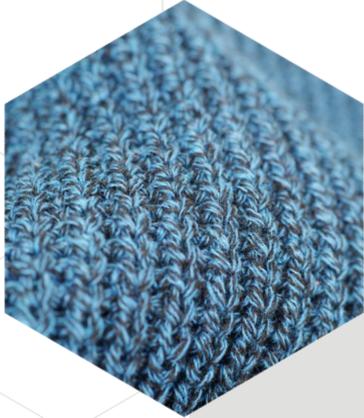


Recovery plan contribution of the French materials clusters

July – 20 - 2020

 EuraMaterials

Who are we?



EuraMaterials' dynamic

- ◆ an **innovation cluster**
- ◆ a **business club** CLUBTEX
- ◆ an **incubator/accelerator**
- ◆ a **reference place** for advanced materials



EuraMaterials is born from the merger of

- ◆ **Matikem** (materials, chemistry, green chemistry)
- ◆ **UP-tex** (technical textiles materials and processing)

At a glance *(end of 2018)*

- ◆ **260 members**
- ◆ Turnover: 19 billions euros
- ◆ 174 companies
- ◆ 1,000 associated partners
- ◆ 432 labelled projects
- ◆ 218 financed projects

The cluster of materials processing industry



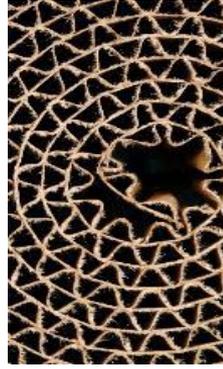
TEXTILE



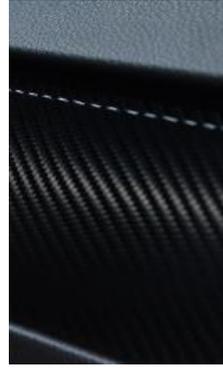
PLASTICS



GLASS



PAPER/
CARDBOARD



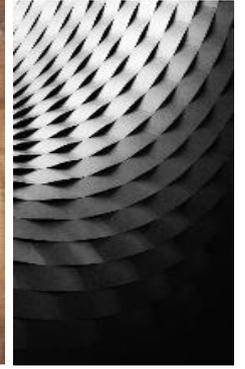
COMPOSITES



CERAMIC



WOOD



METAL



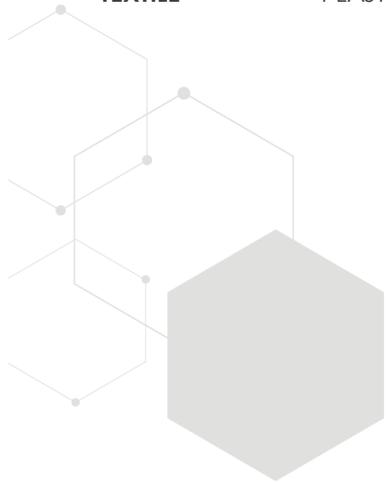
Two main orientations

◆ Advanced materials

- Complex structures
- Innovative material properties
- Eco-material and eco-design
- Interactive materials and structure

◆ Factories of the future

- High added value products & services
- Processes transformation & improvement
- Sustainability





**Materials, at the heart of strategic issues for
national sovereignty
today and tomorrow**

**Proposals done by 7 clusters to the French
Government in the AFPC contribution to the
recovery plan**

Finding

- ◆ "Everything is materials": Materials are everywhere and serve all strategic markets: Health / Mobility / Building / Energy / Luxury / ..., but their transversal and upstream positions mean that their roles are often misunderstood or even forgotten.
- ◆ Materials are at the heart of innovations to transform ideas into concrete realities. So there can be no recovery plan without Materials and no new materials produced without our processing industry on the other.
- ◆ The solutions are multi-materials and therefore they must be thought in cycle for their use: from "cradle to cradle", this is the circular economy, a key point of the "Green deal".
- ◆ Digital and ecological transitions impact the materials industry (processes, choice of materials, eco-design of solutions) and conversely, materials are essential for the success of these transitions (robots, sensors (internet of things), batteries, hydrogen storage, energy neutral buildings),
- ◆ The COVID-19 crisis has highlighted the key role of the materials processing industries (Examples: Plastics for respirators, masks and visors, textiles for masks, tubes for beds, forest-wood-paper for packaging ...) in the value chains and the absence of certain key technologies on the French territory.
- ◆ In addition, the Materials Processing Industries are characterized by a driving role of manufacturing SMEs-SMIs scattered throughout the national territory.



Alert n°1: It is necessary to secure the sovereignty of production chains in the materials processing industry

- Some material value chains are at risks
 - raw materials: availability. Examples: Rare metals, polymers from specialty chemicals (e.g. medical grade polypropylene for masks), Palladium, Diodes, Invar minitubes (for the electronics industry) ...
 - technical/ technological/ loss of know-how (critical stages, lack of industrial tools, risk of failures, REACH regulation, loss of suppliers...). The disappearance or absence of links in these value chains is a critical factor with significant risks for the downstream (Examples: meltblown for filter media...)
- Recommendations:**
 - Launching of a national strategic study for a shared analysis of these risks and critical points of the complete sectors in order to identify solutions to improve resilience and security in the medium / long term. This study could be carried out with the support and backing of the Clusters.
 - The industrial materials sectors have a strong impact on the consumer markets. Too often, however, these markets do not take into account upstream issues due to a lack of knowledge/means/will. It is recommended that the CSFs (Strategic Committees for the application sectors) (e.g. Automotive / Aeronautics / Health / ...) integrate the materials dimension in their actions.



Alert n°2: access to raw materials (supply chain) can be critical for the sector.

- ◆ We do not have all the sources of raw materials in France or even in Europe (particularly due to the failure of the European chemical industry) which generates significant losses of autonomy for the French sectors (Examples: : Medical grade polypropylene, Specialty Chemicals, recycled materials PET, PE, PP ...). Many very specific raw materials whose price is very volatile and / or suppliers are few and outside our borders make the French sectors particularly vulnerable.
- ◆ Studies are made on the situation of so-called strategic materials but seem to remain at the level of the report
- ◆ **Recommendations:**
 - ◆ Referencing of the actors of the value chain for each material.
 - ◆ Encourage a mutually supportive interaction between large industrial groups as suppliers and SME. Develop a commercial strategy aimed at securing the import of critical raw materials into Europe.
 - ◆ Initiate a strong approach promoting innovation in a Green Deal Materials cad recycling (recovery, reuse) and bio-sourced (such as waste from agricultural and forestry/wood processing). Define a circular economy vision in our value chains and on our strategic raw materials.

Alert n°3 : Innovation is key to SME recovery

- The current crisis marks a breakthrough for many companies.
 - The digital dimension (telework in particular) has shown its effectiveness and can lead to the decomplexing of companies to go further towards such a transition (processes, sensors, internet of objectives, management software, databases, expert systems ...).
 - Supply constraints have shown their weight and therefore the need to find alternative solutions integrating the "Green deal" (circular economy, energy and raw material savings) in a European approach.
 - With the recovery, differentiation will become a priority again in order to position oneself on the market.
- In relation to these 3 challenges, we must therefore be offensive and support medium-term solutions that favour the development of our companies by maintaining a significant flow of innovation through collaborative R&D that will enable them to regain a strong position on their markets in the long term (support for market innovation).
- **Recommendations:**
 - We must help SMEs that are in the process of launching innovation projects (and therefore preparing their future) but are in financial difficulty due to the COVID crisis to go through with the project and not give up for lack of means (specific support to be defined), which would weaken them for the future.
 - Use clusters for financing and support Innovation Projects adapted to SMEs (in particular by using the European model of innosup)
 - adapted amount (a few hundred K€)
 - calls for short projects,
 - acceptance decision within 1 month after submission, etc...
 - Preparing the future by promoting product innovation in SMEs with the implementation of "innovation vouchers" to enable the development of prototypes. As our companies are upstream of the user sectors, there is a risk that the upturn will be staggered over time. They must be able to use this "dead time" to prepare for the future.

Alert n°3 : It is essential to encourage the emergence of new start-ups in the Materials sector.

- ◆ Bringing out industrial startups (new materials, transformation, recycling...), tomorrow's SME/SMIs, is a real difficulty in the world of materials. For example, entry tickets are important because of the capital-intensive nature of our industries and the rates of return on investment are lower (and often longer) than in the digital world. There is a real need for dedicated "Seeds funds" for our industries.
- ◆ **Recommendations :**
 - ◆ Explore the capacities with BPI to create a national materials investment fund for our innovative startups (Deeptech or circular economy type).
 - ◆ Facilitate the access of startups to innovation projects by revising the equity rules that limit their participation in collaborative projects.

Perspectives & Next Steps for textile

- ◆ **Working groups launched by clusters on :**
 - ◆ maintenance and end-of-life of products
 - ◆ certification of the most promising masks
- ◆ **Innovation :**
 - ◆ Improve efficiency of PPE (masks)
 - ◆ Find new materials as substitute of Melt Blown Non-Woven
- ◆ **In the medium term: rethinking industrial value chains** to ensure sustainable self-sufficiency for Europe and France
 - ◆ In Mask Productions
 - ◆ In Non Wovens
 - ◆ In Raw Materials

Business Models ?
Which role for Structural Funds & EIB ?



More info ?



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Labels



Certification



Partenaires publics

