



WOOL4BUILD

IMPROVED ISOLATION MATERIAL FOR ECO-BUILDING BASED ON NATURAL WOOL

CIP Eco-innovation - First Application and market replication projects - Call 2013
Call Identifier: CIP-EIP-Eco-Innovation-2013
Duration: 30 months



Co-funded by the Eco-innovation Initiative of the European Union



OBJECTIVE

The main objective of WOOL4BUILD is to develop a **sustainable product for buildings isolation based on the wastes and by-products of hair and wool produced in the tannery industry**, with improved performance in the acoustic and thermal isolation and able to optimize energy efficiency and indoor air quality.

SPECIFIC OBJECTIVES

- 1 To increase **the thermal and acoustics isolation** properties of panels, optimizing the energy efficiency and the level of comfort in the buildings.
- 2 To improve the **hygrometric performance** of panels, being able to absorb up to 33% moisture and help to maintain comfort conditions, adding or removing humidity depending on conditions.
- 3 To optimize other additional features as **insect and fire resistance, mechanical resistance, adaptability and lightness, durability, good handling and recyclability**.
- 4 To develop a product with **low environmental impact**, able to replace materials based on non-renewable raw materials and/or obtained through poor energetic efficiency processes, as polymeric materials, and inorganic wools of glass and rock.
- 5 To give a high **added value** to by-products and waste material from tannery companies, opening a **new business line** for companies in this sector.

ADVANTAGES



Increased value of tannery wastes

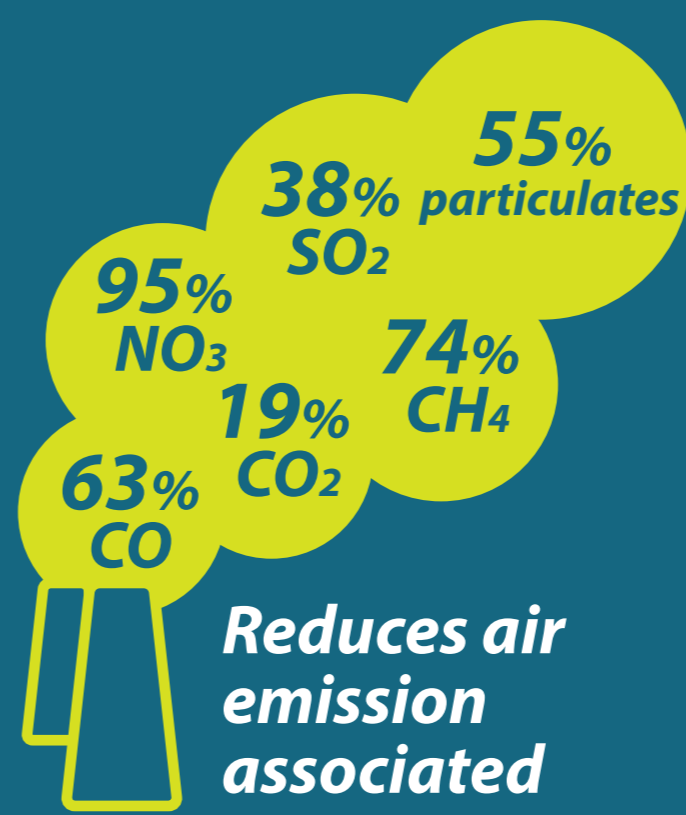
Reduces energy demand and water demand

52%

Primary energy demand

30%

Thermal energy



Reduces air emission associated

Improves the performance in thermal and acoustic insulation and humidity level in building



Reduces 30% price in respect of current natural product

Uses a natural material, harmless to human health

Natural based material

100% recyclable

Co-ordinator:



INPELSA

Co-beneficiaries:

