



MANUSQUARE



www.manusquare.eu

# MANU-SQUARE platform in a circular economy perspective

MANU-SQUARE Final Event

June 23<sup>rd</sup> @ 10:30 (CEST) OFFICIAL PUBLIC PRESENTATION OF MANU-SQUARE PLATFORM

Graziano Elegir

Innovhub Srl

© 2020 MANUSQUARE



MANU-SQUARE project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 761145

**DISCLAIMER:**

The herewith information reflects only the author's view. The European Commission is not responsible for any use that may be made of the information herewith included



INNOVHUB  
STAZIONI SPERIMENTALI  
PER L'INDUSTRIA

innovazione e ricerca

## Areas of Business

Multisector research and innovation centre focused on:



Paper sector (packaging, tissue and graphic paper)



Textile (silk and other textile fibres)



Food (oils) and coatings (varnishes)



Fuels and biofuels



## Services and expertise

innovazione e ricerca

Innovhub srl bridges academia, industry applied research and advanced services.

Its major expertise related to **paper** and **textiles** sectors are:



Circular economy (recycling, biodegradability and compostability)



Sustainability (LCA)



Product innovation (antibacterial, surface treatments)

# Circular economy

A key challenge for both paper and textile sectors

## Current scenario



Paper sector EU recycling rate: 72% (one of the highest material recycling in EU)



Textile sector: recycling rate approximately 1%

## New challenges and targets

According to circular economy directive the Paper packaging must reach 85% by 2030

Textiles domestic collection will be mandatory in Europe in 2025 (In Italy from 2022)

Post industrial material recycling is gaining relevance



# Circular economy

## Paper sector

Paper packaging increase complexity to respond consumers' demand:

- New barrier coatings
- Increase percentage of multi-material packaging (paper/plastic or paper/aluminium)

### Generation of higher waste rejects

Waste rejects (Plastic mix + fibres ) from Paper recycling operation

New technologies allow to recover fibres, **but...**

plastic mix is predominately sent to incineration and/or to landfill.



**New solutions for recycling this plastics mix  
are needed**

# Circular economy

## Textile sector

**Challenge:** post industrial textile material is currently mainly sent to incineration and/or landfill. Chemical recycling is limited.

Opportunities of recycling exist:

- Mono-material textile can be mechanically recycled → Colorants and coating removal is mostly needed
- By-products valorisation

# Circular economy

## Textile sector

Challenge: post industrial textile material is currently mainly sent to incineration and/or landfill. Chemical recycling is limited.

Opportunities of recycling exist:

- Mono-material textile can be mechanically recycled → Colorants and coating removal is needed
- **By-products valorisation**



The use of the MANU-SQUARE platform is relevant for:

- Match-making opportunities (find the right partners) thanks to its **Matchmaking component**
- Circular economy (closed loop recycling) and Industrial Symbiosis (open loop recycling) relying on its **by-product and waste sharing service**

# Thank you for the attention

Graziano Elegir

Innovhub Srl

[graziano.elegir@mi.camcom.it](mailto:graziano.elegir@mi.camcom.it)