



RESET
Interreg Europe



European Union
European Regional
Development Fund

ACTION PLAN for
The Municipality of Prato
and Next Technology Tecnotessile

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ORGANISATIONS INVOLVED



MUNICIPALITY OF PRATO
COORDINATO OF RESET
PROJECT

NTT
RESEARCH CENTRE
SPECIALISED IN TEXTILE
SECTOR



NEXT
TECHNOLOGY
TECNOTESSILE
SOCIETA' NAZIONALE DI RICERCA R. L.

AIM OF THE RESET PROJECT

Generation of a **policy change** in the implementation of regional policies and programmes of the Structural Funds related to strengthening:

- ❖ Research
- ❖ Technological development
- ❖ Innovation

Assure the sustainability of the T&C sector in the partner regions



Through **policy learning** and **capacity building** activities on public policies supporting innovative, green and sustainable T&C production and processes.

THE LOCAL CONTEXT

In Tuscany Region, the most important area for the T&C sector is the district of **Prato**



PRATO TEXTILE DISTRICT			
Year 2019	Number of Enterprises	Number of Workers	Gross production (B€)
Textile sector (including)	2,779	19,270	4,000
Knitwear and Apparel	3,508	20,314	3,500
Total	6,287	39,584	7,500



FEATURES OF PRATO TEXTILE DISTRICT

- ❖ Prato industrial system is based on division of production among independent SMEs specialized in specific activity (spinning, twisting, warping, weaving, dyeing and trimming or finishing).
- ❖ Clothing industry is becoming more and more and important in the area.
- ❖ Presence of technical textile products: paper textiles, medical textiles, textiles used in aeronautics, textile for building, agriculture etc.

Every stage of textile production can be found in the district.

- ❖ In average, every six months, Prato's district develops 2,000 new yarns, 60,000 new textile designs and hundreds of new textile collections.
- ❖ Every year Prato's textile industry produces around 90,000 tons of yarn, 300 million meters of cloth, 110 million meters of technical textiles and 12 million garments.
- ❖ The general value of production in Prato stands at around €5,500 million.
- ❖ Most of the products are exported to Europe, United States and Japan.

POLICY INSTRUMENT ADDRESSED

Regional Operational Programme of the Tuscany Region 2014-2020 (ERDF)



Main goals of the programme:

*Smart, sustainable and **inclusive growth** and economic, social and territorial cohesion, by increasing investments on **research and innovation** processes*

*Most of support activated fall under **Axis 1**: Strengthening research, development and technological innovation.*

*To **improve** the regional business system; to **increase** the availability of qualified human capital; to **boost** the collaboration between companies and R&D centres*



ACTIONS IMPLEMENTED

The instrument used for the implementation of the lessons learnt from the GPs of the RESET project was the Regional call for proposal for R&D project – ERDF published on May 2017 (“Bando Ricerca e Sviluppo” della Regione Toscana)



1

***NOVIFRA:** Study and implementation of innovative systems for the improvement of well-being and living conditions of the so-called "biologically fragile user", based on raising the effectiveness of non-pharmacological treatments*

2

***NANECO:** Panels and nanotechnology for acoustic adjustment in public buildings and energy sustainability in the company*

3

***COM4PRO** - Development of an automated process for the production of a mattress prototype with a high degree of thermo-physiological comfort made from textile waste materials*

NOVIFRA: Study and implementation of innovative systems for the improvement of well-being and living conditions of the so-called "biologically fragile user", based on raising the effectiveness of non-pharmacological treatments

Project goals

1. Development of an integrated system for monitoring, safety and orientation of fragile users in support of non-pharmacological therapies.
2. Study and realization of an innovative garden for fragile users with non-pharmacological therapeutic functions.

The system will be based on non-invasive tracking technologies and will be able to support, orient and monitor patients hosted by health centers and similar.
These functions will allow to support the wellbeing and the security of these patients, representing an effective help to non-pharmacological therapies.

NOVIFRA PROJECT

PARTNERS OF THE PROJECT		MAIN ROLE
1	GENERALI ARREDAMENTI S.R.L (Project coordinator)	Study and development of the equipment of the furniture which will incorporate elements of guidance
2	GIARDINERIA ITALIANA – SOCIETA' COOP. SOCIALE A R. L.	Study and development of the outdoor equipment, creating and testing the garden for the fragile users
3	HIHO S.R.L.	Software development for the data processing
4	NEXT TECHNOLOGY TECNOTESSILE – SOCIETA' NAZIONALE DI RICERCA R.L	Support in the definition of the right technologies to apply; support in the testing phase

GENERALI
ARREDAMENTI

HIHO srl
INTERNET & BUSINESS SOLUTIONS



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INSPIRING GPs FOR NOVIFRA PROJECT

- 1) GP: “*Smart textiles for wearable technology*” presented by the German partner STFI
- 2) GP: “*From wearables to smart textiles - from performance to emotion*” presented by the French partners CETI

Both GPs were presented during the 4th project seminar on “Smart textiles and new ways of production” (Chemnitz (DE), 20th June 2017).

The inspiration came from the use of the traceability technology, developed in the fashion sector, for monitoring action of elderly and disabled people



The project today: the tracking and monitoring system is ready; the testing phase in the nursing home is in course but it has experienced some delays due to COVID-19 pandemic

NANECO: Panels and nanotechnology for acoustic adjustment in public buildings and energy sustainability in the company

Project goals

1. Development of panels and nanotechnology for acoustic adjustment in public buildings and energy sustainability in industrial facilities.
2. Innovative panels with excellent performance in terms of acoustic and climatization of ambient.
3. Performance verification through testing activities in specific building

ACTORS INVOLVED:

1. MANIFATTURA DI MAIANO (Beneficiary)
2. UNIVERSITY OF FLORENCE (Subcontractor)
3. NEXT TECHNOLOGY TECNOTESSILE (Subcontractor)



Based in the Prato district, specialized in the production of technical textile for building, footwear, automotive, metallurgic industries and geo-textile and agro-textile industries as well.

- 1) GP: *“Nanostructured textiles to promote cell growth in severe burn injuries”* presented by the Spanish partner AITEX

This GP was presented during the 4th project seminar on “Smart textiles and new ways of production” (Chemnitz (DE), 20th June 2017).

The inspiration “topic” was the use of nanofibers which have technical properties that can be used and adapted in the production of innovative panels for the building sector.



***The project today: the new sound-absorbent panel with nanofibers and innovative chemicals has been developed and tested and the results are excellent.
The final product is ready and marketable.***

COM4PRO - Development of an automated process for the production of a mattress prototype with a high degree of thermo-physiological comfort made from textile waste materials

Project goals

- 1) Development of a mattress made of a 3D composite based on recycled materials such as polyurethane, latex and virgin or recycled synthetic textile fibers
- 2) Development of the removable shell that will contain the mattress that will be made of a fabric properly treated to give it anti-odour properties;
- 3) development of a line of automatic machines for the stitching of the shell and the assembly of the mattress and its packaging.

COM4PRO PROJECT

PARTNERS OF THE PROJECT		MAIN ROLE
1	TECHNOPLNATS SRL (Lead Beneficiary)	Study of a new concept of mattress and implementation of a pilot production facility
2	MONTENERO – O.M.T.P. OFFICINA MECCANICA	Design and implementation of an automated system for the assembly of the mattress provided with production system real-time control
3	FF SRL	Design and development of a textile structure for the mattress with high thermophysiological comfort and anti-odour properties
4	NEXT TECHNOLOGY TECNOTESSILE (Consultant)	Support in the definition of the right technologies to apply; support in the testing phase

TECHNO*plants*
technologies for non woven

OFFICINA MECCANICA
MONTENERO

 **Lenzi Egisto** by *FF*

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INSPIRING GPs FOR COM4PRO PROJECT

- 1) “Carbon Fibre Recycling Concept – Re-use of carbon fibres in nonwovens”, presented by the partner STFI
- 2) “Textile blankets made from plastic bottles wastes”, presented by the partner CITEVE
- 3) “Textile Recycling Valley”, presented by the partner CETI

These GPs were presented during the 1st thematic seminar about recycling in textile and waste disposal” (Alcoi, Spain, 20th October 2016).

The inspiration came from the use of waste, different from traditional textile waste, to be used for new products in different sectors.



The project today: the new machines and the innovative fabric for the mattress have been developed. The project results will be exploited through the creation of a Start-up by the lead partner.



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Thank you!

Questions welcome



Project smedia