

## EXPECTED RESULTS

- 100% substitution of raw materials of petrochemical origin with others based on renewable sources
- 100% reduction in the bioaccumulation of chlorinated aliphatic molecules and the chloro-sulfonic functional group
- 70% increase in the biodegradability profiles of the molecules used
- 30% increase in the penetration of fat into derma, resulting in better performances of the finished product
- 20% reduction of pollutants in bath wastewaters
- 20% reduction of water consumption during the tanning process
- 20% reduction of pollutant load in tannery wastewater
- 100% reduction of toxicity from high chlorine in the tanning cycle
- 33% reduction of waste management costs and tannage waste
- 20% reduction of energy consumption



LIFE10 ENV/IT/000364

The **ecofatting** project is co-funded by the European Union through the **LIFE+** Programme (Environmental Policy and Governance)

## THE CONSORTIUM




COORDINATOR



Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile




## CONTACTS

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**ENVIRONMENTALLY FRIENDLY  
NATURAL PRODUCTS  
INSTEAD OF CHLOROPARAFFINES  
IN THE FATTING PHASE  
OF THE TANNING CYCLE**



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## THE PROBLEM

More than 200.000.000 m<sup>2</sup> of leather are tanned every year in the EU.

Tanning has a high environmental impact due to the use of hazardous chemicals like chloroparaffines.

Current chloroparaffine-free techniques result in lower quality products.

## THE OBJECTIVE

Demonstrating the use of a new category of products of natural origin, capable of replacing chlorosulfonated paraffines in the fatting phase of the leather tanning cycle.

- **ecofatting** will contribute to the protection of the environment and sustainable development by promoting the use of **fatliquoring natural products which do not exceed the legal limits for hazardous substances** for leather manufacturing.

- **ecofatting** fatliquoring products will allow leather manufacturers, as consumers of tanned leather, to obtain the **European eco-label** for their products, ensuring compliance with parameters related to leather processing (chromium III content in wastewater, arsenic, cadmium and lead content in products, etc).

- **ecofatting** fatliquoring products are **more biodegradable**, making it easier to implement biological treatments for the purification of wastewater from the tanning sector: less sludge is generated and the consumption of reagents can be reduced with respect to the traditional physical-chemical systems.

- **ecofatting** makes it possible to **avoid the use** of fatliquoring agents which favour the transformation of chromium III into chromium VI, a known **carcinogenic substance**.



**LIFE** is the EU's financial instrument supporting environmental and nature conservation projects throughout the EU, as well as in some candidate, acceding and neighbouring countries. Since 1992, **LIFE** has co-financed some 3506 projects, contributing more than €2.5 billion to the protection of the environment.

## ecofatting FACTS

5 partners

2 EU countries (Italy & Spain)

€ 1.651.700 total budget

€ 786.670 EU funding

## KEY INDICATORS

- Penetration of fat into derma.
- Performances of the finished product.
- Fat exhaustion, i.e. less product consumption.
  - Pollutants in bath wastewaters.
  - Compliance with UNI-10594 and 10826 requirements and with guidelines from directive 2002/231/EC.
- Fating biodegradability values (OECD regulation).

