Progress report 2020
At the heart of textile evolution
Dear members,

Our environment was seriously disturbed in 2020. This led us to rethink our lifestyle and ways of working. Adaptation and agility were essential to get through this difficult period together. I would like to thank you for the confidence you have kept in us. I also want to thank the team that took up this challenge, and which was always ready and available to help us.

A few examples allowing us to measure the work accomplished:

✓ Against the backdrop of a pandemic, Techtera supported the textile industry in its efforts to find textile solutions to meet the country’s urgent needs.

✓ Most of the events remained on the calendar in order to maintain the cluster’s momentum; with topics as varied as the Circular economy, Connected objects, and the Factory of the future.

221 members, on the whole textile value chain

- 182 Enterprises
- 28 Labs, Universities, Schools, Technical centres
- 5 Clusters
- 6 Associations (with 3 Trade unions)
- 81 Very Small Companies (>20 employees)
- 83 SMEs (20-250 employees)
- 6 Medium-Sized Companies (250-2,000 employees)
- 12 Groups (>2,000 employees)
- 24% Website visit
- 9,760 Newsletter subscribers
- 13 Press releases sent
- 94 Techtera press mentions
- 67% LinkedIn subscribers
- 12.5% Twitter subscribers

Figures of the year 2020

A word from the president
Our Scientific and Technological Committee, a project endorsement body, has evolved into an Innovation Commission in order to integrate new skills and become international.

Finally, the management has opened up to new organisations; in order to consolidate and unite our sector.

Techtera, drawing on its roots in Auvergne-Rhône-Alpes, is achieving its ambitions at national and international level. More than ever, the cluster, through innovation and united tactics, remains at your side to grasp new opportunities; through which growth and economic recovery will emerge.

I hope to see you soon and I thank you all for your confidence in us.

Louis Vovelle - Président

CERTIFICATIONS:
The ISO 9001 (2014) for Techtera’s quality management system.
The European Cluster Management Excellence Label Gold for Techtera’s highly sophisticated management and dedication to continuous improvement.

Ressources

- 7.1% Board members
- 17.9% Memberships
- 15.7% Trade fairs et services
- 11.6% Trade union
- 3% Success fees
- 44.6% Public subsidies
- 17.9% Private subsidies
- 19.8% Europe
- 53.26% Hosting of collaborative projects

Actions

- 10.34% Communication
- 19.86% Strategy, Administrative management
- 8.20% Development, assistance in detecting and setting up R&D projects
- 8.33% International actions
- 53.26% Boosting textile industry, support towards innovation

Including
- 149 days dedicated to our various actions on masks.
Innovation workshops
Themes launched

Do the groundwork
Keeping watch to facilitate the emergence of innovative projects!

Market exploration

- How to depollute the city with textiles?
- Vitrimers: Application opportunities in textiles
- Sustainable development, recycling and valorisation of flexible textile materials in partnership with the Pôle Textile Alsace
- How to answer to the massive customization issue (hub of cluster for the industry of the future)
- Tomorrow’s textiles, through the circular economy with the CIRIDD, the Auvergne-Rhône-Alpes Region and Unitex

- Materials watch: Intelligent textiles for health, construction, PPE, sport and transport (CONTEXT project)

- Defence watch: Within the framework of the European ALLIANCE project (defence and security):
  - Mission to Japan
  - Market research report: South Korea

- Sport watch:
  - Morning session on collaborative projects in collaboration with the OSV cluster
  - Performance Days exhibition (sport, functional textiles)

- Creative watch:
  - Trend programs:
    - Fashion trends
    - Decoration trends
  - Mégatrends: Première Vision trends Meetings
  - FashionTech: Agility of the textile sector in the pandemic period

- Funding watch: Presentation of the “Green Deal” European call for projects.

Europe
South Korea
Japan
Keeping a watch on European funding
The textile industry will be a partner in the Green Deal launched in 2020. The textile sector has been identified as one of the "priority value chains" by the European Commission, in its industrial strategy for transition to the circular economy. It places particular emphasis on eco-design, upcycling and textile recycling, which should be encouraged through innovation and new industrial applications. Techtera identified these calls for projects as soon as they were published; then, gave its members the keys to respond to them during a webinar. There were nearly fifty participants and several submissions of projects.

Keeping a watch on markets and technologies
Thanks to the CONTEXT network (www.context-cost.eu), members benefited from five studies concerning smart-textile application markets. These studies result from the combined effort of experts in the field, working at European level.

During the “Expert Talks” at “Performance Days”, a fair dedicated to textile applications, Techtera published a report on the theme of this edition, "Nothing to waste – Closing the loop", on closed-circuit products; designed to be recycled, recovered or reused, thereby reducing textile waste.

Keeping a watch on creation and FashionTech
The innovation cluster continued throughout the year to keep watch on events for the fashion, decoration and luxury sectors through trend programmes (Environnement-Maison®, Stratégie Mode and Ateliers 360°–Megatrends).

The six annual meetings were all maintained, sometimes remotely, bringing together more than 226 participants.

With the central theme of “The agility of the textile industry faced with the pandemic”, the 2020 edition of Fashion Tech Lyon was an enormous success. It brought together companies from the textile, fashion and technical textiles sector; as well as higher education establishments dedicated to fashion.

As part of the ALLIANCE project, in partnership with seven European clusters (France, Italy, the Netherlands), Techtera organised an exploratory mission regarding security and defence in Japan during February 2020. The various visits allowed us to consolidate the Memorandum of Cooperation with Japan. Thirty–one companies, two technical centres and one university were met during the Wearable Expo, a major event dedicated to wearables and related technologies, at which Techtera was also an exhibitor.
Clubs

- Club STeW (Smart Textiles) – Club RECIT (Circular Economy) – Club IC4.0 (Industry of the future)
  - Working groups and the birth of projects
  - Technology-watch reports
  - Meetings with project leaders

Meetings and opportunities

- 27 CARTTEX business opportunities
- Awareness campaign for the supply of textile masks to local authorities.

Competitiveness Workshops

- Ambition Europe: European funding for research and innovation
- “Centurion” call for interest: Funding dedicated to innovations for the landed combatant
- Exhibition preparation workshop – Strategic intelligence and international development
- Presentation of the recovery plan

Innovation Workshops

- In-depth study of the themes
  - Smart & Circular: Convergence of STeW and RECIT clubs
  - Definition of a post-covid–19 strategic roadmap
  - Air pollution control

Interclustering

- Hub of cluster for the industry of the future
- CONTEXT: Network of European technical textile experts
- EU-TEXTILE2030: Creation of the European Economic Interest Group
- TEXGLOBAL: Launch of the European project to support exports
- Submission of 10 European interclustering projects
- Participation in the “Fashion & Luxurious” strategic committee as part of the industry’s mobilisation on the theme of masks
- ECA (European Clusters Alliance): Involvement in the European network of clusters

Structuring of Techtera

- TechteraFab (industrial acceleration platform)
- Techtera’s labeling
- Renewal of ISO 9001 certification (version 2015)
- Support for the animation of Techtera by the Defence Innovation Agency (AID)
- Recruitment of 2 Innovation Project Managers

Plant

Sow the first seeds and let them germinate!

Context: Network of European technical textile experts

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The Techtera clubs:
Gardeners of innovation!

3 clubs bring together members around 3 main themes:

**Recycling and Circular Economy in the Textile Industry:** Club RECIT (26 members) created in 2016.

**Smart Textiles & Wearables:** Club STeW (21 members) created in 2017.

**Industry of the future with the launch of new Club ICI4.0** created in 2020.

In response to changes in business models of organisations, Techtera launched Club ICI4.0 – Industrial Club for Industry 4.0. Its aim is to boost exchanges in the textile industry around issues of digitisation, organisation, modernisation and flexibility. To do this, it relies on the complementarity of its members, notably by bringing together textile manufacturers, machine manufacturers and designers of digital solutions. (Already 14 members).

The clubs organise interventions by experts, feedback, and exchanges of good practices. These are aimed at promoting maturity, the integration of new technologies, and even the emergence of joint initiatives.

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**Techtera, partner of the European Texglobal project, fertiliser for internationalisation!**

Launched on September 30, 2020, TEXGLOBAL is a partnership of five European textile clusters representing four countries (Italy, Spain, France, Portugal). Its aim is to support the competitiveness of European textile companies over the long term in the international export world. Three countries are targeted by the project: the United States, Mexico, and Vietnam.

Techtera and the OSV cluster, devoted to outdoor sports, have strengthened their cooperation to enrich the provision of services to their respective members regarding innovation and access to markets: By organising mutual events, sharing information derived from “technology” and “market” surveys. The two organisations have thus built the foundations for the emergence of collective projects.

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**Partnership with OSV (Outdoor Sports Valley), growth factor for future cooperation!**

**The focus quantified**

15 PROJECTS labelled

38 PROJECTS including

23 EUROPEAN PROJECTS submitted

+/-1,150 PARTICIPANTS in the « planting » actions
Ripen
Take care of flowering to ensure fruitful development!

**Accompanying international trade fairs**
- Heimtextil (Home textiles)
- Première Vision (Fashion)
- Performance Days – digital fair (Sport, functional textiles)
- French Tex meetings (Fashion) – Silhouette logistics

**Project support**
- Partnerships
- Identification of funding
- Opinion of the Innovation Commission
- Labelling

**Influence of the sector and innovation projects**
- Press relations: Projects press releases and press kits
- Event communication
- Monthly newsletters (French, English, Japanese)
- Development of a digital community on social networks
- Dissemination of information dedicated to textile masks: information bulletins, tutorials, updates of the list of materials

