

**CO-CREATION:  
Waste to Wear – From textile waste to sustainable materials for textiles, fashion and wearables**

**Project duration:** 1.2.–30.7.2020

**WANTED PARTNERS:**

Companies along the value chain from textile recycling and valorizing waste streams, the production of biobased fibers, enzymes, textiles, and garments.

We also seek designers and companies who are interested in biobased raw materials.

**NAME OF THE LEADING ORGANIZATION:**

VTT TECHNICAL RESEARCH CENTRE OF FINLAND

Contact: Marco Casteleijn, Senior scientist,  
[marco.casteleijn@vtt.fi](mailto:marco.casteleijn@vtt.fi), +358 40 120 7303



## **CO-CREATION: Waste to Wear – From textile waste to sustainable materials for textiles, fashion and wearables.**

### **AIM & CONTENT OF THE CO-CREATION PROJECT**

To gather a network of companies that will develop and exploit an emerging value chain of textile waste and biobased materials. We will operate in 3 classes: (A) biobased textile recycling (side-streams, composite materials), (B) biobased materials (bioplastics, bio-degradable plastics, vegan bioleather, protein-based materials (e.g. spider silk), biodegradable pigments, (C) performance garments designed for recyclability.

### **BENEFIT & COMPETITIVE ADVANTAGES**

1. Valorizing textile waste and its side streams; 2. Novel enzymes, biobased materials, high performance sustainable materials; 3. textiles designed for recyclability. Complete flexibility in the choice of end-product. In addition, (novel) products from class A are used for product in class B, Class B · Class C and where possible, Class C · Class A. Together with international partners (US, Asia) this creates a new value chain.

### **TARGET MARKETS & GLOBAL MARKET POTENTIAL**

Textiles, sustainable fashion industry, and bioplastic markets, with estimated values of \$1.2 trillion (textiles, CAGR ~4%), \$58.3 billion (sustainable fashion, CARG ~11%), \$6 billion (bioplastic, CAGR ~17%) in the next 5-6 years.

Website: <http://wawe.fi>