

Furniture components and buildings materials recycling

Description

Circular processes for eco-designed bulky products to close the loop of composite materials in the automotive, furniture and building sectors by promoting greater re-use, upgrade, refurbishment and recycle.



Objectives

- To define and quantify possible positive/adverse effects to the environment caused by repairing, remanufacturing and reusing process system proposed,
- To outline and optimise the costs of the support tools designed to produce recycled materials enhancing economic feasibility and improving competitiveness,
- To evaluate the social impacts and public receptivity for long-lasting, reusing and recycling of the new products components.

Activities

- Sustainability assessment:
 - Life-Cycle Assessment LCA,
 - Life-Cycle Costing LCC,
 - Social-economic assessment,
- Regulatory assessment.

Challenges

- Input data complex to collect 
- Technical knowledge required 
- Legal & legislation barriers 
- Technology readiness level 

Expected outcomes

- 75% material recovery target,
- 200M tonnes GHG saved,
- 90% reduction of non-renewable energy sources.

