%. tExtended is funded under the European Union's Horizon Europe Research and Innovation Programme grant agreement no.101091575 and is coordinated by the VTT Technical Research Centre of Finland.

Role of ERT:

ERT plans to work and create value in two fronts: first, providing industrial side-streams, and second, using the recycled materials on its normal production. In the point of view of side-stream valorization, ERT's side-streams (340 tons annually) are collect by specialized companies, and they are used for combustion or buried in specialized fields. As such, ERT currently has a cost to process these materials. Creating a new processing chain will provide value to those materials and reduce operational cost for ERT. On the other hand, ERT hopes to close the cycle, after providing the residues (fabrics foams and TNT's). ERT plans to use the rejuvenated materials in is production line, reducing costs and providing solutions to clients in automotive



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industry where we can offer parts made from production of car side-streams (LER 040222/Processed textile fiber waste) in accordance with the European Waste Classification List in 2021. If the new materials, made from recycling, suffer from some physical degradation that compromises the application in automotive industry, ERT can also apply these materials on other fields like shoes and technical textiles.

Localization:



