

CLUSTER TEXTIL tecnologia e moda



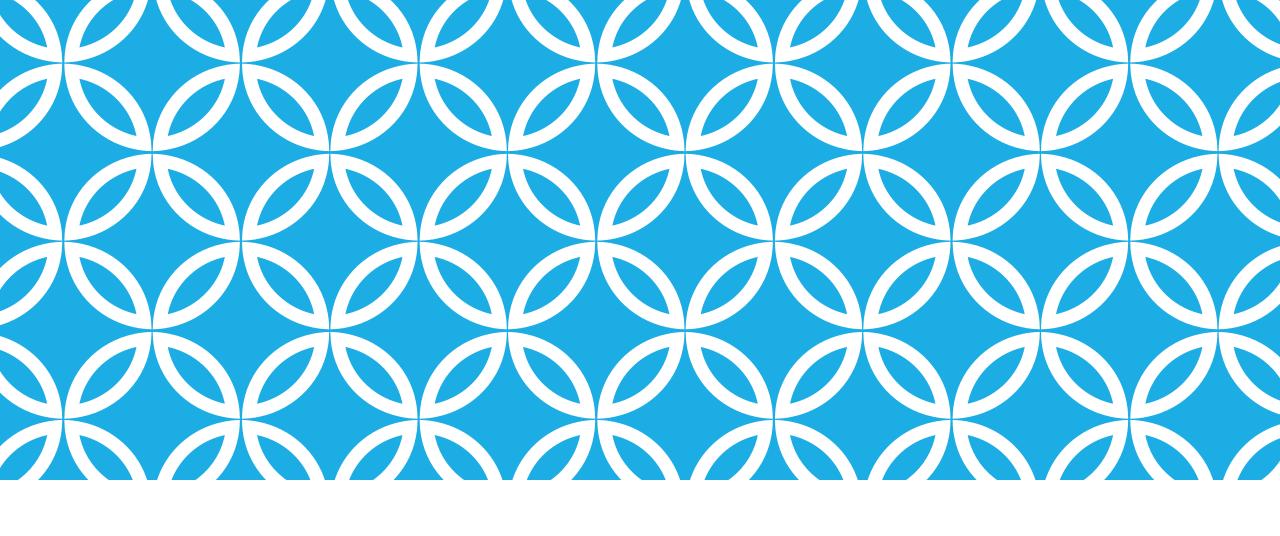
PORTUGUESE TEXTILE CLUSTER

SIG V. Sports

3rd of April 2019, Porto







1. THE CLUSTER

- To enhance the endogenous capacity of the consolidated economic aggregate around the textile business;
- To increase business competitiveness through co-operative innovation.

To promote and facilitate an integrated and sustainable development of economic aggregate involving textiles, clothing and technical textiles.

- Stimulating a strong coordination between the different actors;
- Stimulating the approach of the cluster to complementary and strategic value chains;
- Promoting the collaboration between members;
- * Facilitating the cross-sectorial cooperation and promoting roadmapping and strategic thinking



The five strategic areas for action:

- i. Human capital (Training & Education)
- ii. Research, Innovation and Sustainability
- iii. Design and Fashion
- iv. International projection
- v. Interclustering and Cross sectorial approach

High Level Group (HLG): strategy definition

Special Interest Groups (SIG): roadmapping and "textile thinking"

in strategic thematic areas

Executive structure: implementation



THE SPECIAL INTEREST GROUPS (SIG)

"Think thank" around 9 strategic thematic areas

172 experts



Green Textiles Club







Defense & Protection





Digitalisation & Industry 4.0



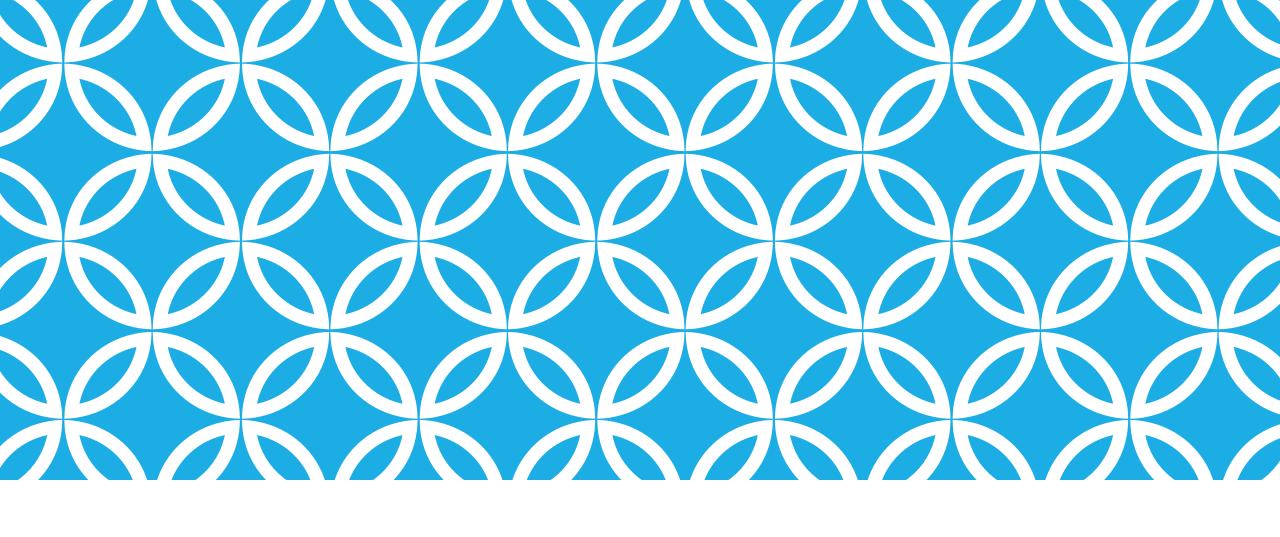
Human Capital



Design & Fashion



Marketing & Communication



2. SIG V. SPORTS



- To define a strategic agenda for Research and Innovation, with a vision for 2030, which will inspire the decision-making processes of different national and international actors;
- To promote national skills and capabilities to identify future opportunities and challenges;
- To promote partnership projects, joint dissemination actions, etc.



SIG SPORTS STRATEGY



Networking and Interclustering

Meetings with different actors (end-users, advisors, ...)

Strategic Research & Innovation Agenda 2030

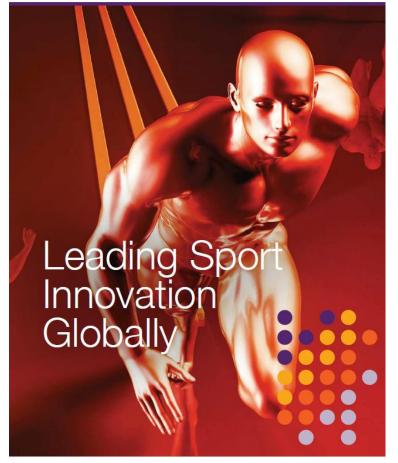
Lobby at National and International level



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the customers





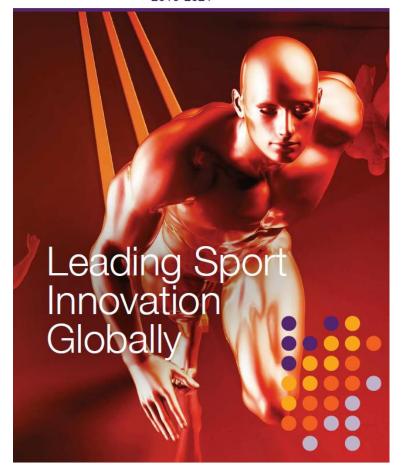
- 1. Innovation in sport: an answer to various health issues
- 2. Innovation in sport in line with sustainability goals
- 3. Using data, technology and innovation to drive change in the sports market
- 4. How technology is shaping the sports market
- 5. Innovation to meet the personalized demands of



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STRATEGIC RESEARCH AND INNOVATION AGENDA 2016-2021



Another key element is an emerging sports market which is related to more intelligent and functional products that are open to the introduction of new technologies:

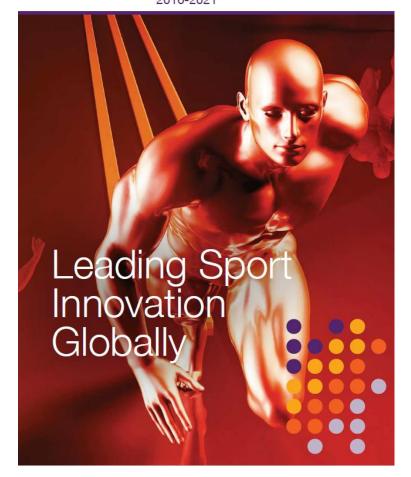
- · Use of Smart materials
- New design and creativity methods
- Customised production techniques
- Integration of ICT
- Internet of Things and added services