**Digital**

**Interventions:**
- Global Fashion Conference: Round table on the theme of “Innovation and sustainable development: The heritage for the future”; recorded at the Textiles Museum in Lyon
- 2020: Towards an innovative and sustainable textile industry” at the conference organised by the emlyon business school
- Woman captain of the sector according to the France Clusters study – Interview of Corinne Farace
- Forum of Cluster Associations and Networks - Side event on the Green Deal
- ECA (European Clusters Alliance): Meeting on the textile industrial ecosystem – Clusters and recovery plans

**Nominations:**
- Manager of the year award – Pitch of Corinne Farace (finalist) at the conference organised by the ECCP (European Cluster Collaboration Platform)
- Trophées Filex (annual conference of clusters): Support to Barral for its biosourced masks

**Partnership**

**Investment**

**Banking**
Since 2020, Techtera has offered its members the possibility of having a special interlocutor in order to personalise the relationship with the cluster. Thanks to listening attentively, requests will be sent to the right department, and appropriate information will be communicated regularly.

Agility, pro-activity, responsiveness and targeted support are the levers for grasping opportunities in terms of innovation and economic development.

Examples of funded projects:

- **SENSITELLE**
  - Design a new non-slip structure with high performance grip, comfort and aesthetics.
  - **Markets**: health
  - **Funding**: R&D booster – Auvergne-Rhône-Alpes Region
  - **Project budget**: 779 K€

- **MIROIR**
  - Design semi-industrial solutions for the metallisation of innovative, resistant, flexible materials; for luxury and personal protection.
  - **Markets**: fashion, PPE
  - **Funding**: PSPC Régions – French state – Auvergne-Rhône-Alpes Region
  - **Project budget**: 3.18 million €

- **AEROTEX**
  - Develop new industrial manufacturing processes for high-performance flexible textile materials for more efficient thermal insulation.
  - **Markets**: infrastructure, sport, PPE
  - **Funding**: R&D Booster – Auvergne-Rhône-Alpes Region
  - **Project budget**: 928 K€

- **TRIMETIS**
  - Develop a new technology for the functionalisation of polymeric threads and filaments.
  - **Markets**: health, sport
  - **Funding**: PSPC Régions – French state – Auvergne-Rhône-Alpes Region
  - **Project budget**: 2.89 million €

- **TIGER**
  - Develop a prototype of current generation by triboelectricity using a textile yarn, with an electronic system and a flexible battery.
  - **Markets**: PPE, sport
  - **Funding**: RAPID – Directorate General of Armaments
  - **Project budget**: 917 K€

- Support with setting up and approved by Techtera

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and also 2 mobility projects for researchers...
Supporting the textile industry

Mobilisation of the textile industry during the pandemic: Techtera’s role

Since March 11, the Techtera and EurAMaterials innovation clusters and IFTH (French institute for textiles and clothing) have been working hand in hand as regards the French economic “fabric”. Triggered by the health crisis, a tremendous momentum has highlighted the mutual aid between the various textile players and the excellent skills of French companies searching for textile solutions to meet the country’s urgent needs.

Involved in several workgroups, Techtera helped organise the textile industry’s response, particularly concerning the materials to be used for manufacturing masks, in close collaboration with EurAMaterials and IFTH. In partnership with Sable Chaud (specialist in the integration of new textile technologies) and the CTTN (research institute for maintenance and cleaning), it has set up a disinfection and washing group to define a cleaning cycle.

The innovation cluster also provided support for the development of R&D projects aimed at finding solutions to the current situation; as well as the validation of solutions and the search for manufacturers.

In addition, Techtera raised awareness within the EPCI (Public Establishments for Intercommunity Cooperation) by advocating the need to supply textile masks rather than disposable masks; and, at the same time, communicating with the general public (through tutorials, information).

The organisation has also provided support to European countries by providing information about initiatives developed in France.

These concrete actions have made it possible to strengthen cooperation by pooling the know-how of the organisations that form the textile ecosystem.

Material studies for masks manufacturing
- Over 2,000 material complexes analyzed by the working group on materials.
- Over 1,200 reports from the Directorate General of Armaments analyzed on the material properties for filtration and breathability.
- 317 compositions of relevant material complexes identified, by the working group on materials.

Research projects
- 12 companies supported in the development of COVID-19 related projects.
- 49 responses to call of interest for the creation of a new production line for the manufacture of FFP2 masks.

Research of masks manufacturers
- 141 contacts identified and contacted.
- Over 70 answers to specific demands.
2020-2022 Techtera roadmap

Projects maker - 3 technological axes -

- Smart materials and high-performance specification
- Circular Economy and resources efficiency
- Factory of the future and new economic models

TechteraFab: industrial accelerator platform

Outreach and Business development

- Increasing the European dimension
- Development of cross-border cooperation
- Strengthening the synergies of the sector
- Identification of collaborations with the clusters of the region

Expertise & solid organisation, the key words for a long-lasting innovative cluster

- Strengthening the Techtera team of experts
- Intensification of alliances throughout France

Expertise & solid organisation, the key words for a long-lasting innovative cluster