



LIFE: Force of the Future: 'Ceramic sector benchmark'

New circular business concepts for the predictive and dynamic environmental and social design of economic activities

Sustainable development as an overlap

In the European Union, the construction industry plays a significant role in both employment and economic growth, accounting for 30% of industrial employment and contributing over 10% to the EU's gross domestic product. However, this sector also has a considerable environmental impact, consuming 40% of the EU's total energy and contributing nearly 36% of its greenhouse gas emissions.

To mitigate these effects, there has been an increasing emphasis on sustainable construction practices that prioritise resource efficiency and the use of materials with lower environmental impacts throughout their life-cycle. This approach requires a holistic vision that incorporates social, environmental, and economic considerations into a company's overall strategy.

Design. Sustainability. Performance. Affordable cost... All in the same product

The LIFE Force of the Future project has introduced a sustainable development approach to the ceramic sector. The project operates at the intersection of three interrelated areas: environmental, social, and economic sustainability.

Environmental sustainability involves conserving natural resources and maintaining ecological balance through efficient and rational resource use. Social sustainability focuses on promoting human well-being and preserving social communities. Economic sustainability aims to achieve not only quantitative growth, but also qualitative growth that takes into account the limitations of natural capital.

It has led to the creation and introduction of a new brand that identifies an innovative technology to produce sustainable ceramic tiles: G3NIUS. The new products were achieved by demonstrating the feasibility of dynamically monitoring the environmental, economic, and social impacts of a ceramic company by integrating sustainability considerations into its enterprise resource planning (ERP) system. This was also achieved by developing a new model for dynamic sustainability assessment (DYCTA).

The G3NIUS collections utilised the results of innovative Industry 4.0 technologies and real-time data processing throughout the entire production process, starting from raw material storage to sorting and packaging. Therefore, you can find FLORA, the first G3NIUS collection, in the portfolio of major retailers.

"THE WORLD IS MY HOME" (a message from the coordinating beneficiary – Gruppo Ceramiche Gresmalt S.p.A.)

"With the LIFE Force of the Future project, Gresmalt and its partners are firmly committed to working towards sustainable development, concentrating in particular on reducing the environmental impact of production processes and products."

Learn more

Project acronym: LIFE: Force of the Future

Reference: LIFE16 ENV/IT/000307

[Project website](#)

Do you want to benefit as well from support to commercialise your innovative solution?

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