

May 2024

## Editorial

### A balanced assessment and ambitious initiatives: a look back at the Techtera General Meeting

During the meeting, Techtera presented its results for the year 2023. They showed very satisfactory results, in alignment with the strategic roadmap.

The president wished to thank the 282 members, the funders, the innovation commission and the cluster's entire team of experts.

Techtera also discussed the initiatives undertaken in 2023, which are designed to:

- **Support innovation:** The year 2023 documented a record number of projects submitted and funded. Twenty-six R&D projects were labelled and funded, representing an overall budget of €47 million. More than 44 projects were submitted, the results of which will be communicated in 2024. To encourage the emergence of tomorrow's R&D projects, the cluster has actively stimulated this dynamic with the organisation of 11 Innovation Workshops and 41 Work Groups.
- **Support development:** Techtera has initiated numerous actions aimed at stimulating the economic development of its members, in particular through the organisation of 32 Innovation Workshops. Two hundred and thirteen companies benefited from thematic conferences and technology watches. In addition, 26 companies were accompanied or supported internationally during trade fairs, and 69 during missions abroad. The BtoB meetings brought together 387 companies. The use of the Techtera textile know-how database led to 35 supplier searches in 2023, which also contributed to the growth of their activities.
- **Participate at the European level:** The year 2023 was marked by a strong commitment to Europe; with Techtera's investment in European Intercluster Projects, such as [RegioGreenTEX](#) and [AlpTextyles](#) as well as in R&D projects with [BioStruct](#), [MC4](#) and [Caliméro](#).
- **Optimise the visibility of the sector:** Techtera promotes its members, their news, their successes and their projects via its newsletter, its website and its LinkedIn page and various press releases.

The Innovation and Development teams also presented the first results and actions for the first quarter of 2024 with regard to Techtera's strategic roadmap.

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## Focus

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### Techtera and the EDEN Cluster: a strategic collaboration for innovation in Defence and Security

The signing of a partnership between the EDEN Cluster and Techtera, on April 18 at ITECH during the cluster's General Meeting, marks a significant step in the landscape of innovation in Defence and Security.

The EDEN Cluster is the voice outlet for small/medium enterprises working in the Defence, Security and Safety sectors. It is supported in particular by the DGA (*French Ministry of Defence*) and represents an ecosystem of 120 small/medium enterprises.

This group combines technical expertise and perfect knowledge of operational needs. This makes the offers and proposals of its members more coherent and competitive, in both civil and military fields.

The aim of this partnership is to facilitate the emergence and development of cooperation to promote innovation and competitiveness.

#### To implement this collaboration:

- **Animation activities, with a view to setting up joint projects and developing partnerships:** Participation of Techtera in Eden Work Groups dedicated to operator equipment, organisation of joint workshops linked to the themes of high equipment performance & smart textiles/wearables.
- **Pooling action of mutual interest:** Co-organisation of events, workshops, information relay, etc.

By combining their expertise and resources, the EDEN Cluster and Techtera are committed to meeting the most complex challenges – They encourage the deployment of textile projects in the fields of security and defence.

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## They are new members

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### EUROPROTECT

EUROPROTECT is an integrated manufacturer of technical textiles intended for personal protection. It covers all production stages – from weaving to finishing.

This vertical integration allows it to control the end-to-end production process, from manufacturing to marketing, including preparation and weaving, dyeing, printing, as well as mechanical and chemical finishing.

These products comply with the high levels of requirements of labels such as OEKO-TEX® STANDARD 100, and certifications in accordance with international standards.

EUROPROTECT verifies and checks each stage of the production process; to ensure the best quality and guarantee the traceability of these products.

The company offers tailor-made products and services, providing this expertise through its mastery of the manufacturing process and its R&D department, which benefits from more than 30 years of experience.

EUROPROTECT is present on an international scale, covering all of Europe, the Maghreb, Asia and South America.

**Website:** <https://www.manutex.fr/>



## FLIP FLAP

The **Flip-Flap** start-up, incubated at DECA BFC, has recently launched its first clothing specifically adapted to the needs of autistic, hypersensitive and visually-impaired persons, working with the “Armor Lux” brand. Its products are entirely made in France, using eco-responsible and anti-waste procedures.

**Flip-Flap**, with the support of Techtera, has turned to the Text’IN Laboratory, to take on new challenges. This promising collaboration aims to develop new innovative products, with special knitting processes, in order to meet other needs identified in the field of adapted clothing.

The dedicated approach of **Flip-Flap**, combined with its commitment to sustainability and quality, has strengthened its position as a player in the sector of trendy and non-stigmatising fashion. By combining technological expertise and social sensitivity, **Flip-Flap** asserts itself as a company constantly seeking to improve the quality of life of people with special needs.

**Website:** <https://www.saotextile.fr/>

## Your appointments with the cluster

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### November 5-6, 2024: Regional visit to the Ecomondo exhibition, international trade show for ecological transition – RIMINI - ITALY

Ecomondo, the equivalent of the **Pollutec trade fair in Italy**, is an unmissable event for those involved in the **ecological transition**. This international event brings together manufacturers, service companies, policy makers and public bodies concerned with technologies and solutions for a **green and circular economy**. By exploring areas such as water management, waste disposal, textiles, bioenergy and more, you will discover the latest advances in research and innovation.

In partnership with the Techtera, Axelera and Business France innovation clusters, the “Auvergne-Rhône-Alpes Enterprises” agency is organising a Visitors Delegation, from November 5 to 7, starting from Lyon.

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## November 23-26, 2024 : Congress on Polymer and Composite Materials in Building and Civil engineering - 77420 CHAMPS-SUR-MARNE

SFIP is launching the 4th edition of the congress on “Polymer and Composite Materials in Building and Civil engineering” to be held on the 27th & 28th November 2024.

This event is organised in partnership with CSTB, ENPC, Orgagec, Plastics Europe, Techtera, UPB and the University Gustave Eiffel.

Experts from the building and civil engineering industries, as well as the polymers and composites' ones, are invited to take part in this key event, to share their knowledge and devise joint developments.

### These conferences and exchanges will cover the following main themes:

- Changes in regulations, legislation, and directives
- Decarbonisation of industrial sectors: eco-design, circularity, sustainability, eco-responsible alternatives, bio-based materials, dismantling, recycling, reuse, etc.
- Innovation in materials and processes: flooring, cabling, road surfaces, waterproofing membranes, structural and architectural applications, decoration, paints, 3D printing, etc.
- Functionality: mechanical, thermal, fireproofing, waterproofing, acoustic, soundproofing, haptic, aesthetic, energy, photovoltaic performance, etc.

Submission for call for papers - Deadline 10 may 2024: [Call of papers](#)

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## Life of the members

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### A European partnership for the production of wheat-based bioplastic

Tereos, which is French, the world's second largest sugar group, and Futerro, a Belgian firm specialising in the production of polylactic acid (PLA), have recently announced a partnership in Europe. Together, they plan to produce bioplastic from wheat – in a factory to be built in Normandy.

Tereos undertakes to supply Futerro with 150,000 tonnes of dextrose annually, a sugar obtained from wheat starch, coming from its Seine-Maritime site. This partnership will promote the creation of a bio-industrial, circular and sustainable base, dedicated to green chemistry.

Futerro, as the world's second largest producer of PLA, will invest €500 million in this ambitious project. Construction of the factory is expected to begin in 2025, with commissioning planned for 2027.

It will provide an annual production of 75,000 tonnes of PLA. This site plans to create nearly 250 direct jobs and 900 indirect jobs; as well as the establishment of a recycling unit dedicated specifically to PLA materials.

This partnership illustrates the commitment of Futerro and Tereos to a biosourced, circular and sustainable economy, while positioning Europe as a major player in the production of biosourced plastics and their recycling.

Website: [www.futerro.com/](http://www.futerro.com/)



### **CETIA: Re\_SHOES project, launch of a pilot line for the recyclability of shoe soles**

Re\_SHOES is the **first French industrial innovation programme** dedicated to the recyclability of shoe soles. This has led to the launch of a **pilot line** on the CETIA site, **capable of automatically separating the soles from the uppers of shoes – and then sorting them by composition.**

**Re\_SHOES has three objectives:**

- Increase the quantities of materials to be recycled by considering the 80% of shoes put on the market
- Make a closed loop possible for shoe soles
- Prepare the industrialisation of a shoe recycling sector

Initiated by CETIA and supported by the Nouvelle-Aquitaine region, Re\_SHOES has brought together eight partners **committed to accelerating circular transition** in the shoe industry: DECATHLON and a group concerned with the luxury market.

In total, €1 million has been invested **to make possible the automation of the upstream phase of shoe sole recycling.**

Website : <https://cetia.tech/>



### **3Deus Dynamics: Fundraising of €10 million to become the leader in silicone 3D printing**

**3Deus Dynamics** has just successfully completed a €10 million fundraising mission, aiming to revolutionise the silicone 3D printing industry.

