Contract No: LIFE 13 ENV/IT/000996

Title: Production of recycled high quality joists from wood waste

Duration: 01/07/2014 - 31/06/2018

Abstract:

LIFE+ GREENJOIST aims at demonstrating the value and feasibility of an eco-innovative recycling process, able to reuse and valorize wood waste to produce green, high quality and cost-effective joists. The latter will be used in different sectors such as manufacturing, transportation, logistics and construction. This will contribute to the consolidation of sustainable eco-innovative businesses in the EU woodworking industry leading to the achievement of EU 2020 goals of Resource Efficiency, avoiding dangerous impacts on human health and the environment. With a potential to substantially cut the currently land filled wood waste, amounting to 15 million tons per year, the LIFE+ GREENJOIST project has set out a well-structured plan with the following key objectives:

- **1.** Showcase an innovative process for the production of high-quality, cost-effective joists from recycled wood waste through the realization of a pilot plant demonstrating the feasibility and effectiveness of this novel recycling process
- **2.** Foster a sustainable society and economy where waste, which is both harmful and costly, is used as a valuable resource and manufacturing is committed to the environment
- **3.** Increase awareness of eco-innovative solutions both in the general public, policy makers and woodworking industry, focusing on the environmental and economic advantages as well as on their technical feasibility
- **4.** Avoid the use of virgin wood in the construction of new joists and pallets, saving trees while cutting the generated CO2 emissions for the transportation and processing
- **5.** Promoting the shift from using potentially harmful chemicals to natural components in the woodworking industry

In the framework of GREENJOIST, CHIMAR is testing renewable resources, namely lignin, tannin and starch natural raw materials for the substitution of petrochemical components of adhesive resins in order to produce high quality joists from 100% recycled wood waste.



