



Cross-fertilization of industrial ecosystems in textile manufacturing and construction leveraging digital and advanced technologies to build up green and digital resilience in Europe.

FIRST CALL FOR PROPOSALS

SMART LIVING: SAFE, CONNECTED AND GREEN READY FOR THE FUTURE

The global objective of xBUILD-EU is to build an EU strategic partnership focused on cross-sectoral collaboration and cross-fertilization across textile, construction and advanced technologies as catalyst to deploy green solutions and a more digital Europe that enable smart living.

xBUILD-EU will promote building up resilience with a diverse lump sum grants with a total budget of 1.05M€ to foster SME resilience via green and digital transitions, innovation and internationalization that will generate growth opportunities globally. It is also aligned with the five key objectives of the Joint Clusters Initiatives for Europe's recovery program.

xBUILD-EU is a cross-fertilization Eurocluster that spans across different industrial ecosystems (textile and construction) and brings complementarities to the priorities for both thanks to the strong linkages of advanced technology sector to facilitate the SME uptake of digital talent and the cross-sectoral collaboration needed to push forward a greener and more digital Europe. This cross-sectoral partnership is composed of five clusters, three of them in the textile sector, one in advanced technologies and advanced manufacturing, and one in the construction sector.



All three sectors involved in xBUILD-EU will deliver a cross-fertilization towards smart living solutions by promoting safety (wear, digital tools for monitoring, construction methodologies, technical and smart textiles for safety and construction operators), facilitating connectivity through digital technologies (from user through garments, to domotics or home automation and smart buildings) and greener through new materials.

The first call for proposals for the xBUILD-EU project was open from April 3 until June 7, 2023 and counted with 40 proposals in total between the three grants: Innovate, Global and Digital & Green.



GRANT REPORTS

GLOBAL GRANT

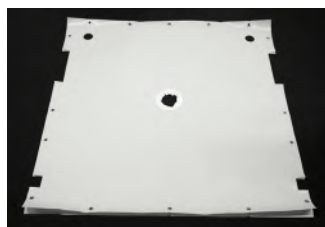
AirConSA - Spain

ROSICH's venture into the Saudi Arabian market has proven to be an exciting and immensely successful endeavor, marking a pivotal moment in our global expansion strategy. The project's comprehensive approach has enabled us to not only meet but exceed our objectives of market expansion and sustainability assessment. Collaborative efforts with ACCIÓ Catalonia-Middle East, the identification of potential clients for our coated textiles and other textiles like protection equipment, transmission and conveyor belts, thermal and electrical insulation, flexible hoses and ducts, expansion joints, diaphragms, membranes, etc., and the strategic execution of the action plan showcases our commitment to excellence and innovation. With a thriving coating solutions market, our achievements lay a strong foundation for future growth. This project underscores ROSICH's adaptability and strategic prowess, positioning us as a leader in the Saudi Arabian market and exemplifying the significance of well-executed internationalization strategies in fostering global business success.



FINSA2UAE - Spain

The project represents a strategic thrust to extend the company's influence into the dynamic textile market of the United Arab Emirates, strategically aligning with the region's impressive economic upswing. At the heart of the project's success lies the meticulous identification and establishment of robust relationships with new clients and business partners in the UAE. This entails a comprehensive strategy centred on identifying local partners specialized in textile manufacturing, equipped not only with an established sales network but also the ability to source raw materials internationally. A key objective is the diversification of revenue streams and the successful penetration of the UAE market, with a substantial income increase anticipated through the export of specialized textile products. While embarking on this ambitious journey, the project confronts challenges such as geopolitical risks, the necessity for cultural adaptation, and local competition. These challenges are met with robust risk management and credit assessment strategies, showcasing the project's resilience in navigating complex market dynamics.



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TECHTEXSA - Spain

Incabo's TECHTEXSA project was reaching the objective and the focus of looking for opportunities in the Saudi Arabian market for technical textiles which was successfully implemented. This venture successfully cultivated important client relationships, resulting in strategic partnerships and an in-depth comprehension of the market's nuances, particularly in the technical textile industry of protective workwear, military garments, and uniforms. Collaborative efforts with ACCIO Saudi Arabia played an important and relevant role in acquiring crucial market insights, contributing significantly to the project's success. One of the main tasks was to achieve a solid database of potential customers, impactful meetings with selected entities, and the formulation of agreements for future collaborations in the technical textiles domain. These achievements are a good base for the potential within the Saudi market for Incabo's specialized technical textile products which are tailored to the specific needs of our customers.



SOLLTECH - Slovenia

A-Star has successfully identified business opportunities during the xBUILD project for its SOLLSTAR product range. The results:

- It has researched the regulatory and certification requirements and have no issues to start immediate sales in UAE. CE certification will be enough for import procedures and local regulatory bodies.
- It has received very positive feedback from potential partners and is already planning a second trip to Dubai.
- Construction sector for A-Star is relatively closed, but they were able to detect ways into that industry via local agents and distributors.
- Current economic trends and outlook are positive for SOLLSTAR to start operations in UAE.
- They identified a new, previously undetected opportunity, to open JV with a manufacturing partner in UAE where they would be producing basic cabinets and A-Star would be providing EU manufactured induction drying technology.



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GLOBAL GRANT

RECYCLED TECHNICAL FABRICS - Spain

Although the interest in the project has been based on the real possibility of marketing recycled technical textile products in Israel, the circumstances have caused the company to dedicate and focus the resources obtained in the manufacture of 3 products for their anti-cut properties, resistance and durability. It should be noted that although the studies obtained in the first phase have helped in the creation of these three main threads, the most important company contacted has also expressed interest in recycled products with natural properties, and this based fundamentally on the type of company and the current trend for the manufacture of sustainable products. It is to be expected that all the development that comes from technical, recycled and sustainable yarn has great interest in the market. From the contacts made and the incorporation of these products into their portfolio, it helps them to consolidate the offer thanks to their characteristics and distinguish themselves as specialists worldwide.



CoolShield - Slovenia

The goals of the project were to gain knowledge on the technical liability of a UAE market, to cooperate with an expert to facilitate Dubai based contacts, active in the field in which TITERA had vision to enter and to gain knowledge of the current Dubai market landscape in the field of shielding and cooling garments and products. Their insights, work and level of expertise have helped the company to navigate further steps and decisions. Niche market of EMF shielding elements was recognized. Textile and apparel Fair participation gave an opportunity to firsthand experience and get to know manufacturers, distributors, and other active players in the Dubai textile landscape. With great interest, they found out, there is still very low knowledge about the possible implementation of EMF shielding materials as construction elements, or interior textiles or as garments. During the time of the project, TITERA has established good Dubai based contacts and recognized that there is currently a lack of shielding products available.



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GREEN AND DIGITAL GRANT

S.G.T.S. - Italy

Marlegno and Knitronix developed an innovative distributed sensor system for buildings' monitoring and maintenance; the objective has been achieved both in labs and in production sites and the sensor is now equipped with basic electronics. They plan to build upgraded electronics and the next steps will be to build an IoT platform for data gathering and Analysis via AI. Their system can monitor the structural health of wooden houses, sending alerts to drive preventive maintenance actions. All the performed tests confirmed the initial hypothesis where a diffuse sensor system can give higher added value than a local sensor: the building surfaces are therefore transformed into active elements, which are able to send information and transmit data to the tenants to improve their well-being and extend the useful life of the structure, saving resources and raw materials.

MARLEGNO

Knitronix
industrial flexible sensors



LoomproductionMVP - Spain

The project focuses on integrating advanced sensory technologies into FINSA looms. It aims to improve real-time production measurement, optimizing operational efficiency and reducing material waste. The successful implementation of sensors and processing algorithms aligns with strategic objectives, enhancing production measurement accuracy and laying the foundation for strategic decisions in production and maintenance. Despite being limited to one loom, the project significantly enhances production planning and efficiency at FINSA, reducing waste and energy consumption, positively impacting sustainability and operational efficiency. The proposal's value is reinforced by its ability to provide precise real-time data, crucial for strategic decision-making. With a short market entry time, following successful initial launch and clear industry demand, the project is poised to add significant value to FINSA's production processes and potentially to other companies in the textile and advanced manufacturing sectors, paving the way for digitalization and sustainability in the industry.

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GREEN AND DIGITAL GRANT

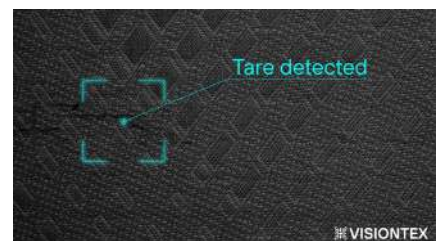
Project Machine Carbon - Ireland

Project Machine Carbon developed a new and innovative digital system to support manufacturers to automatically track, report and reduce their carbon footprint. The digital Carbon Emissions Monitoring System was developed and deployed in an Medical Devices manufacturer; promoting and embedding sustainable practices in a practical, accessible, and economically viable way. It enabled them to track their carbon emissions in real time and then identify carbon reduction initiatives. All project objectives were met, and significant carbon reduction was achieved through implementing two initiatives during the final phases of the project. These included changing machine operations and optimizing machine cycle times.



VISIONTEX - Spain

The project has proven to be a promising innovation that revolutionizes the textile industry. By employing advanced image processing algorithms, this project has significantly improved the quality and efficiency in textile production. Artificial vision technology has allowed for more precise and rapid inspection of fabrics, identifying defects with unprecedented accuracy. This has not only reduced production costs by minimizing defective products but has also elevated the overall quality of textile products. Furthermore, it has optimized inventory management and production planning by monitoring the flow of materials in real time. This has led to increased efficiency in the supply chain, reducing lead times, and improving responsiveness to market demand. This artificial vision project in textiles has exceeded expectations, delivering very promising results that not only transform textile production but also set a higher standard for quality and efficiency in the industry.

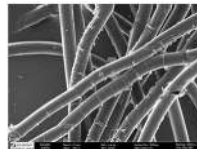


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INNOVATE GRANT

TExBINDERS - Spain

The project promotes the use of different synthetic textile recycled fibers combined with sustainable natural hydraulic lime (NHL) materials. This combination has served to create a new kind sustainable render mortar for the building and heritage sector. This holistic approach in the context of sustainability integrates two great innovations that are not widely present in heritage building materials: firstly, a recycling approach by the use of textile fibers wastes, which generates a lightweight compound with a low carbon footprint. Secondly, the use of a naturally available material highly used in the past which is an alternative to ordinary Portland cement. The technology has been developed by rendering characteristics for interior or exterior parameters for the restoration of built cultural heritage. Also, the obtained technology has served as a starting point for the creation of a new product line which will serve in the future to expand and introduce TESELA into new markets.



3DAppRace - Spain

The launch of our Measurement APP is an exhilarating moment, representing the culmination of our innovative endeavors. The xBuild-EU project played a pivotal role in translating our vision into reality. "Marina Fit's You," our groundbreaking initiative, introduces a state-of-the-art Measurement APP that reshapes the landscape of custom race suits. This transformative technology brings advanced features for precise measurements and improved figure recognition, guaranteeing a tailored and seamless experience. It stands as a testament to our unwavering commitment to delivering unparalleled standards of accuracy and user satisfaction. As we eagerly await the market's response, this project not only revolutionizes the way we approach racewear but also sets a new benchmark for excellence. Stay tuned for the launch of this game-changing product that represents a significant leap forward in our pursuit of innovative solutions and enhanced user experiences.



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INNOVATE GRANT

humiTEX - Germany

humiTEX is a textile-based sensor technology developed by ITP GmbH. The main objective of the humiTEX sensor is to solve the problem of detecting the presence of moisture on different surfaces. The humiTEX study focuses on wooden structures with different roughness. The moisture problem in wooden houses is usually at the edges between different thick walls or between indoor and outdoor surfaces. humiTEX is able to give a quick response by detecting whether the surface is getting wet. humiTEX sensor is light and flexible, which gives the possibility of different integration and mounting possibilities. Its design makes it easy to replace after use.



CoSMoS Innovative project - Spain

The project has achieved groundbreaking success in developing a cutting-edge solution for concrete curing. By maintaining test cylinders under on-site curing conditions, it bridges the gap between non-destructive and traditional methods, ensuring unparalleled accuracy in strength testing. This innovative tank, seamlessly integrated with the CoSMoS™ system, allows users to exert precise control over the curing process. By replicating real-time site conditions remotely, it guarantees the reliability of data for both non-destructive and break-tests. Empowering construction with an unprecedented level of control over their concrete structures. The CoSMoS™ eCure provides a new paradigm for concrete quality control thanks to more accurate results, reduced site visits, lower costs, and improved safety conditions. The strategic business models cater to diverse needs, targeting both control laboratories and civil engineering projects. Extensive research, meticulous prototyping, and rigorous testing have resulted in a product that excels in performance, safety, and adaptability. With imminent real-world testing in a Spanish railway tunnel project, the CoSMoS™ eCure is set to revolutionize concrete curing processes globally. Its integration with the CoSMoS™ system enhances data accuracy. As it prepares for market launch, the impact of this innovative product on the way we approach concrete quality control is poised to be nothing short of transformative.



GRANT REPORTS

INNOVATE GRANT

IT support for the green transition of SMEs 23 - Slovenia

The goal is developing new module for self-assessment in DNA EQMS, which is owned by NETS and upgrading the IT application, facilitating ISO 14001 compliance, and supporting the green transition. By achieving these goals, the application aims to provide micro and small businesses with accessible tools and guidelines for implementing environmental management solutions and promoting sustainable practices. Ultimately, the objective is to empower businesses to enhance their environmental performance, reduce their impact, and contribute to a greener future. The application streamlines the process and provides guidance to ensure compliance with ISO 14001, an internationally recognized environmental management standard. The application enables companies to optimize their processes, reduce waste, and efficiently utilize resources, contributing to overall environmental sustainability. By incorporating the necessary requirements and algorithms, DNA EQMS assists companies in meeting environmental management standards and promoting sustainable practices.



Create your style - Bulgaria

The project inspires and helps people to create custom clothes and accessories printed on demand that contribute to sustainability and a better use of resources, because they are produced only after they are ordered. They are printed with sublimation, which is one of the most sustainable fabric dyeing processes because it creates absolutely zero waste and there is no need for water in the dyeing process. Designs are created with a photo or drawing, provided by the clients who will not throw the products away quickly, because they will have a sentimental value for them, which contributes to their long use. The main objective is to create and offer more products and a variety of product styles, so that their customers have a larger choice. They have created different types of dresses, shirts, skirts, shorts, tops, scarves, textile and leather bags, and also 100 templates of predesigned prints to facilitate customers with ideas to choose from and be able to order matching products. Another objective is to promote personalization as a trend in fashion design and a sustainable business model. They also ordered and used recycled polyester instead of virgin polyester in some products where possible and made them even more sustainable.



GRANT REPORTS

INNOVATE GRANT

STFaaS - Spain

Thanks to STFaaS Project we have demonstrated both technically and commercially from a business perspective that Soft Textile Flooring as a service is a new alternative to current solutions used in the construction of smart Buildings to deliver facility management services such as Cameras, LiDAR, and other intrusive, non-privacy respectful and non-complete area monitoring coverage. We have combined new Soft Textile Floors together with textile sensors made with additive manufacturing and we are capable of collecting data and generating the digitalization of this data from the ground using AI advanced technologies to build green buildings. The new product named Floor Mat and the new Services named Sensing Health Home and Sensing Suit Traffic.



NaturalOutdoorsrugs - Spain

The project stands for innovation, sustainability, and strategic excellence. Initiated to address the shortcomings of traditional outdoor rugs, this project successfully pioneered a revolutionary product. By utilizing recycled polypropylene yarns and textured techniques, they have produced rugs that resist weather, and chlorine, and are resistant to UV rays, redefining durability for outdoor settings. Moreover, they achieved the softest outdoor rugs which are not only meant to walk them barefoot but also are durable and protect the outdoor furniture. The project's commitment to sustainability is evident; they used for the weaving 50% recycled PP multifilament yarns which resulted in outdoor fabric rugs with the lowest carbon footprint in their category. Strategically, Etsilk will expand its market presence through a multi-faceted marketing approach, emphasizing online channels and participating in renowned international fairs. Intensive and rigorous quality testing ensured customer satisfaction until now, while the project's alignment with Etsilk's vision strengthened the brand's reputation as an eco-conscious industry leader. In essence, the Naturaloutdoorsrug project not only met its objectives but exceeded expectations, finding a prominent niche in the market and positioning Etsilk as a market leader in sustainable, high-quality outdoor furnishings.



GET READY FOR THE 2ND CALL FOR PROPOSALS Q2 2024

MEET THE PARTNERS



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