

## BISPOL

With the contribution of the LIFE Programme of the European Union

## PRODUCTION OF LEATHER MAKING BIOPOLYMERS FROM BIOMASSES AND INDUSTRIAL BY PRODUCTS, THROUGH LIFE CYCLE DESIGNED PROCESSES



MARKET SURVEY AND PRE-TREATMENT OF BIOMASSES IN

ORDER TO MAKE THEM SUITABLE

FOR PRODUCING THE BIOPOLYMER



SYNTHESIS, CHEMICAL
CHARACTERIZATION AND LEATHER
APPLICATION OF BIOPOLYMERS
PRODUCED AT LAB SCALE



DESIGN AND BUILD UP AN INDUSTRIAL PROTOTYPE PLANT ABLE TO PRODUCE BIOPOLYMERS AT INDUSTRIAL SCALE.



The leather supply chain is facing ecological issues such as the minimizing of the environmental impact and guaranteeing the safety of the products used in the tanning process.

LIFE BIOPOL aims to develop safe and eco-friendly polymers based on biomasses. The main target of the project is the synthesis of a new class of biopolymers, which represent innovative and suitable alternatives to traditional products based on petrochemicals, currently used in leather making process. Biopolymers are produced using as raw material some industrial by-products like animal and vegetable biomasses from leather and agrochemical industries.

The project also satisfies many aspects considered high relevant in the leather industry, in particular: the improvement of water management, the reduction of hazardous substances and the decreasing of the carbon foot print of chemicals. The success of the LIFE BIOPOL and the full scale of the innovative technology will allow the implementation of more sustainable measures for the leather processing.





LARGE SCALE PRODUCTION OF THE NEW BIOPOLYMERS INTO THE PROTOTYPE PLANT



INDUSTRIAL APPLICATION OF BIOPOLYMERS ON BOVINE, SHEEP/GOAT AND SPLIT SUEDE LEATHERS IN ORDER TO PRODUCE HIDES FOR UPHOLSTERY, AUTOMOTIVE, FOOTWEAR, LEATHER GOODS, GARMENT.