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STRATEGIC RESEARCH AND INNOVATION AGENDA



Classification of smart materials

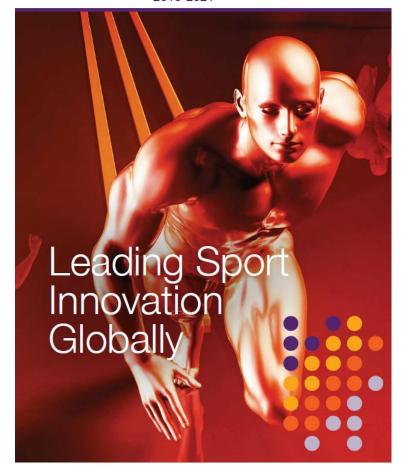
- Piezoelectric materials
- Electrostrictive materials
- Magnetostrictive materials
- Rheological materials
- Thermoresponsive materials
- Electrochromic materials
- Fullerences
- Biomimetric materials
- Smart gels



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STRATEGIC RESEARCH AND INNOVATION AGENDA 2016-2021



3D Printing:

- Prototypes are made faster and cheaper (without tooling)
- Create objects with complicated internal features that cannot be manufactured by other means
- Produce parts of different geometry within the same batch
- Produce customized parts
- Produce anytime and anywhere



SIG SPORTS STRATEGIC AGENDA SCOPE

- Garment (1st and 2nd layer)
- * Accessories (knee pads, elbow protection, ...)
- Equipment and components (nets, rackets, ...)
- Infrastructures (artificial grass, marking tape, ...)

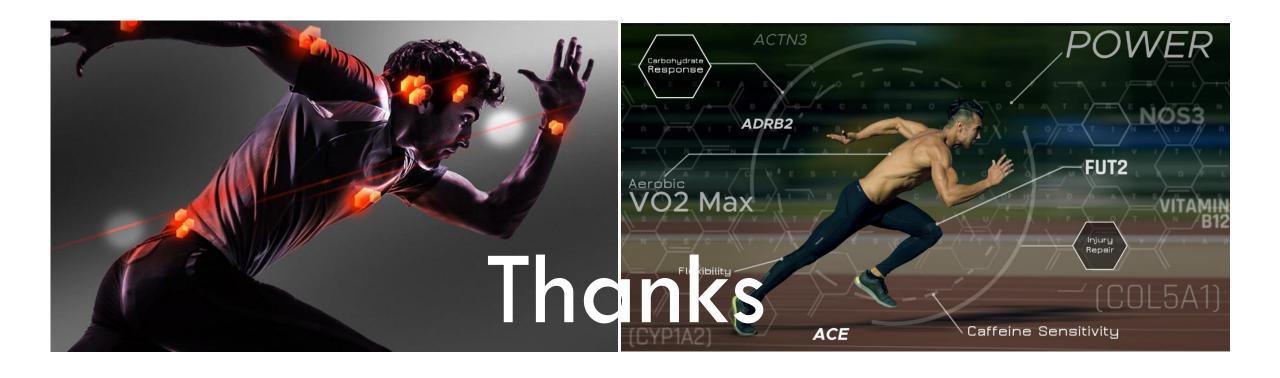


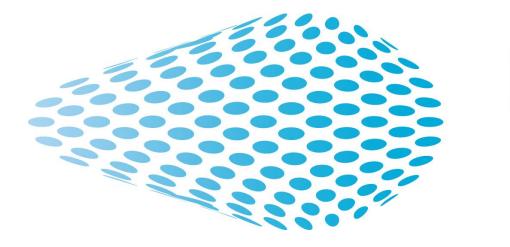
STRATEGIC AGENDA :: MEGATRENDS

- E-textiles, information and communication systems integration: vital signs monitoring, communication and data acquisition, software platforms, IoT, etc.
- Textiles with preventive and therapeutic performance: controlled release of active agents (drug release, hydration, ...), controlled compression textiles (ex. compression socks, ...)
- Comfort and Performance: thermal management (heating, cooling, insulation), ergonomics, biomechanics & morphology, moisture management (quick drying), low weight ...
- Resistance, durability and reliability in extreme conditions and/or high competition
- Sustainability: designing new products and processes aligned with global sustainability policies and resource efficiency, ...
- Customization and co-creation: industry 4.0, digitalisation, ...



HOW SMART SPORTS WILL BE





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PORTUGUESE TEXTILE CLUSTER

Thanks



THE PORTUGUESE TEXTILE CLUSTER

Mission is to enhance the endogenous capacity of the consolidated economic aggregate around the textile business. Increase business competitiveness through cooperative innovation.

- Promoting and facilitate an integrated and sustainable development of the textile value chain.
- Stimulating a strong coordination between the different actors of the cluster and Stimulating the approach of the cluster to complementary and strategic value chains.







14 other entities