These funds will be deployed for many purposes. They will serve to expand its influence on the global silicone 3D printing market. From their new headquarters in France, they will help consolidate the industrialisation of their Dynamic Moulding technology, a multi-patented process, which uses a granular medium as a dynamic mould to support materials during printing. They will make it possible to intensify its R&D efforts; and comply with the strict quality standards required by the health markets and by specific industries such as aeronautics and defence.

This will be carried out as part of a decarbonisation strategy, aimed at reducing the carbon footprint of products originating from Dynamic Moulding.

This collaboration with **Elkem** will not only stimulate the international growth of 3Deus Dynamics; but will also strengthen its leadership in this industrial sector.

Website: <https://www.3deusdynamics.com/fr/technologie.html>



## **Eweave, pioneer of smart textiles, is expanding – thanks to the alliance between Satab and AQ-Tech**

Already present on the market for two years, Eweave combines textile know-how and IOT (internet of things) skills to offer a range of unlimited solutions concerning smart textiles.

Depending on the needs, Eweave systems can handle electrical connectivity, data transfer, integration of ON/OFF switches and dimmers (variators), detection and localisation of leaks, supports, shocks, cuts, mechanical tension, pressure, water level measurement. They can also be adapted to new lighting systems.

Today, there is an alliance between Satab (a benchmark concerning the narrow textile market) and the multidisciplinary engineering agency AQ-Tech (expert regarding mechanics, electronics and intelligent textiles). This alliance allows Eweave to integrate, into its products, skills that range from development, prototyping as far as assembly.

This new internal innovation unit, called “EweaveLab”, allows Eweave not only to work on turnkey systems but also to offer full support in the development of the smart textile solutions of tomorrow – and to take them up to the level of industrial maturity.

**Website:** [www.aq-tech.fr](http://www.aq-tech.fr)



## **Immersive installation at the 60<sup>th</sup> Venice Biennale – covered with Barrisol canvases**

On the occasion of the 60<sup>th</sup> Venice Biennale, one of the most prestigious artistic events in the world, the artist Josèfa Ntjam, in collaboration with LAS art foundation, unveils this new immersive installation – in a blue setting covered with Barrisol® canvases.

In the courtyard of the Venice Academy of Fine Arts, the prism-shaped pavilion was covered with 700 m<sup>2</sup> of blue-lacquered Barrisol® canvases, reflecting the buildings and the Venetian sky.

Inside, on a large wall, visitors can discover videos of the cosmic and organic landscapes created by Josèfa, enriched by a soundscape composed by Fatima Al Qadiri.

The Barrisol® system used is fully recyclable and meets the highest fire safety standards (B-s1, d0) and it is classed A+ (COV).

**Website:** <https://barrisol.com/>



## **Circular textile economy: the HEREWEAR Consortium General Meeting at Mitwill Textiles Europe**

The HEREWEAR EU project brings together fifteen European partners from research institutions, universities and industrial companies under the leadership of the Belgian research centre CENTEXBEL. The aim of the project is to develop an industrial base for the production of bio-sourced, local and circular

clothing manufactured in Europe. The project, lasting 3 years, will come to an end in 2024.

The consortium met in Sausheim in the Microfactory of partner Mitwill Textiles Europe last April, to take stock of the progress made:

- Design of biosourced circular textiles
- Extraction of cellulosic materials from biological waste sources such as straw, manure and seaweed
- Development of new organic polyester fibres and weaving or knitting into textile materials
- Digital tools for tracking raw materials to ensure “sustainable origin” and “circular use”
- Life cycle analysis and ecological labelling throughout value chains
- Establishment of an EU-wide commitment and greater capacity for bio-based circular textiles across the industry.

**Websites:** [www.herewear.eu](http://www.herewear.eu) - [www.mitwilltextiles.com](http://www.mitwilltextiles.com)

## Calls for projects

### EUROPEAN AND INTERNATIONAL CALLS FOR PROJECTS

LIFE Programm - *More information:* [here](#)

Horizon Europe - *More information:* [here](#)

European Defence Fund - *More information:* [here](#)

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### CART'TEX

#### **Call for applications for the CART'TEX chart (reserved for TECHTERA members)**

Textile companies wishing to join “CART'TEX”, the chart of textile skills created by TECHTERA, can make themselves known to Issam CHAOUKI.

**The CART'TEX database is the daily tool of the cluster for managing the search for partners for all projects, and for the response to business opportunities.**

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