



CIRTECHTEX is an innovative project dedicated to promote sustainability in the textile industry, specifically within the production of textiles for personal protective equipment (PPE). The name is short for “Circular Technical Textiles”, and our goal is to transform the way PPE textiles are manufactured, used and recycled.

There is an urgent need to address environmental challenges in the industry.

The multidisciplinary team of collaborative partners, that are experts through all textile value chain, is working to develop solutions that minimize waste, reduce carbon emissions, and promote resource efficiency in order to contribute with the goal of sustainability in the textile industry.

### Coordinating beneficiary

**MARINA**  
TEXTIL

### Associated beneficiaries



Implementation of circular economy processes to reduce textile waste in the manufacture of personal protective equipment

Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.



## Innovation

The innovation of this project is the application of the circular economy combining the following factors:

- Upcycling process to fulfil rigorous standards with the new recycled fabrics (same standards and equivalent protection level than those produced with virgin raw material).
- Recycling of pre-consumed (raw and dyed) and post-consumed material.
- Recycling of various fibres from different families that are mixed together.

The technology needed already exists, but due to the difficulties that are related to the PPEs, it is not implemented in a general way in the technical textiles sector, even less involving the whole productive process.

## Key Objectives of Cirtechtex

The project aims to manage the waste generation in the technical textiles industry, specifically in the production of personal protective equipment (PPE).

The consortium plans to implement a circular economy approach to reduce waste and upcycle it into new PPE fabrics.

The goal is to recycle textile waste and incorporate a minimum of 20% recycled material in at least 80% of PPE fabric production. This will be achieved through a waste collection and recycling methodology, with an industrial demonstration capacity.

According to the EU strategy for sustainable and circular textiles, 80% of environmental impact products are determined at the design phase. Prolonged life, reuse options and fiber-to-fiber recycling present opportunities for more sustainable products and so going towards the EU strategy.

