

# **ECO-FINISHING**

# Water free process for finishing garments



The project's aim was to demonstrate the viability of a new process for applying different finishing chemicals to raw garments without using hundreds of liters of water. The new technology, named e-Flow, was industrially validated and launched on the market. It significantly reduces the environmental burden of the garment finishing industry.

## The project's product e-Flow

Current technologies for surface treatment of garments are based on distributing the chemicals in a bath inside industrial washing machines. The technology e-Flow instead relies on Micro-nano bubbles which can get directly inside the fibres. In comparison, the e-Flow consumes 44% less energy, requires 86% less water and eliminates 97% of wastewater resulting from the traditional methods. Further, only a half the amount of chemical products is required for the treatment. These savings do not compromise the desired effect of the treatment. Softening treatments and functionalization treatments (for example water repellence, wrinkle free properties) using e-Flow even outperform their conventional counterparts.

The project was developed and financed between 2013–2015. e-Flow supplements the catalogue of Jeanologia, a global leader in innovative technologies for the garment industry.

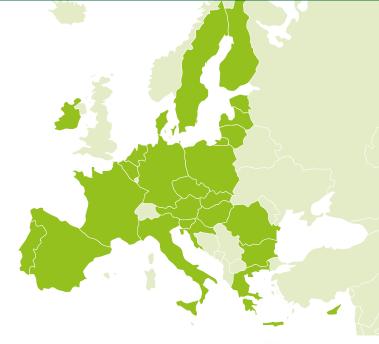
- Product available in the whole of the EU and Asia
- Focused on the B2B sector
- Contact: info@jeanologia.com



Textile industry



Resource efficiency









Annual turnover: € 2-5 million



Expected revenues in 5 years: € 10-20 million



Expected market share in 5 years: 51-100%



New direct employments since the end of the project: 4



500+ machines sold



The product has been developed further, incl. new applications, new garment finishes, new functionalities



Thorough LCA study estimates CO<sub>2</sub> savings at 50-90% depending on the type of treatment



Safer to use than conventional methods



Launched in 2008, the Eco-innovation initiative was part of the EU's Entrepreneurship and Innovation Programme (EIP), set up to support innovation among SMEs and to improve their competitiveness. It was included in the EIP's annual work programmes.

The eco-innovation initiative bridged the gap between research and the market. It helped good ideas for innovative products, services and processes that protect the environment become fully-fledged commercial prospects, ready for use by business and industry. In doing so the initiative not only helped the EU meet its environmental objectives but also boost economic growth.

The LIFE programme has financed green innovation and clean tech solutions since its start in 1992. One of today's key priorities for LIFE is to support close-to-market projects delivering innovative environmental solutions, ensuring that they are sustainable and capable of being widely taken up by society in general, and the economy in particular.

The Close-to-market initiative's aim is to help and assist the LIFE projects with market potential to develop towards successfully maintaining project results via commercialisation and upscaling of the proposed innovative solutions.

# LIFE can help you to sustain and thrive even after the end of the LIFE project.

#### **HOW TO APPLY FOR LIFE FUNDING**

The European Commission organises annual calls for proposals. Full details are available at https://ec.europa.eu/easme/en/life https://ec.europa.eu/easme/en/section/life/life-close-market-projects

#### **LEARN MORE**

ec.europa.eu/life

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